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December 2003

Department of the Navy
Engineering Field Activities - Chesapeake
Washington Navy Yard, Washington D. C.

Final

Closeout Report Removal Action

**Site 12 - Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland**

Prepared by:



**Contract No. N62470-97-D-5000
Task Order 0062**



Shaw™ Shaw Environmental, Inc.

**FINAL
CLOSEOUT REPORT
REMOVAL ACTION
SITE 12 – TOWN GUT LANDFILL
INDIAN HEAD DIVISION – NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND**

**CONTRACT NO. N62470-97-D-5000
TASK ORDER 0062**

Prepared for:

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December 12, 2003
Project No. 809401

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Appendices C through H are provided in electronic format only on the CD in the back of the report binder. The CD also contains the entire report text and Appendices A and B in electronic format.

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LIST OF ACRONYMS

<u>Acronym</u>	<u>Title</u>
AASHTO	American Association of State Highway and Transportation Officials
ANSI	American National Standards Institute
ASTM	American Society for Testing and Materials
BTEX	benzene, toluene, ethyl benzene, and xylene
CD	compact disc
CMP	corrugated metal pipe
CR-6	crusher run aggregate
CRZ	contamination reduction zone
DRO	diesel range organics
E&S	erosion and sediment
ECM	erosion control matting
EFA	Engineering Field Activity
ESCP	Erosion and Sediment Control Plan
EZ	exclusion zone
GIS	geographic information system
GRO	gasoline range organics
IDW	Investigative Derived Waste
IHDIV-NSWC	Indian Head Division – Naval Surface Warfare Center
JSA	Job Safety Analysis
LEL	lower explosive limit
MDE	Maryland Department of the Environment
NIOSH	National Institute for Occupational Safety and Health
NTR	Navy Technical Representative
O ₂	oxygen
OSHA	Occupational Safety and Health Administration
PBA	Project Business Administrator
PID	photoionization detector
PPE	personal protective equipment
ppm	part(s) per million
PQCP	Program Quality Control Plan
psi	pounds per square inch
QC	quality control
RC-6	recycled concrete
RD	Record Drawing
ROICC	Resident Officer In Charge of Construction
RPM	Removal Project Manager
SCE	stabilized construction entrance
Shaw	Shaw Environmental, Inc.
SIP	Safety Incentive Program
Site 12	Site 12, Town Gut Landfill
SM	silty sand
SSHASP	Site Specific Health and Safety Plan
SSO	Site Safety Officer
SZ	support zone

TCLP	toxicity characteristic leaching procedure
TD	technical directive
TPH	total petroleum hydrocarbon
TtNUS	Tetra Tech NUS, Inc.
USCG	U.S. Coast Guard
USEPA	U.S. Environmental Protection Agency
UXO	unexploded ordnance
VR	Variance Request

1.0 INTRODUCTION

Shaw Environmental, Inc. (Shaw), formerly OHM Remediation Services, Corp., was contracted by the Navy to install a soil cover at the existing Site 12, Town Gut Landfill (Site 12) at the Indian Head Division, Naval Surface Warfare Center (IHDIV-NSWC) in Indian Head, Maryland. This work was performed under Contract No. N62470-97-D-5000, Delivery Order No. 0062. The soil cover design for this removal action was prepared by Tetra Tech NUS, Inc. (TtNUS).

1.1 PURPOSE

This report describes in detail the tasks performed and the techniques that were used for the installation of a soil cover at Site 12 at the IHDIV-NSWC. This report provides the documentation to establish that the work was completed in accordance with the approved work plan, project specifications and the design drawings.

The appendices included within this document provide the technical information compiled during removal activities at the site. The following appendices are included as hard copies within this draft report and will be included electronically on a compact disc (CD) with the final report:

- Appendix A - Record Drawings
- Appendix B - Photograph Documentation

The following appendices will be included electronically on a CD for the final report submittal:

- Appendix C - Transportation and Disposal Documentation
- Appendix D - Quality Control Documents
- Appendix E - Technical Directives/Variance Requests/Requests for Information
- Appendix F - Analytical Test Results
- Appendix G - Geotechnical Test Results and Field Data
- Appendix H - Health and Safety Documents

1.2 PROJECT BACKGROUND

The IHDIV-NSWC is located in northwestern Charles County, Maryland, approximately 25 miles southwest of Washington, DC. The IHDIV-NSWC provides services in energetics, ordnance devices and components, and other related ordnance engineering standards, including chemicals, propellants, and their propulsion systems, explosives, pyrotechnics, warheads, and simulators.

Site 12 is located in the central area of the IHDIV-NSWC (Figure 1-1). It covers approximately 4.8 acres of undeveloped land and includes three areas of landfilled waste, two ponds, and was crossed by Atkins Road Extension. The three areas of landfilled waste were separated by a tributary (Photo No. 1 of Appendix B) to the northern pond and Atkins Road Extension. The southern pond (Photo No. 2) and Atkins Road Extension bound Area 1. Area 2 was east of Atkins Road Extension and was bounded to the north by the northern pond and the tributary. Area 3 was east of the tributary and was bounded on the north by the northern pond. Atkins Road Extension divides the northern and southern pond, under which a 78-inch culvert connects the two ponds. The three areas, along with other pre-removal site conditions, are shown on RD-C1.

1.3 GENERAL SCOPE AND OBJECTIVES

The objective of this removal action was to construct the soil cover in accordance with the approved work plan and design drawings. This removal action included lowering the water levels of the ponds and excavating waste along their shorelines, segregating the waste requiring off-site disposal and consolidating the remaining waste within the limits of the cover; placing and grading common fill over the existing cover soils; and placing a soil cover over the regraded area. The work covered under this project included construction of erosion and sediment (E&S) controls, waste relocation/regrading, placement of soil cover over the landfill, reconstruction of the Atkins Road Extension, and planting wetland plants along the pond perimeters. A description of the specific work activities for the above scope is presented in Section 2.0.

1.4 PROJECT ORGANIZATION

The removal activities at Site 12 were managed by a project-dedicated team that was responsible for the management and completion of the overall project. The Project Manager had the overall responsibility for the project efforts, including technical, schedule, and budget aspects. The Project Manager was responsible for the day-to-day management and integration of all elements of the project and was accountable for each activity. Supporting the Project Manager in the field were the Site Superintendent, Operations Foreman, Site Safety Officer (SSO), Project Business Administrator (PBA), and other personnel as needed.

The quality control (QC) chain of command, under the direction of the QC Program Manager, was separate from the project management chain. The Site QC Manager reported to the QC Program Manager independently of the Shaw project team.

1.4.1 Project-Dedicated Shaw Team

Key management personnel included Dan Pringle - Project Manager, Steve Carriere - Site Superintendent, Joe Walker - SSO, and Joey Guzzardo - PBA. Ernie Duke was the Site QC Manager. The organizational chart for the project is shown on Figure 1-2.

1.4.2 Navy Points of Contact

The key Navy points of contact for Site 12 included the following:

Removal Project Manager (RPM):	Jeff Morris Engineering Field Activity (EFA) - Chesapeake Code CH20C 1314 Harwood Street, SE Washington Navy Yard, Washington DC 20374
Engineer in Charge of Construction, Resident Officer in Charge of Construction (ROICC) Office:	Cathy Gardner IHDIV-NSWC, Building 503 101 Strauss Avenue Indian Head, Maryland 20640-5035
Indian Head Environmental Department:	Shawn Jorgensen IHDIV-NSWC Code 044SJ, Bldg. D-327 101 Strauss Avenue Indian Head, MD 20650-5035

2.0 SUMMARY OF WORK PERFORMED

This section discusses in detail the major field activities associated with the soil cover construction at Site 12. These activities included:

- Mobilization and site setup
- Site preparation
- E&S controls installation
- Clearing and grubbing
- Monitoring well abandonment
- Waste removal and segregation
- Regrading and soil cover installation
- Atkins Road Extension modification
- Monitoring well installation
- Site restoration
- Site inspection
- Demobilization.

The sequencing and duration for each of these activities as well as other related activities, is shown on the final project schedule (Figure 2-1).

2.1 MOBILIZATION AND SITE SETUP

The ROICC Navy Technical Representative (NTR) conducted a Pre-construction Meeting at Building 503 on September 9, 2002. Shaw was oriented to the procedures and requirements to work within the restricted area of the Base. At that time a Work Permit (Appendix D) was issued for Shaw to begin work at the site.

Shaw mobilized personnel, equipment, and resources necessary to complete the project as defined in the work plan, the project specifications, and the design drawings. Initially, key individuals and equipment were dispatched to the site to receive trailers and other equipment essential to perform the project removal activities. Initial site setup included preparing the office and support areas, installing the trailer, storage container, and connecting utilities.

Upon completion of the initial site setup, Shaw continued mobilization. This included mobilization of excavation, grading, hauling equipment and all other equipment and personnel necessary to complete the project. Support facilities, including sanitation facilities, trash dumpsters, and staging areas were setup. The project management, support and logistics were coordinated through Shaw's Pittsburgh, Pennsylvania and Trenton, New Jersey offices.

2.2 SITE PREPARATION

Once mobilization and site setup were completed, site preparation activities began.

2.2.1 Utility Search

Underground utilities that exist adjacent to Atkins Road and within the planned limits of disturbance were investigated and located prior to any earth disturbances. Shaw requested a utility mark

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out from the ROICC prior to beginning ground disturbance activities. The ROICC advised Shaw to conduct an independent survey and mark the utilities to be incorporated into a Geographic Information System (GIS) map of the site.

A field inspection to verify the locations and depths of utilities within the site limits was conducted on September 13, 2002. All utilities were identified and marked by Dave Roberts of Your Locator, a locally subcontracted utility search company. No other underground utilities were found within the limits of the site other than the water line shown on the design drawings taken from the existing GIS map received from the Base. No excavation was conducted to the depth of the water line along Atkins Road.

On May 13, 2003, Your Locator performed an additional utility search at the locations outside of Site 12 where Monitoring Wells S12MW007 and S12MW012 were to be installed. No additional underground utilities were found in those areas.

2.2.2 Initial Site Survey

Shaw performed a topographic survey of the existing conditions at Site 12 to confirm that its pre-construction condition conformed to the lines and grades shown on Sheet C-1 of the design drawings. Construction control points and the limits of disturbance were staked in the field to provide survey support. Continual survey support was provided by a Shaw survey technician (Photo No. 3). Initially, a Topcon total station and Hewlett Packard Data Collector (HP48GX) were used. In January 2003, the Topcon system was replaced by a Trimble 5600 robotic total station and data collector. The accuracy of the vertical survey was to the nearest 0.01 foot for the control points and 0.1 foot for the horizontal accuracy.

2.2.3 Delineation of Work Zones

Shaw marked all work zones in accordance with Occupational Safety and Health Administration (OSHA) guidelines and the Site Specific Health and Safety Plan (SSHASP) of Appendix D of the approved work plan. All specific work zones were delineated with orange plastic safety fencing with metal posts and appropriate warning signs strategically placed. Caution tape, roping, and other fencing devices were used, as specific project tasks required (Photo No. 4).

2.2.4 Lowering Pool Elevations of Ponds

The pool elevations of the ponds surrounding the landfill areas were lowered to expose the waste limits indicated on the design drawings. The pool elevations were controlled by a weir located at the discharge (southern) end of the southern pond (Photo No. 5) and by conditions in Mattawoman Creek, located south of the ponds. The pool elevations were abnormally high at the time of mobilization, partially because a beaver dam immediately upstream of the weir was restricting the flow. Initially, Shaw lowered the water level by clearing some of the debris away from the weir and opening an 8-inch butterfly valve built into the weir. The debris was removed in stages over a period of several days to allow the water to discharge from the pond at a controlled rate to prevent sediment from being carried from the impounded area. Once the debris was cleared and the pond level was lowered to the extent that the existing weir and 8-inch valve allowed, the steel weir was cut with a reciprocating saw (Photo No. 6) in order to lower the level to an elevation slightly lower than the work elevation (Photo No. 7). After the removal work was completed, a steel plate was welded back onto the existing weir and the pond elevation was restored to its previous condition.

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2.2.5 Dust Control

A water truck with a sprinkler attachment was utilized to control dust in all excavation areas and haul roads and during placement of material. Water for the truck was either pumped from the pond or taken from a hydrant designated by the ROICC. Determination of the need for dust control was the responsibility of the SSO and Site Superintendent based on instrument readings and visual conditions.

2.2.6 Air Monitoring

Shaw performed perimeter air monitoring in accordance with the SSHASP. Air monitoring began at the start of the intrusive activities and continued through placement of the general fill layer. The SSO was responsible for monitoring and maintaining the monitoring equipment on a daily basis.

2.3 EROSION AND SEDIMENT CONTROLS

This section describes the various E&S controls that were used during earthmoving activities at the site. All controls complied with the manufacturer's installation specifications and were installed as directed by the Shaw Site Superintendent in accordance with Sheets C-2, C-3, and C-5 of the design drawings. All E&S control structures remained in place until vegetation was established and authorization to remove them was obtained from the Maryland Department of the Environment (MDE) and ROICC Office.

The installation of E&S control measures allowed the soil cover and site grading activities to take place while minimizing any threat to the adjacent waterways. Work covered under this task included installation of super silt fence, silt fence, a stabilized construction entrance (SCE), material handling and decontamination pads, rock check dams, riprap-lined drainage channels, erosion control matting, and seeding. The maintenance of these structures for the duration of the remediation project was included as part of this task.

2.3.1 Super Silt Fence

Super silt fence was installed at the locations shown on Sheet RD-C2 of the record drawings and in accordance with Detail 1 on Sheet RD-C4. It was placed along the shoreline of both ponds (Photo No. 8) as indicated to protect the ponds during sediment removal and soil cover placement. The water levels of the ponds were lowered to allow placement of the super silt fence outside the landfill limits; however, the muddy and soft nature of the shoreline along with the wood debris made the super silt fence installation and maintenance very difficult. The muddy soil could not support the super silt fence, and the erosion from rain events often pushed down the super silt fence. To help support the super silt fence, 12-foot poles were driven along the fence-line where necessary to help keep it stable. No ground disturbance other than what was necessary to install the super silt fence occurred in an area until the area's super silt fence was in place. The super silt fence was inspected weekly and after each rain event, checking for undermining, fabric deterioration, and sediment accumulation. The accumulated sediment was removed when it caused the fabric to bulge or if it accumulated to half of the fabric height. Any accumulated sediment that was removed prior to placement of the first lift of the cover soil was spread over the uncovered area within the landfill limits. All sediment collected after the first lift of cover soil was stockpiled for reuse after the material was sufficiently dried to a workable condition. The super silt fence remained in place for the duration of the removal activities and was removed following the establishment of permanent vegetation and MDE approval.

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2.3.2 Silt Fence

Silt fence was installed according to the design drawings at the location shown on RD-C2 of the record drawings. Silt fence was installed as shown along the slope of the landfill and to protect the stabilized construction entrances and decontamination pads. In addition, two rows of silt fence were installed across the slope of the area of the site south of Atkins Road Extension (Area 1) to protect the area, where soil erosion was often a problem (Photo No. 9). It was installed in accordance with Detail 2 on RD-C4 as part of the site preparation work. The silt fence was inspected weekly and after each rain event for undermining, deterioration, and accumulation of sediment. Sediment was removed if it caused bulging of the geotextile or accumulated to half the height of the silt fence (Photo No. 10). The silt fence remained in place until the areas it protected were stabilized and approval for removal was obtained from the MDE and ROICC Office. Any accumulated sediment that was removed prior to placement of the first lift of the cover soil was spread over the uncovered area within the limits of the landfill limits. All sediment removed after the first lift of cover soil was placed was considered to be clean and incorporated into the cover.

2.3.3 Stabilized Construction Entrances

To reduce the amount of soil transported onto paved public roads by motor vehicles or runoff, a stone pad with a filter fabric underliner was constructed at the point of vehicular ingress and egress shown on RD-C2. The construction entrance was installed in accordance with the design drawings and Detail 3 on RD-C4. The construction entrance was inspected regularly and new stone was added as necessary or existing soil was washed off, so that the stone at the entrance performed its intended function of removing soil from the vehicle tires. No other points of egress off the landfill were permitted.

2.3.4 Materials Handling Pad

A materials handling pad was installed in Area 1 at the location shown on RD-C2 and approved by the ROICC and MDE to provide drying areas for the excavated materials. The location was situated within the limits of waste and the drained water resulting from the waste was allowed to infiltrate into the soil beneath the pad. The pad was constructed by first grading a 40- by 75-foot area, then constructing a soil berm around the pad to a height of approximately 2 feet. A 6-inch layer of American Association of State Highway and Transportation Officials (AASHTO) #1 coarse aggregate was installed across the base of the pad. The pad was used for dewatering excavated soil and sediment, construction debris, and other large items. An additional materials handling pad was originally planned for Area 3; however, because the excavated soil and sediment contained no free liquids, the additional materials handling pad was not installed.

2.3.5 Decontamination Pad

A decontamination pad was installed in Area 1 adjacent to the materials handling pad. The pad was used to decontaminate equipment and large debris removed from the ponds before they left the site. Because the decontamination pad was within the limits of the landfill, water used in the decontamination process was allowed to infiltrate into the site.

2.3.6 Portable Sediment Tank

A portable sediment tank was used during dewatering operations at the site. The tank was relocated as necessary to support the various areas. In each area of the site, the portable sediment tank was placed at the top of the area's riprap channel. Water discharging from the tank was released into the channel, thereby preventing erosion of the site soils (Photo No. 11). Because the water was taken from

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the ponds, no testing was required before it was released from the tank. Sediment collected in the portable sediment tank was placed under the soil cover.

2.3.7 Conveyance Channels

Permanent conveyance channels were installed along the eastern sides of both Area 2 and Area 3 according to the design drawings. In addition, permanent conveyance channels were constructed along both the northwest and southeast sides of Area 1. The permanent conveyance channels are all shown on RD-C3 of the Record Drawings. The channels divert off-site runoff away from the soil cover and collect runoff from the soil cover in order to reduce erosion. The channels were installed according to Detail 4 shown on RD-C4. The Area 3 channel was lined with erosion control matting (ECM), and riprap was placed at the critical locations as shown. The Area 2 channel was lined with riprap for the eastern half and ECM for the remainder (Photo No. 12). The channel northwest of Area 1 was lined with riprap. The top 20 feet of the channel southeast of Area 1 was lined with riprap, and the rest was lined with ECM. Rock check dams were installed as described in Section 2.3.9 to help protect the channels while vegetation was established.

2.3.8 Erosion Control Matting

Synthetic Industries Landlok[®] TRM 435 was installed in the drainage channels to stabilize the channels until vegetation was established (Photo No. 13). The design called for a temporary ECM that could withstand flow velocities up to 6 feet per second; however, no temporary ECM meeting that criterion was available. Therefore, Permanent ECM Landlok[®] TRM 435 capable of withstanding short – and long-term (i.e. ½ hour and 50 hour duration) flow velocities up to 18 and 10 feet per second respectively, according to manufacturer's literature. This ECM was installed according to the manufacturer's recommendations and Detail 9 on Sheet C-9 of the design drawings.

2.3.9 Rock Check Dams

Rock check dams were installed within the drainage channels at the locations shown on RD-C3 (Photo No. 14). These check dams were designed to reduce the flow velocities within the channels to non-erosive rates and prevent channel erosion. Inspections occurred weekly and after each rain event during construction. Sediment collected by the dams was removed and placed within the limits of the soil cover when the sediment reached half of the original height of the check dam. Erosion caused by high flows around the edges of the dams was corrected immediately. Although the rock check dams were originally intended to remain in place only during construction, they were left in place to permanently reduce the flow velocities within the channels.

2.3.10 Vegetation

Permanent seeding, mulch, and plantings were installed throughout the site to reduce or eliminate the potential for soil loss. The installation of these features is described in Section 2.11, Site Restoration.

2.4 CLEARING AND GRUBBING

Shaw personnel performed the clearing and grubbing within the limits of disturbance, which are shown on RD-C2, once the E&S controls were installed. Clearing consisted of the removal of aboveground vegetation (Photo No. 15). Saleable timber was cut into manageable lengths and removed from the site and stockpiled east of the site across Atkins Road, as directed by Jeff Bossart of the Indian Head Environmental Office. The remaining cleared material was chipped (Photo No. 16) and spread in lifts with excavated sediment within the limits of the landfill and included under the soil cover. Grubbing

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consisted of the removal of stumps and root systems within the limits of disturbance. It was determined to be more cost effective to dispose of the grubbed material off site rather than chipping it and placing it within the limits of the landfill as specified. Therefore, the grubbed material was chemically tested and disposed as non-hazardous waste at King George Country Landfill in Virginia. The results of the chemical analysis are included in Appendix F.

2.5 MONITORING WELL ABANDONMENT

Six monitoring wells within the limits of disturbance as shown on RD-C1 were abandoned prior to installation of the soil cover (Photo No. 17). A driller licensed in the state of Maryland was subcontracted to abandon the wells in accordance with state requirements. The monitoring wells were abandoned by Chesapeake Geosystems on September 24, 2002. Chesapeake Geosystems provided abandonment logs to Shaw and directly to the State. The abandonment logs are included in Appendix D as Submittal 02525-01.

2.6 PROOFROLLING

Once the clearing and grubbing was completed, all disturbed areas outside the limits of the landfill and the landfill itself were proofrolled in order to provide a firm base for material placement. Proofrolling was conducted using an excavator and a tracked dozer with ground pressure of at least 8 pounds per square inch (psi).

2.7 WASTE REMOVAL

Waste removal and handling around the ponds were conducted in accordance with the Excavation and Material Handling Plan (Appendix A of the work plan). Once the water levels of the ponds were lowered, miscellaneous debris such as an old truck frame (Photo No. 18) and concrete (Photo No. 19) were removed. The field crew then began excavating soil material along the ponds' shorelines to the limits shown on Sheet C-2 of the design drawings at the toe of the soil cover (Photo No. 20). After the water was lowered, portions of the limits of disturbance were in the ponds. According to TtNUS, the limits were based on the wetlands delineation and not intended to be within the water. The limits were discussed during the September 26, 2002 QC Meeting and the parties at the meeting agreed to adjust the limits to the edge of the pond at the lowered water level. Wetland areas within the limits of waste were excavated to a depth of two feet. Additionally, visible waste and debris within the reach of the excavator was removed from the pond and wetland areas during the excavation. Visible waste outside of the limits of disturbance was removed when dictated by the client. Some of the natural material along the shoreline, such as logs and stumps (Photo No. 21), were left in place to provide a habitat for wildlife, as discussed in the October 10, 2002 QC Meeting.

An Unexploded Ordnance (UXO) Specialist monitored all excavation activities (Photo No. 22). No ordnance-related devices were found during excavation activities; however, an approved UXO Plan was available in the event that any ordnance-related devices had been found. The UXO specialist provided brief UXO training to all site personnel prior to any excavation.

Soil and small waste objects were consolidated on site. All large items of exposed waste and debris within the ponds and wetlands were initially designated to be removed for off-site disposal; however, some adjustments were made in order to allow some of the large debris (Photo No. 23) to be kept on site. A hoe-ram was utilized to break the large concrete pieces (Photo No. 24) into manageable pieces so they could be incorporated into the landfill. Materials requiring off-site disposal that contained free liquids were placed on a materials handling pad and allowed to dewater naturally prior to removal

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from the site. Free liquids were allowed to infiltrate into the soil prior to the placement of the soil cover. The metal debris was decontaminated (Photo No. 25) so that it was salvageable at a recycling facility. The materials were stockpiled and tested for characterization before transport for off-site disposal. The results of the disposal analysis are included in Appendix F. All wood debris, including railroad ties, telephone poles, and stumps (Photo No. 26), was sent to a non-hazardous disposal facility, the King George County Landfill in Virginia. The waste drums were considered hazardous and disposed at Cycle Chem, Inc. in Lewisberry, Pennsylvania. The metal debris was sent to Prince George Scrap for recycling. A total of 9.69 tons of scrap were shipped. Although there was very little salvageable scrap metal on site, the recycling facility provided payment for the scrap, which was credited back to the Navy. Five drums of soil and water were generated as investigative derived waste (IDW) from the installation of the required monitoring wells. This material was determined to be non-hazardous and disposed at the C-MAC - Fisher Industrial Service, Inc. licensed hazardous waste disposal facility in Glencoe, Alabama. Additionally, 1.92 tons of tires were sent to the local BFI Landfill.

2.8 REGRADING AND SOIL COVER INSTALLATION

The on-site materials excavated from around the ponds were regraded once the material had dried to establish the interim grades, then the soil cover was installed over the landfill limits.

2.8.1 Landfill Regrading

The landfill areas, including waste, sediment, concrete, and any existing cover soil requiring excavation, were regraded to establish the interim grades indicated on Sheet C-6 of the design drawings (Photo No. 27). The excavated material was spread in 8-inch loose lifts and compacted with a minimum of 4 passes of the 10-ton vibratory smooth drum roller (Photo No. 28). The compactive effort while placing this material was visually monitored. No in-situ density tests were obtained during placement.

The interim grades indicated on Sheet C-6 of the design drawings were intended to be as accurate as possible, but were not expected to match perfectly with the actual on-site material volumes. No additional fill was to be brought on site to meet the design grades, nor was any extra on-site material to be sent off site. Area 1 was the first area to be graded. That area was graded to meet the interim grading plan. Once the grade was met, some excess material was transported to Area 2. Areas 2 and 3 were then graded concurrently. Areas 2 and 3 ended up very close to the interim grading plan but were slightly different. Shaw verified by Survey that the design requirements, including the 4 percent minimum grade and 25 percent maximum grade, were met and the intended drainage patterns were maintained. The final interim grade was surveyed and used to set the grade for the select fill and topsoil in order to ensure the two-foot cover requirement was achieved.

2.8.2 Soil Cover Installation

The soil cover serves to reduce the possibility of exposure to receptors, eliminate physical hazards, reduce erosion, and improve aesthetics. The soil cover was installed according to the design drawings and as shown on Detail 5 of RD-C4. The soil cover consists of 18 inches of select fill and 6 inches of topsoil. Both the select fill and topsoil were obtained from approved off-site borrow sources. Prior to delivery to the site, the borrow materials were tested for full Toxicity Characteristic Leaching Procedure (TCLP) parameters, including ignitability, corrosivity, and reactivity; total petroleum hydrocarbons (TPH) content; and the sum of benzene, toluene, ethyl benzene, and xylene (BTEX). The results, which are included in Appendix F, indicated less than 100 parts per million (ppm) of TPH, less than 10 ppm of the sum of BTEX, and fall within the allowable concentrations for the TCLP analysis. As deliveries of select fill and topsoil arrived on site, the trucks were periodically weighed to verify the delivered tonnage. Weighing was accomplished using portable truck scales (Photo No. 29).

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2.8.2.1 Select Fill

An 18-inch layer of select fill was placed over the limits of waste following the grading of existing site materials. Select fill was classified as silty sand (SM), with a maximum particle size of 3 inches. The geotechnical test results for the select fill are included in Appendix G. Select fill was placed in 8-inch loose lifts resulting in approximately 6-inch lifts after compaction. Each lift of select fill was compacted to a minimum 85 percent of American Society of Testing and Materials (ASTM) D 698 with a smooth drum roller (Photo No. 30) or other appropriate placement/compaction equipment. The surface of the select fill was then scarified using the dozer tracks in preparation of topsoil placement. Because of the unpredictable weather, select fill was delivered and stockpiled on site (Photo No. 31) during non-placement work hours. The material was then available for spreading whenever needed.

2.8.2.2 Topsoil

A 6-inch layer of topsoil was placed on the select fill layer (Photo No. 32). Test results for the topsoil are included in Appendix F and G. Topsoil was of medium texture (sandy loam), with a pH of 7.2 and a soluble salt content of 85 ppm. The organic content was 1.4 percent, which was less than the specified value of 5 to 8 percent. The low organic content was acceptable for the majority of the site; however, a higher organic content was necessary for the wetland areas. Therefore, under Technical Directive (TD) 004, Leafgrow was added to the topsoil in the wetland areas to increase the organic content. The topsoil was spread evenly with a dozer to provide positive drainage. No compactive effort other than what was achieved with the placement equipment was required. Approximately two inches of Leafgrow was spread over the topsoil (Photo No. 33) in the wetland areas, then tilled into the topsoil. Debris and stones larger than 1 inch in any dimension were removed prior to fertilization and seeding.

2.9 ATKINS ROAD EXTENSION MODIFICATION

Atkins Road Extension was reconstructed (elevated) to coincide with the 2-foot soil cover placed over the entire landfill. The road serves as a ridgeline and surface water divide for the soil cover between Areas 1 and 2. Clean common fill meeting the requirements of Project Specification Section 02315, "Excavation and Fill," was used to raise the road base. The final roadway section includes common fill, a 10-inch subbase layer, a 2-inch base layer (Photo No. 34), and a 1-inch wearing course as shown on Detail 6 of RD-C4. The road was built 21 feet wide with a 2-foot shoulder on each side. The road was constructed in accordance with the design drawings and Project Specification Section 02742, "Pavement with a Bituminous Concrete Surface." The reconstructed section of road is shown on RD-C3. To make a smooth transition from the existing pavement to the new pavement, the existing pavement was sawcut (Photo No. 35) at the transition between the new and existing pavement (Photo No. 36). The new pavement was then tied into the existing (Photo No. 37).

2.10 MONITORING WELL INSTALLATION

A total of seven groundwater monitoring wells were installed at the locations shown in the Long-Term Monitoring Plan (TtNUS) and RD-C3. The new wells were installed according to Detail 6 on Sheet C-9 of the design drawings. The new wells were installed by C.R. Hugo, Inc., a licensed well driller, according to the requirements of Project Specification Section 02525, "Monitoring Wells." All drill cuttings and well development liquids were containerized and chemically tested prior to off-site disposal. Drilling equipment was cleaned prior to drilling and between boreholes, and decontaminated before leaving the site. The new monitoring well survey coordinates are listed on RD-C3. The well installation logs are included in Appendix D.

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2.11 SITE RESTORATION

Restoration involved activities associated with returning the site to pre-excavation conditions as best as practical in preparation for demobilization. These actions, which included seeding and mulching the disturbed areas, restoring the wetlands by planting wetland plants, and installing warning signs around the landfill, are discussed in detail below.

2.11.1 Permanent Seeding

All disturbed areas were seeded and fertilized in January of 2003 (Photo No. 38). Tra-Agri, Inc. applied the seed, mulch, and nutrients based on the results of the nutrient testing on the topsoil. Because the planting schedule recommended planting permanent species before November 15, Variance Request (VR) 003 was approved to allow the later planting. The amount of annual rye in the permanent seed mix was increased. The temporary seed would germinate and serve as erosion control and a nurse crop. The permanent seed remained dormant until the early spring. The modified seed mixture is included as Detail 7 on Sheet RD-C4 of the Record Drawings. All temporary E&S structures remained in place while vegetation was established at the site.

2.11.2 Hydro-Blanket[®]

Hydro-Blanket[®] was applied to the disturbed areas of the site by Tra-Agri, Inc. (Photo No. 39) after they were hydroseeded. Hydro-Blanket[®] is a hydraulically applied Mechanically-Bonded Fiber Matrix[™] that was used for erosion control (Photo No. 40). Erosion and sediment controls were developed and detailed in the site Sedimentation and Erosion Control Plan, which was included in the Removal Action Design. In addition, it was found additional erosion and sediment control measures were necessary for some of the slope areas where excessive erosion occurred during construction. Hydro-Blanket[®] was used to address and control the slope erosion. TD-005 was submitted and approved, authorizing the use of Hydro-Blanket[®].

2.11.3 Wetlands Restoration

Approximately one-half acre of wetlands was disturbed during the waste excavation. The disturbed areas of the wetlands were restored to their pre-existing condition by backfilling the excavation areas and planting wetland vegetation with equal or greater value to wildlife, including Pickerel Rush, Smartweed, Lizard's Tail, Three Square Bulrush, and Soft Stem Bulrush. The backfilling activity coincided with the placement of select fill and topsoil in these areas. The chosen plants, listed on Sheet C-7 of the design drawings, are fast growing and were expected to form dense stands able to cover and stabilize the pond shoreline and releasing nutrients to the ponds. Wetlands restoration (Photo No. 41) was performed in accordance with the planting schedule on Sheet C-7 of the design drawings and Project Specification Section 02951, "Mitigated Wetlands Area, Shrubs, Plants, and Grass." The wetlands plants were purchased from Tra-Agri, Inc. and planted during the week of April 7, 2003.

2.11.4 Sign Installation

Aluminum warning signs were installed at 100-foot intervals along Atkins Road Extension and Atkins Road around the perimeter of the landfill (Photo No. 42), as designated by the ROICC. The signs were installed according to Detail 8 of RD-C4. The signs designate the limits of the landfill, warn that unauthorized excavation and groundwater use are prohibited, and provided a contact number for additional information.

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2.11.5 Final Survey

At the completion of the field activities, which involved site grading or installation/removal of structures, a final topographic survey of the project site was conducted by a registered land surveyor. The final survey includes site topography, elevation/location of existing structures, and the elevation/location of new structures such as the new wells, warning signs, boundaries of the wetland restoration areas, and road modification. The results of the final survey were used to generate RD-C3, indicating the as-built site conditions.

2.12 SITE INSPECTION

A pre-final inspection was held on April 17, 2003 in anticipation of the closure of the project. The following list of deficiencies and tasks to be completed was developed during the inspection by the Site QC Manager and reviewed with the ROICC Office:

- Install the seven monitoring wells as required.
- Remark the utilities for the off-site wells prior to drilling.
- Repair any damage to the surface of the soil cover caused by the drilling activity and from erosion.
- Reseed any surfaces that were repaired.
- Sample the drill cuttings and development water from the monitoring well installations.
- Dispose of the wastes from the monitoring well installation.
- Complete the shoulder of the Atkins Road Extension.
- Survey the locations of the monitoring wells.
- Complete the as-built survey of the site.
- Monitor the growth of the wetland plants and vegetation to ensure success.
- Disconnect the power and phone service through the ROICC.
- Remove the office trailer and storage container.
- Remove the silt fence after the vegetation became established and approval was obtained.

On August 7, 2003, a final inspection was conducted at the site to verify that the deficiencies identified in the pre-final inspection had been completed. Attendees of the inspection included representatives of the ROICC and Environmental Offices and Shaw. The purpose for this inspection was to verify that the tasks detailed in the contract had been completed to the Navy's satisfaction and that all previously identified deficiencies had been rectified. At the completion of this inspection, there was no unacceptable work remaining. The completion of this task constituted final acceptance of the project.

2.13 DEMOBILIZATION

Shaw demobilized labor, equipment, and materials from the site upon completion of the work activities and after having met the project objectives. Demobilization occurred in stages as various work activities were completed, and included those activities discussed below.

2.13.1 Decontamination of Site Equipment

All site equipment that came in contact with waste materials was decontaminated using high-pressure washing before leaving the site. The resulting decontamination water was allowed to infiltrate back into the landfill before the cover was placed. The equipment was decontaminated as the grading of

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the waste was completed. Once the select fill layer was in place, the area was designated as a clean area. Any equipment decontamination from that point on was conducted as a dry decontamination since the presence of contaminated soil on equipment was no longer an issue.

2.13.2 Site Cleanup

Temporary utilities were disconnected as they were no longer needed. The site was cleaned up by removing traces of temporary construction facilities such as work areas, structures, stockpiles of excess or waste materials, and other signs of construction. Seed and mulch were applied to all disturbed areas in accordance with Section 2.11. The Site Superintendent verified the site was clean and restored to a level acceptable to the ROICC before final demobilization of the remaining site resources.

2.13.3 Demobilization of Resources

All equipment was visually inspected for proper decontamination prior to leaving the site. Additional materials not utilized were removed from the site, or stored on Base if the materials were potentially usable in the future at the site or for other Base activities. Construction equipment was demobilized from the site as work phases were completed and the equipment was no longer needed. The equipment and materials (if appropriate) were returned to their location of origin. Personnel demobilized from the site as they were no longer necessary. A portion of the crew conducted the final demobilization in December, concurrent with the holiday break. The remaining crew demobilized on or before February 7, 2003 when the project was substantially complete. A small crew remobilized to the site to plant the wetlands plants, install the landfill signs, perform maintenance on the E&S controls, and install the asphalt to complete the Atkins Road Extension modification. This crew demobilized on April 18, 2003. An additional crew mobilized to the site on July 17, 2003 to complete the installation of the monitoring wells, repair erosion rills on the site, reseed areas, and remove the remaining E&S controls. This crew demobilized from the site on July 29, 2003.

2.14 RECORD DRAWINGS

This draft closeout report contains record drawings of the as-built site conditions. These record drawings are included as a hard copy in Appendix A.

3.0 SCHEDULE AND COST

The following sections summarize the schedule and cost associated with the removal action at Site 12. These sections pertain specifically to the work conducted by Shaw although other parties were also involved either directly or indirectly in ultimately meeting the removal action goals.

3.1 SCHEDULE

The removal action at Site 12 began September 9, 2002 with the initial site setup, installation of E&S controls, and vegetation clearing. The project was substantially complete on February 7, 2003. The final completion date was July 29, 2003.

The initial project schedule included the project mobilization on September 9, 2002 with a personnel demobilization on November 14, 2002. However, due to project delays from numerous weather events and extensions of work (soil cover extension and additional E&S controls), the field work was not completed until July 29, 2003. The field work was substantially complete February 7, 2003 and the field crew demobilized from the site; however, a few minor activities needed completion once warmer weather returned. Therefore, the field trailer remained at the site. The crew mobilized back to the site April 7, 2003 to complete the project and finish the site teardown. However, poor weather during that week prevented the installation of the monitoring wells because driving the drill rig on the saturated soil cover would have resulted in considerable damage. Therefore, the monitoring well installation was postponed and the driller remobilized to the site to complete the work on July 17, 2003. The final project schedule is presented in this document as Figure 2-1.

Throughout the project, bad weather conditions continued to hamper the progress at the site. As mentioned above, the completion of the field work was extended several months in order to successfully complete the assigned tasks. Between mobilization on September 9, 2002 and February 7, 2003, the field crew experienced 32 work days of lost time due to inclement weather. In addition, the remaining work activities after February 7, 2003 were delayed several times because of saturated and soft conditions of the soil cover. The drilling subcontractor tasked to install the seven new monitoring wells had to mobilize three separate times to the site in order to complete the work.

3.2 PROJECT COST

The initial cost estimate to complete the scope of work as defined in the design documents was \$868,478. However, throughout the life of the project, additional costs were incurred outside the original scope of work. Specific activities or items that resulted in additional cost to the project included the following:

- Culvert Extension - The 15-inch corrugated metal pipe (CMP) emptying into the riprap channel in Area 2 was extended approximately 5 feet. The extension (Photo No. 43) was necessary so that placed riprap effectively stabilized the shoulder of Atkins Road at the culvert. An 18-inch CMP was slipped over the end of the existing culvert and riprap was then buttressed against the embankment with a layer of separation geotextile between the riprap and existing ground surface. The culvert extension was addressed in TD-001. The invert of the extended culvert was partially blocked (Photo No. 44) and too low to place the riprap at the designed elevation. In order to prevent regrading the channel to meet the lower elevation, VR-001 was submitted and approved for the installation of a plunge pool at the

SCHEDULE AND COST

- outlet of the culvert. This solution allowed unrestricted flow from the culvert without increasing the cost of the channel. The additional cost for this modification was \$2,740.
- Soil Cover Extension - During the removal of surface debris, additional waste was discovered in the triangular area south of the Area 1 along Atkins Road (Photo No. 45) and down slope of the riprap channel in Area 2. In each of these areas, the top 2 feet of trash was excavated and moved to within the original landfill limits. The design limits were then modified and the soil cover was extended to include these areas. This resulted in an increase of approximately 0.3 acres to the overall soil cover at an additional cost of approximately \$35,700. The approval to extend the extra waste areas was handled in TD-002.
 - Area 1 Riprap Channel - A riprap channel was installed at the northwestern side of Area 1 because surface water runoff from the west side of Atkins Road Extension discharging over the slope was causing severe erosion (Photos Nos.46 & 47). The erosion area was repaired several times with soil (Photo No. 48), which did not provide a permanent solution. A riprap channel (Photo No. 49) was then proposed and approved under TD-003. Separation geotextile was placed on the slope, followed by an 18-inch layer of riprap. The approximate cost for this modification was \$3,800.
 - Leafgrow - The topsoil available in the Indian Head area had an organic content of only 1.4 percent. The wetland areas required a higher organic content, so approximately 2 inches of Leafgrow was spread over the topsoil layer in the wetland areas (Photo No. 33) and tilled in to raise the organic content. The Leafgrow was addressed in TD-004. Although there was an additional cost of \$6,350 for the Leafgrow and its application, this actually represented a potential cost savings to the project. The cost to purchase unmodified topsoil meeting the organic requirements would have been much higher.
 - Hydro-Blanket® - Hydro-Blanket® was installed over the entire site after it was hydroseeded (Photos Nos.39 & 40). The Hydro-Blanket® was used to protect the site from erosion. It was necessary to protect against the on-going erosion problems at the site resulting from the heavier than normal frequent precipitation. The Hydro-Blanket® application was addressed in TD-005 at a cost of \$18,600. This item, although an additional cost to the project, minimized or eliminated the need for constant soil cover repairs after a rain event.
 - Olsen Road Test Pits - Test pit operations at the Site 42 - Olsen Road Landfill were conducted in order to determine the lateral and vertical limits of the buried waste. The results of this activity were then used to modify the design parameters for the upcoming Site 42 Removal Action. The cost of this activity was \$8,040 and addressed as TD-006.
 - Incidental Work - During the field work at the site, minor work activities were conducted that were not planned during the estimating process. These activities included design document review, attending client meetings, and repairs to the site (Photo No. 50) due to weather. The overall additional cost for these activities was \$38,370.

Weather delays also had an impact on the cost of the project. During the removal work at Site 12, the crew experienced a total of 32 work delay days due to inclement weather, wet site conditions, or time spent repairing previously graded areas. The total impacted cost to the project because of the weather delays was approximately \$148,082.

The total estimated cost impact to the project for the items listed above was approximately \$261,682. To complete the project as defined in the scope of work and design documents, funding modifications were submitted to the Navy and approved. These modifications (Modification Nos. 4 and 5) totaled \$239,333. The total cost of modifications were less than the total cost of the weather impacts and design changes. This would have resulted in a cost savings to the overall project if no design changes were made or the project was not hampered by weather delays.

As mentioned previously, the initial estimated cost for the removal action at Site 12 was \$868,478. With the modifications and cost impacts listed above, Shaw submitted two modifications that were approved for a revised project budget of \$1,107,811. Although the project is not officially closed out (completed), the cost at completion is estimated to be \$1,107,150.

3.3 COST SAVINGS

The following sections outline the design changes or value added suggestions that were implemented during the project execution.

3.3.1 On-site Disposal

Materials originally designated for off-site disposal were instead disposed on site. Concrete debris was crushed into manageable pieces (Photo No. 24) and incorporated into the landfill. Saleable timber was cut into manageable lengths and removed from the site and stockpiled east of the site across Atkins Road, as directed by Jeff Bossart of the Indian Head Environmental Office. The remaining cleared material was chipped (Photo No. 16) and spread in lifts with excavated sediment within the limits of the landfill and included under the soil cover. Grubbing consisted of the removal of stumps and root systems within the limits of disturbance. It was determined to be more cost effective to dispose of the grubbed material off site rather than chipping it and placing it within the limits of the landfill as specified. Therefore, the grubbed material was chemically tested and disposed as non-hazardous waste at King George County Landfill in Virginia. The results of the chemical analysis are included in Appendix F. By segregating the debris, then incorporating the concrete and chipped-cleared material into the landfill, while disposing of the heavy grubbed stumps off-site, a savings was realized.

3.3.2 Recycling

Slight cost savings were achieved by recycling some of the scrap metal (Photo No. 25) rather than paying for off-site disposal. A small reimbursement was provided for two rollofs of scrap metal that were sent to King George Scrap. The reimbursement was credited back to the Navy.

3.3.3 Road Subbase

Recycled concrete (RC-6) was substituted for Crusher Run Aggregate (CR-6) at a cost savings of approximately four dollars per ton. The RC-6 had a similar gradation as the CR-6 and would achieve similar strength properties. The use of RC-6 was approved in VR-004.

3.3.4 Leafgrow

Leafgrow was applied to the topsoil in the wetland areas to increase the organic content of the soil. Without this additive, screened topsoil at a much higher cost would have been required.

3.3.5 Erosion Control Improvements

As mentioned previously, a few added erosion prevention items were installed at the site to minimize the continued erosion on the cover by inclement weather. These items included additional rows of silt fence (Photo No. 9), riprap-lined drainage channels (Photo No. 49), and the use of the Hydro-Blanket[®] over the cover (Photo No. 40). Although the direct cost savings for these items cannot be identified, they did fulfill their intended purpose and minimized regrading efforts.

4.0 HEALTH AND SAFETY

Shaw provided a safe, healthy, and accident-free workplace and ensured that the workplace was maintained in accordance with all Federal and Maryland State regulations, guidelines, policies, and standard procedures. Site 12 began work in early September 2002 and was substantially complete on February 7, 2003. Some additional work was completed in April and July once the weather allowed for work to be done. There was a full-time SSO on site for the duration of the project. Shaw put many safety programs into effect on this project to ensure the safety of personnel, clients, visitors, and subcontractors. Tailgate Safety Meetings were conducted daily and a Safety Observer Program was carried out twice a week, where employee (worker) involvement was encouraged. Site-specific orientation was given to all personnel who worked on or visited the site. Also, a Safety Incentive Program (SIP) was established to reward the personnel for safe work practices. With over 6,800 man-hours on the project, there were no accidents, incidents, or injuries for the duration of the project. All personnel received a safety award for their accident-free work at Site 12.

4.1 DELINEATION OF WORK ZONES

To prevent migration of contamination caused by personnel or equipment, work areas and personal protective equipment (PPE) were clearly specified prior to beginning operations. This was discussed at the morning Tailgate Safety Meetings and at site-specific orientation. The SSO designated work areas or zones as suggested by the National Institute for Occupational Safety and Health (NIOSH), OSHA, United States Coast Guard (USCG), and United States Environmental Protection Agency's (USEPA) document titled "Occupational Safety and Health Guidance Manual for Hazardous Waste Site Activities." Each work area was divided into the following three zones:

- Exclusion Zone (EZ)
- Contamination Reduction Zone (CRZ)
- Support Zone (SZ).

The EZ was the actual work area, where suspect contamination was possible. No field worker, subcontractor, or visitor was allowed into this area without proper training and medical certification or proper PPE.

The CRZ was set up for field workers, subcontractors, and visitors to go to when leaving the EZ. In this area personnel cleaned off, removed PPE, and removed any possible contamination.

The SZ was set up as a clean zone. Office trailers, parking, eating facilities, meetings, vendors, and visitors would come to this area before going out on site. A visitor sign-in sheet was posted in the office trailer.

4.2 SITE ACCESS

Access to the site was strictly controlled during work hours. Appropriate access control signs were posted. Vehicle access ways leading to the site were blocked using wooden/access barriers during after work hours. High-visibility orange fencing was also put up around the site area. A log of all personnel visiting, entering, or working at Site 12 was maintained in the site office trailer. This log contained the date, time, individual, and company or agency entering and exiting the site. No visitors

were allowed to enter the EZ without showing proper proof of training and medical certification. All workers, subcontractors, and visitors attended a mandatory site-specific orientation given by the SSO and were required to sign the copy of the SSHASP prior to entering the site. The presence of UXO was possible at Site 12 because it was within the restricted area at the NSWC. UXO avoidance procedures and safety precautions were outlined in the site-specific UXO Support Plan. During excavation activities a UXO support person was on site.

4.3 PRIMARY LEVELS OF PROTECTION

The primary levels of protection used at Site 12 were Level D and Level D+ (modified). Actual levels of protection were based on site conditions, weather conditions, scheduled work tasks, and exposure to suspect contaminants. The level of protection based on the day's field activities was discussed at each morning Tailgate Safety Meeting.

Level D protection consisted of American National Standards Institute (ANSI) safety glasses with permanent side shields, an ANSI-approved hard hat and steel-toed work boots, a high visibility orange vest, and work clothing as determined by the day's weather and field activity.

Level D+ consisted of all of Level D PPE, plus a face shield (when decontaminating equipment or when splashes or projectiles posed a hazard) and Kleenguards/Tyveks when working in grassy areas to avoid tick bites, poisonous plants, and soil contact in suspect contaminated areas, such as areas of excavation and drum removal. All Tyveks worn were taped off at the ankle and wrist with duct tape. Leather gloves, latex or nitrile gloves, and overboots were also worn to protect against transferring any possible contamination to the SZ.

4.4 DECONTAMINATION PROCEDURES

To ensure that both personnel and equipment were free from contamination when they left the work site, the decontamination procedures outlined in the project SSHASP were followed. The procedures were reviewed during Tailgate Safety Meetings. All equipment that came into contact with suspected site contamination was decontaminated before moving to another work area or leaving the site. Procedures for decontaminating the equipment involved pressure washing, sweeping, wiping, and scraping the exterior of the equipment. Special attention was given to the tracks of all track-mounted equipment and all equipment was inspected before leaving the work area. Personnel performing this task wore the appropriate PPE as directed by the SSO.

4.5 AIR MONITORING

Air monitoring was conducted in order to determine airborne contamination levels. This ensured that respiratory protection was adequate to protect personnel against the chemicals or airborne hazards that were encountered. The primary air monitoring instruments used at Site 12 were a Lower Explosive Limit (LEL)/Oxygen (O₂) Meter, a Photovac Photoionization Detector (PID), and a Particulate Meter Data Ram. The PID was used to monitor for toxic vapors. The LEL/O₂ meter was available to test for potential combustible vapors and to check oxygen levels. The Particulate Meter Data Ram was used to monitor for airborne particulate. All monitoring records were kept on file at the site office trailer and discussed at the Tailgate Safety Meetings. The air monitoring logs and calibration logs are included in Appendix H. No upgrades to worker protection levels were required.

4.6 SAFETY INSPECTIONS, PERMITS, AND JOB SAFETY ANALYSIS (JSA)

Safety inspections were conducted biweekly by the Project Manager and Site Superintendent and reviewed by the SSO on site. The Corporate Health and Safety Procedures Plan established the requirements for safety inspections of the project. These inspections were an integral part of the overall accident prevention program, and demonstrate management's commitment to safety. Any deficiencies identified during the safety inspections were corrected immediately. In addition to the biweekly safety inspections, an incentive program was in effect for all field personnel who put safety first. Awards were given to the workers throughout the project for their safe work practices. The Safety Inspection Reports are included in Appendix H.

The Base Health and Safety Department issued all Hot Work permits on a weekly basis. The permits were posted in the site office trailer and are included in Appendix H.

A Job Safety Analysis (JSA) was performed for each task and every time a change was made to an operation. The SSO reviewed each JSA with everyone involved with the specific task, and each person present during the review signed the JSA. The JSAs and sign-off sheets are provided in Appendix H.

4.7 DOCUMENTATION

The following types of health and safety documentation were maintained on site as active files for the duration of the project.

- Safety Work Permit for Explosive Area
- Daily Health and Safety Reports
- Tailgate Safety Meetings
- Air Monitoring Readings and Calibration Logs
- Drum Sampling Logs
- JSAs
- Safety Inspection Reports
- Hot Work Permits.

These documents were available for review in the site files by personnel on an as-needed basis. Once the project was complete in the field, these documents were transferred to the permanent office files for future review or reference if required.

5.0 QUALITY CONTROL

This section discusses the QC procedures that were implemented to ensure that the project was executed according to the design drawings and project specifications.

5.1 PROJECT QUALITY CONTROL PROGRAM

Shaw provided and maintained an effective QC Program for the Site 12 project requirements at the IHDIV-NSWC. This program was performed in accordance with the approved Program Quality Control Plan (PQCP) developed specifically to be responsive to Contract Specifications, Contract No. N62470-97-D-5000, and to the Site 12, Task Order No. 0062 Contract Requirements. The purpose of the QC Program for this project was to ensure compliance with the approved work plan and design drawings, while maintaining the highest level of quality and confidence in the work. The Site QC Manager was responsible for the management and implementation of the PQCP and the project requirements for both on-site and off-site work activities. The on-site QC function for the removal action at Site 12 was divided into the following two categories:

- Management and Administration
- Inspection and Testing.

5.2 MANAGEMENT AND ADMINISTRATION

The QC Program for Site 12 was managed and administered by the Site QC Manager. The Site QC Manager was responsible for controlling the quality of the construction as presented on the design drawings, project specifications, and approved work plan. The QC Manager assured confidence in the work with the highest level of quality maintained.

5.2.1 Three Phases of Control

The QC Program followed a three-phase approach for the QC of site work: preparatory, initial, and follow-up meetings and inspections. The three-phase approach assured that the project work was properly planned and executed to achieve a quality finished product in a smooth, efficient manner. These meetings and inspections were an integral part of completing the work correctly the first time, minimizing any rework and schedule delays. A Daily QC Report was prepared documenting each phase of the work as it proceeded. The Daily QC Reports for the site work can be reviewed in Appendix D. Photo documentation of the site activities and work progress was also conducted using a digital camera. A photo pass was approved for the Site QC Manager to take photographs of the site.

Preparatory meetings were conducted by the Site QC Manager prior to the start of each definable feature of work. These meetings were the first step of the work to assure that the correct materials, equipment, and methods were delivered and used. These meetings with key personnel, including Base personnel and subcontractors involved in the definable feature, included a discussion of the following:

- Review of the Contract Specifications and design drawings
- Verification that submittals for materials were approved
- Verification of testing requirements
- Discussion of construction methods and schedule
- Review of the safety requirements (JSAs) for the various tasks.

The Initial Phase of each definable feature of work was observed by the Site QC Manager to ensure compliance with the Contract Specifications and Drawings. As the work started, the Preparatory Meeting Minutes were reviewed to make sure that the work was starting as planned. The materials to be used were inspected, the necessary preliminary work was verified as complete, and it was confirmed that those personnel supervising the work understood the activity requirements.

Follow-up inspections were performed on a daily basis until the completion of each definable feature of work. These inspections were documented in the Daily QC Reports.

Throughout the duration of the project, the Site QC Manager reviewed each activity with the project staff to assure the work was done correctly the first time. Details of the design drawings were reviewed and copies were provided to the field crew when necessary to help explain the upcoming task. Upon starting and through the duration of the task, the work was observed and adjustments were made to assure compliance. As site conditions changed, the QC Manager communicated the changes to both the Navy and TtNUS. Through discussions and cooperation between the Navy, TtNUS, and Shaw, the best resolution was agreed upon and changes were made.

5.2.2 Contract Modifications

Modifications to Contract Specifications and Drawings, which required Navy approval, were prepared and submitted in the form of either a VR or TD. A VR was submitted for a change to the design or material specifications. The VR was first sent to the ROICC, who then forwarded it to the TtNUS design engineer for review and comment, then back to ROICC for approval. A TD was submitted when there was a change in the project scope or cost and was submitted directly to the Navy for review and approval. There were five VRs and seven TDs submitted and approved for this project. A log of the VRs and TDs is provided in Appendix E.

5.2.3 Record Drawings

Records were maintained in the field during construction to accurately prepare RDs for the project. Redline drawings were maintained at the site office by the Shaw project field surveyor and the Site QC Manager. These drawings were continuously updated as conditions changed to reflect all of the changes to the design drawings during construction. As-built surveys containing elevations and coordinates of the structures and final grading were maintained by the site surveyor during construction. A surveyor licensed in Maryland was subcontracted to perform a final site record survey after the completion of construction. The RDs and documents prepared from these records are included in Appendix A (record drawings) and Appendix D (Submittals)

5.2.4 Quality Control Meetings

QC meetings were conducted at the site trailer biweekly. These meetings were attended by Shaw supervisory and management personnel, Base personnel from the Public Works Office, Base personnel from the Environmental Office, representatives from the ROICC Office, EFA - Chesapeake RPM, and the TtNUS design engineer representative. The status of the project, including work accomplished, work scheduled, rework items, submittals, and testing as well as items of production and QC, were discussed. These meetings resolved concerns identified during construction. Minutes of the meetings were prepared and distributed by the Site QC Manager and are included in Appendix D. Prior to mobilization, a Coordination and Mutual Understanding Meeting was conducted to review and discuss the objectives and responsibilities of the QC Program for the project. Minutes of this meeting are also included in Appendix D.

5.2.5 Submittals

Submittals for materials, test results, reports, and drawings were required for this project. The information necessary to certify that the materials and structures proposed to be incorporated into the project were in compliance with the Contract Drawings and Specifications was acquired and submitted. These submittals were sent directly to the ROICC Office, who would forward them to the design engineer and RPM for review and approval. No materials or structures were incorporated into the project without first being approved in accordance with the Contract. The submittals were tracked on the Submittal Register, which was reviewed and revised periodically. All contractor- and government-approved submittals, including test results and certificates of compliance, were reviewed by the Site QC Manager for specification compliance prior to being forwarded to the ROICC Office. The Submittal Register and the electronic copies of the approved submittals are contained in Appendix D.

5.2.6 Procurement

Procurement of permanently installed materials and structures was reviewed by the Site QC Manager and approved through the submittal process. Upon delivery of the materials or structures, inspections were performed by the Site QC Manager to verify the integrity and compliance of the materials and structures with the approved submittal.

5.2.7 Testing Log

A Testing Log was maintained by the Site QC Manager to track and summarize testing that was conducted by Shaw during construction. This testing included geotechnical testing and chemical analysis of off-site fill and topsoil, nutrient analysis testing of topsoil, in-place moisture, density testing, and chemical testing of waste for disposal profiling. The Testing Log was prepared monthly and submitted for review with copies of the analytical results. Copies of the test results were also submitted upon receipt either as a submittal or with the Daily QC Reports. These Testing Logs are included in Appendix D. Copies of the chemical analysis are included in Appendix F and the geotechnical and field test results are in Appendix G.

5.2.8 Rework Items List

Rework items identified during the construction of the project were tracked on the Rework Items List. These items were identified by the Site QC Manager and pointed out to the Site Superintendent to be corrected. Rework items were defined as those work items identified for correction, but not corrected by the end of the day. These items were also identified and discussed during the biweekly QC meetings. The Rework Items List can be reviewed in Appendix D.

5.2.9 Periodic and Final Inspections

Periodically, Base personnel not involved in the project on a day-to-day basis, such as Base Health and Safety, visited or inspected the site. The Commanding Officer of the Base visited the site and reviewed the scope of work on September 19, 2002. The Restoration Advisory Board visited the site on October 3, 2002.

A Pre-final Inspection was conducted on April 17, 2003 by the Site QC Manager. The following punch list was developed during the inspection and reviewed with the ROICC office:

- Install the seven monitoring wells as required.
- Remark the utilities for the off-site wells prior to drilling.

- Repair any damage to the surface of the soil cover caused by the drilling activity and from erosion.
- Reseed any surfaces that were repaired.
- Sample the drill cuttings and development water from the monitoring well installations.
- Dispose of the wastes from the monitoring well installation.
- Complete the shoulder of the Atkins Road Extension.
- Survey the locations of the monitoring wells.
- Complete the as-built survey of the site.
- Monitor the growth of the wetland plants and vegetation to ensure success.
- Disconnect the power and phone service through the ROICC.
- Remove the office trailer and storage container.
- Remove the silt fence after the vegetation was established and approval is obtained.

The items identified in the Pre-final Inspection were addressed, and a final walk-through inspection was performed on August 7, 2003. The inspection was conducted with representatives from the offices of EPA - Chesapeake, Environmental Department, and Shaw. The punch list of items developed at the Pre-final Inspection conducted on April 17, 2003 was reviewed as well as the present condition of the site. There were no comments or items identified for additional work at the Final Inspection.

5.3 INSPECTIONS

The project work activities were divided into twelve definable features of work. QC inspections and testing were conducted following this outline of the definable features of work:

- Site Preparation
- E&S Controls
- Clearing and grubbing
- Monitoring Well Abandonment
- Waste Removal
- Waste Regrading
- Transportation and Disposal - Non-hazardous Waste
- Transportation and Disposal - Hazardous Waste
- Cover Soil
- Site Restoration
- Atkins Road Extension Modification.
- Monitoring Well Installation

5.3.1 Site Preparation

Site preparation activities included the setup of the office trailer, connex box, and other facilities, the connection of the utilities, and lowering the water elevation within the ponds. The Preparatory Meeting for the site preparation activity was conducted on September 9, 2002. Site supervision staff and Base personnel from the ROICC office were present for the meeting. The related plans and specifications were reviewed. The SSO reviewed the JSAs with the field crew after the meeting. The site preparation activity began on September 11, 2002 after the work permit was issued by the Frank James of the Base Safety Department.

5.3.2 Erosion and Sediment Control Installation

E&S control installation involved the installation of specified E&S control devices. These devices included silt fence and super silt fence, ECM, stone check dams, a SCE, material handling pads, and a decontamination pad. The Preparatory Meeting for these erosion controls was conducted on September 9, 2002. Site supervision and Base personnel from the ROICC Office were present for the meeting. The Plans, Specifications, and the MDE-approved ESCP were reviewed. The Site QC Manager verified that the materials to be used had been submitted and approved and that the approved materials had been delivered to the site. Prior to the start of any earth disturbances, the required E&S controls were identified and installed. The SSO reviewed the JSAs of the upcoming work. Installation of the E&S controls began on September 18, 2002 when the Site QC Manager conducted an Initial Inspection. Receipt of the approved work permit, included in Appendix D, was verified. Work methods and installation instructions for the work were reviewed with the crew. The crew was informed that no earth disturbance was to start until the site E&S controls were installed. Proper marking of the limits of disturbance and silt fence and super silt fence alignment was verified prior to starting installation of the silt fence.

To install the silt fence and super silt fence, the alignment was cleared of small brush and obstructions by hand. An excavator was used to remove larger objects, such as concrete debris and logs, in the alignment of the silt fence and super silt fence. Natural items, such as logs and stumps, were placed outside of the silt fence. Trash was moved inside of the silt fence. Work continued for the installation of the E&S controls following the design drawings, project specifications, and "Standards and Specifications for Soil Erosion and Sediment Control" published by the MDE. Various methods were used for the installation, depending on the site conditions. Where possible, a trencher was used to dig the trench for the fence; however, most of the trench had to be dug by hand or with an excavator. Significant difficulty was encountered installing the super silt fence along the edge of the ponds in the soft sediments. Much of the installation was performed by hand by personnel wearing waders to walk in the soft sediments.

5.3.3 Clearing and Grubbing

The Preparatory Meeting for clearing and grubbing was conducted on September 9, 2002, with the same personnel as present for the Site Preparation and E&S meetings. The scope of the work was reviewed and discussed. Trees were to be first cleared in areas known to be within the limits of disturbance. Once the limits of disturbance were marked, clearing would begin along the limits. To minimize disturbances within the landfill area, trees were to be cut close to the ground surface and the stumps were to be left in place. Roots and stumps were only removed in areas where the roots would prevent proper construction. No earth disturbances were to be started until the E&S controls were installed for the area. Trees and limbs with diameters less than four inches were chipped and remained on site. Shaw was to spread these chips as a thin layer under the soil cover. Trees and branches with diameters greater than 4 inches were cut into manageable sections and stacked off-site for Navy use. The JSA was reviewed by the SSO.

The crew began clearing operations on September 10, 2002 when an Initial Inspection was conducted of their work activities. The JSA was again reviewed by the SSO with the crew when they arrived on site. The trees were cut close to the ground surface using chain saws. The smaller trees were then chipped with the 9-inch chipper and spread on site in a thin layer. The larger trees were piled at the location indicated by the Navy. The Site QC Manager inspected the activity throughout its duration to verify it was performed in accordance with the specifications.

5.3.4 Monitoring Well Abandonment

The Preparatory Meeting for monitoring well abandonment was conducted on September 24, 2002. Chesapeake Geosystems, a licensed Maryland well driller, was subcontracted to abandon the monitoring wells within the construction area. Site supervision and Chesapeake Geosystems personnel were present for the Preparatory Meeting. The wells were to be abandoned in accordance with the applicable Maryland regulations. The steel protective casing was to be removed, along with the inner pipe and screen if possible (Photo No. 17). A cement and bentonite grout was to be used to seal the wells. The abandonment records were to be completed by the well driller and provided to the State and to Shaw for submittal. The list of wells was reviewed with and provided to the driller. The SSO reviewed the JSA with the Chesapeake Geosystems personnel.

Chesapeake Geosystems started abandonment of the monitoring wells immediately after the Preparatory Meeting. Six monitoring wells were abandoned. For each well, the outer casing, riser, and screen were removed and the well was grouted with bentonite and cement. The monitoring wells were shallow, so pressure grouting was not necessary. A mixture of expanding bentonite was poured down the former well hole to complete the closure. Copies of the Abandonment Logs were received and submitted as Submittal No. 02525-01. This submittal is included in Appendix D of this report. Chesapeake Geosystems also submitted the Abandonment Logs directly to the State of Maryland.

5.3.5 Waste Removal

The waste removal definable feature of work covered the removal of shoreline waste. The Preparatory Meeting was conducted on September 30, 2002. Shaw personnel, including a UXO Specialist, attended the meeting. The Drawings and Specifications related to the activity were reviewed at the meeting, and the SSO went over the JSAs.

This activity involved the removal of the waste along the shorelines and relocating it to areas of the landfill requiring fill to meet the Interim Grading Plans. The removal of the debris was started and the Initial Inspection was conducted on September 30, 2002. The UXO Specialist observed the excavation (Photo No. 22) to identify any UXO items that were unexpectedly uncovered; however, no UXO items were discovered during the excavation. An excavator was used to remove the waste from the shoreline and place it on the slope of the landfill area. No soil or sediments containing free liquids were excavated. As the waste was excavated, a loader was used to segregate it into piles by type: metal, concrete, wood, and soil/sediment. The small waste was to be incorporated into the landfill. The large waste, such as tires, telephone poles, railroad ties, and metal debris, was to be disposed off site (Photo No. 26). In order to save money in transportation and disposal, Shaw obtained approval to utilize a hoe ram to break the concrete debris into smaller pieces (Photo No. 24) that became incorporated into the landfill rather than disposing of it off site. Additionally, the metal debris was decontaminated on-site (Photo No. 25) and then transported to a local salvage yard for recycling. The rest of the large debris was sampled and disposed off site.

Throughout the duration of the waste removal activity, the Site QC Manager maintained close communication with the project staff. Daily Follow-up Inspections reviewed the work and documented work activities. The Site QC Manager inspected the shoreline to verify that all of the waste had been removed as required.

5.3.6 Waste Regrading

The Preparatory Meeting for this definable feature of work was conducted on October 2, 2002 prior to the commencement of the waste regrading. Shaw personnel were present for the meeting. The

Site QC Manager reviewed the scope of work for the activity, along with the related Drawings and Specifications. The scope of work included regrading site materials to meet the lines and grades of the Interim Grading Plan. However, if the cut and fill areas did not balance perfectly, no off-site fill material was to be brought on site, and no extra material was to be disposed off site. Field modifications to the grade would be made, and the Site QC Monitor would document the actual grades in order to ensure the proper thickness of cover soil would be placed. The JSA for the work activity was reviewed by the SSO.

The waste regrading activity began and the Initial Inspection was conducted on October 2, 2002. Continuous survey support was provided during the waste regrading activity. Area 1 was graded first (Photo No. 27). It was graded to meet the Interim Grading Plan, and excess material was transported to Area 2. Areas 2 and 3 were then graded. They were graded very close to the interim grading plan, but varied slightly due to slight variation in material volume. The Site QC Manager verified that the design requirements, including the 4 percent minimum grade and 25 percent maximum grade, were met and the intended drainage patterns were maintained. The final interim grade was surveyed and used to set the grade for the select fill and topsoil in order to ensure the two-foot cover requirement was achieved.

5.3.7 Transportation and Disposal - Non-Hazardous Waste

The Preparatory Meeting for this definable feature of work was conducted on October 22, 2002. The Shaw supervisory personnel and work crew attended the meeting. The disposal facilities and the waste going to each were discussed. The SSO presented the JSAs.

The Initial Inspection was conducted on October 22, 2002. Tires were sent to the BFI Old Dominion Landfill in Virginia. Waste debris and stumps were sent to the King George County Landfill in Virginia. Weight tickets for the materials disposed off site were provided to Shaw. The Non-Hazardous Waste Manifests for the debris are included in Appendix D as Submittal 01575N-08. The Site QC Manager verified that the appropriate testing was performed prior to disposal and the necessary paperwork was filled out correctly and accompanied the material being disposed. Follow-up Inspections were performed by the Site QC Manager each time material was sent off site for disposal.

The new monitoring well installation activity generated several drums of liquid and solid waste. These waste streams were sampled and the materials were determined to be non-hazardous. These drums were removed from the site on October 13, 2003 and disposed at an approved landfill facility.

A summary of the transportation and disposal is included as Table 1.

5.3.8 Transportation and Disposal - Hazardous Waste

The Preparatory Meeting for this definable feature of work was conducted on November 20, 2002. The Shaw site personnel attended the meeting. This activity included the containment of waste drums into overpack drums and their transportation and disposal. The SSO reviewed the job hazards with the site personnel.

Waste drums (Photo No. 51) found during the site excavation and regrading were placed into 5 overpack drums and labeled (Photo No. 52). Samples from the drums had been tested to determine an appropriate disposal facility for the drums. The overpack drums were picked up and transported to Cycle Chem, Inc. for disposal on December 13, 2002. Prior to transportation, the Site QC Manager confirmed that the drums and truck were labeled and placarded properly. The Hazardous Waste Manifest and Certificate of Receipt for the Disposal of Hazardous Drums is included in Appendix D as Submittal 02223-02. A summary of the transportation and disposal is included in Table 1.

5.3.9 Cover Soil

This definable feature of work covered the placement of the cover soil, which included the select fill layer and topsoil layer. The Preparatory Meeting for the cover soil was conducted by the Site QC Manager on October 23, 2002. The Shaw supervisory personnel and work crew attended the meeting. The SSO presented the associated JSAs.

This work activity included the placement of 18 inches of select fill and 6 inches of topsoil. The Site QC Manager verified that the materials met the specifications before they were brought on site. The as-built survey of the regraded waste was used to set the grade stakes for the select fill and topsoil. The select fill was placed in three 8-inch loose lifts and compacted with a smooth drum roller. A 50- by 50-foot grid system that was established for survey control was used to document the test locations and a Troxler nuclear density gauge was used to test the compaction in each grid after each lift. The compaction requirement for the select fill was 85 percent of the maximum dry density. A six-inch layer of topsoil was then placed over the select fill. The compaction of the topsoil was incidental to its placement by the low ground pressure dozer (Photo No. 32). Testing results are included in Appendix G.

The cover soil placement began and the Initial Inspection was conducted on October 23, 2002. The Site QC Manager continued regular inspections for the duration of the activity.

5.3.10 Site Restoration

The site restoration activity encompassed hydroseeding the site (Photo No. 38), placing the Hydro-Blanket® (Photo No. 39), and planting wetland plants (Photo No. 41). The site restoration Preparatory Meeting for the hydroseed and Hydro-Blanket® was held on January 14, 2003. The Shaw site personnel and Tra-Agri, Inc. staff attended the meeting. Tra-Agri, Inc. was the subcontractor for the hydroseed and Hydro-Blanket®. The Site QC Manager reviewed the appropriate drawings, specifications, and JSAs with the Shaw and Tra-Agri, Inc. personnel.

The activity began and the Initial Inspection was conducted on January 14, 2003. The Site QC Manager reviewed the seed tags and certifications to confirm they were the appropriate seed mixture. The fertilizer bags were also checked. An 18-24-12 time released fertilizer was used based on the soil test. No lime was required, based on the topsoil tests. The Site QC Manager watched as the proper seed mixture, fertilizer, and clean water were added to the tank and mixed. Tra-Agri, Inc. then evenly sprayed the mixture over the site. Following the hydroseeding, Tra-Agri, Inc. applied the Hydro-Blanket® in multiple layers. The Site QC Manager performed follow-up inspections each day of the activity.

The Preparatory Meeting for the installation of the wetlands plants was held on April 7, 2003. Representatives of the ROICC office, Environmental office, Tra-Agri Inc., and Shaw attended the meeting. The Site QC Manager reviewed the specifications and JSAs and the Tra-Agri, Inc. representative instructed the crew on the methods of planting the wetland plants. Tra-Agri, Inc. was the vendor to provide the wetland plants.

The work began and the Initial Inspection was conducted on April 7, 2003 after the Preparatory Meeting. Prior to the start of the work, the Site QC Manager reviewed the Plant Certification and the plant list to verify that the correct species and sizes of plants were delivered to the site. In addition, the Site QC Manager verified that the preliminary work, which included topsoil and leaf-grow placement, was complete.

5.3.11 Atkins Road Extension Modification

The Atkins Road Extension modification included reconstructing the road to coincide with the two-foot soil cover placed over the landfill. The Preparatory Meeting for the initial stages of the Atkins Road Extension modification was held on January 20, 2003. The Shaw site crew attended the meeting, where the Site QC Manager reviewed the associated drawings, specifications, and JSAs.

Prior to commencement of the activity, the Site QC Manager verified that the correct materials were on site. Materials for this activity included common fill, subbase aggregate, and woven geotextile. The select fill material was used as the common fill because it met the requirements for both. VR-004 was submitted to allow the substitution of RC-6 as subbase aggregate instead of CR-6. The Site QC Manager obtained the appropriate approval before the RC-6 was brought to the site. During the placement of the RC-6, the required compaction of 97 percent of the modified proctor could not be achieved according to field testing; however, discussions with the laboratory indicated the testing procedure was not appropriate for RC-6. Therefore, VR-005 was submitted and approved to allow for compaction acceptance to be based on 4 passes with a minimum 9-ton vibratory roller and no visual changes in the surface during compaction.

The rationale for making this adjustment is due to the fact that when testing recycled concrete, nuclear densitometer testing tends to indicate a higher moisture content than is actually present. The moisture content is used to determine the dry density of the material. A higher moisture content results in a lower dry density, which falsely indicates a lower percent compaction than is actually achieved. There is technical evidence in the literature to confirm this phenomenon. Even though the measured compaction result was believed to be artificially depressed by the test method, the goal to assure a high level of subsurface stability in order to avoid settling, cracking, or deterioration of the road remained a requirement. Based on research that was performed, a minimum of a 4-pass recompaction was believed sufficient to assure road base integrity.

The activity began and the Initial Inspection was conducted on January 20, 2003. Survey control was used to bring the common fill to the appropriate grade. Prior to the placement of the common fill, the existing asphalt was saw-cut in preparation for the tie-in to the new asphalt. The asphalt cuttings were placed in areas of the road requiring at least two feet of fill. This ensured a minimum of two feet of clean fill was placed over the asphalt. The woven geotextile was placed over the compacted common fill, followed by 10 inches of aggregate subbase. The common fill and aggregate subbase were tested during installation as indicated in the following section.

The Preparatory Meeting for paving Atkins Road Extension was held on April 14, 2003. Representatives of Austin Paving and Shaw attended the meeting. The Site QC Manager reviewed the specifications and JSAs for the activity and the Austin Paving representative reviewed the procedures for the activity.

The activity began and the Initial Inspection was conducted on April 16, 2003. Tasks under this activity performed by Austin Paving included final grading and recompacting the road subbase, milling the edges of the old pavement for a smooth transition, placing and compacting a minimum of two inches of base course, and placing and compacting a minimum of one inch of wearing course (Photo No. 34). Hillis and Carnes performed the asphalt testing to verify that the compaction requirement of 96 percent of ASTM D1188 was met. The Site QC Manager performed inspections for the duration of the activity.

5.3.12 New Monitoring Well Installation

Seven new monitoring wells were to be installed at the site to replace the six wells previously taken out of service. The new wells (Photo No. 53) were scheduled to be installed after the soil cover over the landfill was complete. A Preparatory Meeting for the installation of the new wells was held on April 7, 2003 and was attended by Carl Hugo of C.R. Hugo Inc., the licensed well installer; several members of the field crew; and the Site QC Manager.

The Site QC Manager reviewed the project specifications, design drawings, and SSHASP with the drilling subcontractor prior to conducting any drilling. In addition, the QC Manager verified that the correct materials of construction for the new wells were on site.

The Initial Inspection was conducted on May 19, 2003. The monitoring well installation activity began on May 19, 2003. However, due to wet landfill cover conditions, only two of the seven new wells were partially installed. Significant damage by the drill rig to the landfill soil cover would result if an attempt was made to install the other wells. The decision was made to postpone the drilling until favorable cover conditions were present. The well installation continued July 17, 2003. The Site QC Manager monitored the new well construction and well development. A total of 10 drums of Investigative Derived Waste (IDW) were generated from the well installation activities. Representative samples of the drum contents (soil and groundwater) were collected and submitted for waste characterization. The drums were then properly labeled and stored awaiting future off-site disposal. A copy of the well installation logs is presented in Appendix D and the waste characterization results for the IDW are in Appendix F.

5.4 TESTING

Testing was a significant task for the completion of the project work to demonstrate conformance with the Specifications. Testing Logs were maintained on a monthly basis to track the status of every test conducted during the month. These Testing Logs are provided in Appendix D and also for reference at the beginning of both Appendix F and G, where chemical and geotechnical test results are provided. The testing for this project was divided into two major types: chemical and geotechnical.

5.4.1 Chemical Testing

Chemical testing was performed to verify the clean fill parameters for the off-site borrow soil and to determine the waste profiles for the waste being sent off site for disposal.

5.4.1.1 Fill Material

Chemical testing was conducted for the off-site borrow sources. One topsoil source and one select fill source were tested. Each was tested for the full set of parameters identified for off-site sources. These parameters included Full TCLP, BTEX, and TPH Diesel Range Organics (DRO)/Gasoline Range Organics (GRO). The results indicated that the materials were acceptable for use. Submittal Number 02315-01 provided the results and was approved for use. These submittals are included in Appendix D. Copies of the chemical analysis testing results are included in Appendix F of this report.

5.4.1.2 Waste Profiling

All waste materials being sent for off-site disposal were sampled and tested. Samples for the telephone poles, railroad ties, stumps, and debris were taken on October 7, 2002 and sent for disposal analysis. The analytical was submitted as Submittal 01575N-05 (Appendix D). The debris was sent to

King George County Landfill in Virginia for disposal; the permit for the landfill is provided in Submittal 01575N-07 (Appendix D). The drummed waste was sampled on October 15, 2003 for disposal analysis. Submittal 01575N-06 provided the test results from the analysis. Of the six drums, five were hazardous and one was non-hazardous. The analytical results were submitted as Submittal 01575N-06 (Appendix D). The permit for Cycle Chem, Inc., the disposal facility for the hazardous drums, is included in Appendix D as Submittal 02223-01. The permit for Old Dominion Landfill is included as Appendix D as Submittal 01575N-06.

5.4.1.3 Topsoil Composition Testing

To determine the quality of the topsoil and recommended quantity of nutrients to be added for good vegetative growth, a sample of the topsoil was tested for composition prior to delivery and use. A sample from each source proposed for use was sent to the soil laboratory at the University of Maryland for testing. Results of the composition testing were provided to the seeding subcontractor to determine the nutrients to be added during the seeding process. These results are included in Appendix G. The specifications required an organic content of five to eight percent. However, topsoil available in the area did not meet that requirement. Topsoil from LaPlata Sand and Gravel had an organic content of 1.5 percent, which met the requirement of Section 20 of the MDE "1994 Standards and Specifications for Soil Erosion and Sediment Control." Therefore, VR-002 was approved to accept the use of the topsoil without altering the warranty.

5.4.2 Geotechnical Testing

Geotechnical testing of the soil and fill materials used on the site was an ongoing activity. Geotechnical testing was conducted on the material both in the laboratory and on site after placement and compaction. These tests were also included in the monthly Testing Log. The geotechnical test results can be reviewed in Appendix G of this report. Geotechnical test results for both laboratory and on-site testing were submitted throughout the material placement activity.

5.4.2.1 Laboratory Testing

Samples were collected of the off-site select fill, topsoil, and road subbase materials to be used on the site and sent to the laboratory to determine the geotechnical characteristics. The samples were tested as described in the project specifications. The test results for the select fill and road subbase were used to determine the maximum dry density of the material for in-place compaction testing. The topsoil geotechnical test results were used to verify that the topsoil met the requirements of the topsoil specifications.

5.4.2.2 Field Testing

Field testing of the in-place materials was conducted throughout the duration of the select fill and subbase material placement activities. A Troxler nuclear density gauge (Photo No. 54) was used to measure the in-place density (ASTM D2922) and moisture (ASTM D3017) of the material placed. This testing was conducted to confirm that the materials were placed and compacted to the required density for each material according to the project specifications. Each lift of material was tested at the required frequency. Select fill was tested at a frequency of one test per every 2,500 square feet. This was accomplished by establishing a 50-foot by 50-foot grid over the area. As material was placed and compacted, a test was conducted at a random location within each grid and the results recorded on the daily Compaction Testing Summary Sheet. The results of the Troxler tests, as well as other geotechnical testing, are included in Appendix G.

5.5 LESSONS LEARNED

Throughout the life of the project, there were several situations that occurred or were realized that impacted the project through additional cost and prolonged schedule. These situations are discussed below and are grouped into two general categories. The first group of situations was items that may have been averted with additional pre-mobilization planning and effort. The second group of situations was items that needed resolving as they occurred.

5.5.1 Pre-Mobilization Situations

Several situations occurred during the project execution that may have been averted or their impact reduced with some additional pre-planning.

- Lack of Phone Lines at the Project Trailer: It took several weeks to get a phone line established at the project trailer after the initial mobilization. The availability of phone lines for the trailer was also limited to one line. This delay in establishing appropriate communication lines resulted in having to establish an off-base command center for the project. Communication for the field trailer may have occurred sooner with additional pre-planning. However, the lack of available phone lines could not be remedied and the off-base command center would still be needed.
- Waste Limits Modification: During the installation of the perimeter E&S control features, additional landfill waste was identified beyond the limits on the design drawings. This additional waste resulted in an extension of the cover system and relocation of some of the waste to within the overall design limits of the landfill. Although providing additional pre-design investigation may have identified these expanded areas, the overall impact to the project would have most likely been the same. The situation was resolved quickly once identified and any delays associated with mitigating the additional areas were minimized.

5.5.2 Post-Mobilization Situations

Several situations arose after mobilization into the field which would not have likely been avoided by what would be considered prudent and reasonable pre-planning. These situations included:

- Super Silt Fence Installation: After the installation of the super silt fence along the pond, it was determined that the subsurface soil did not provide adequate strength to support the fence poles once the super silt fence experienced silt loading. Significant effort was used to repair the super silt fence once silt began to build up along the geotextile fabric. After several repairs, it was determined that longer poles were required for support. When repairs were later made, the longer poles (12 feet in length) were used and provided the necessary support. The longer poles were the solution for the weak soil. However, knowing this ahead of time would have been difficult.
- Soil Erosion: The imported soil used as part of the cover system met the design specifications. However, this soil was highly erodible once it was subject to channel flow runoff. Significant effort was used to repair erosion rills after even mild rain events. More cohesive material would have fared better in minimizing soil loss and repair efforts for rain events.

- Erosion Channel: Rain events caused significant soil loss at the embankment of the culvert pipe that linked the two ponds. The embankment was repaired several times until it was decided to install a rip-rap channel down the slope. This was the correct solution to the problem. However, other less expensive solutions were tried prior to the channel installation without success.
- Hydro-Blanket: Soil loss continued throughout the life of the project because of the lack of cohesive material and the excessive rain experienced. Erosion was evident during topsoil placement. With this added soil loss, the vegetation for the cover would have a difficult time in establishing proper root growth. The solution was to cover the site with a hydro-blanket which would protect the seed and reduce soil loss. This was an appropriate solution and was derived prior to any major repair work. With the success of the blanket, its use on other future projects should be evaluated prior to top soil placement.

There were other minor situations that occurred during project execution that were handled and resolved. Some were quickly resolved and some were solved by trial and error. The completion of the project was a team effort between the designer, contractor, and the Navy. It is difficult to prepare for a situation until the situation occurs. However, delays and cost impacts can be minimized with timely solutions from the project team.

5.6 COMPLETION CERTIFICATE

CERTIFICATE OF CLOSURE

**SITE 12 - TOWN GUT LANDFILL
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND**

**LANTDIV CONTRACT NO. N62470-97-D-5000
TASK ORDER NO. 0062**

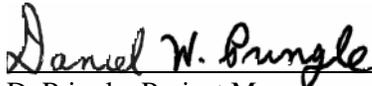
On behalf of Shaw Environmental, Inc., I certify that, to the best of my knowledge and belief, the remediation of Site 12 - Town Gut Landfill at Indian Head Division - Naval Surface Warfare Center in Indian Head, Maryland, has been completed as described in this Removal action Closeout Report issued on December 12, 2003 and prepared by Shaw Environmental, Inc.



E. Duke, Site QC Manager

December 12, 2003

Date



D. Pringle, Project Manager

December 12, 2003

Date

TABLES

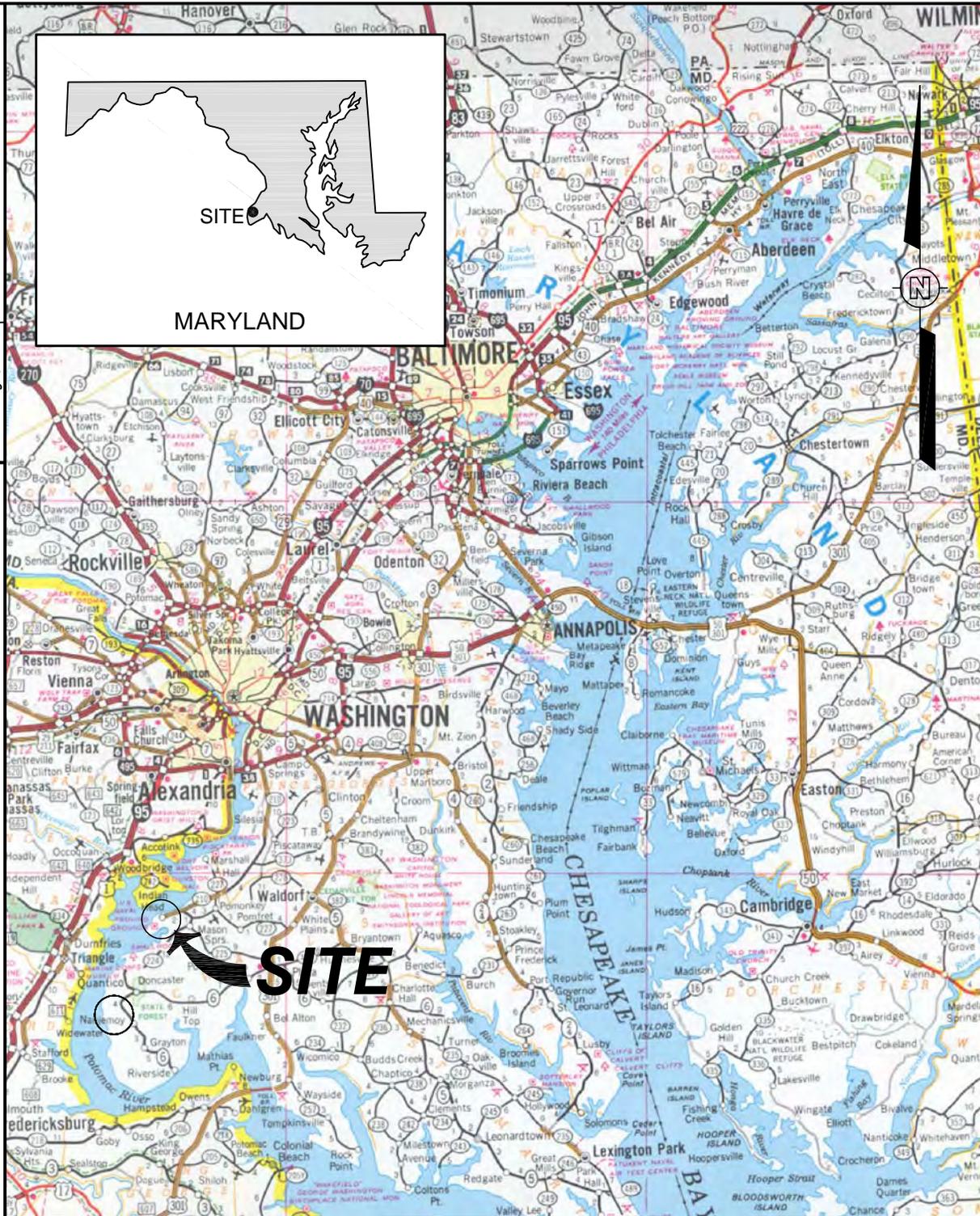
**Table 1
Transportation and Disposal Log**

Manifest Number	Date	Ticket Number	Quantity	Destination	Description	Type
--	10/13/2002	--	5 drums	C-MAC - Fisher Industrial Service, Inc.	IDW Soil & Water from Monitoring Well Installation	Non-Hazardous
	10/15/2002	--	5.43 tons	Prince George Scrap	Metal Scrap	Non-Hazardous
--	10/17/2002	--	4.26 tons	Prince George Scrap	Metal Scrap	Non-Hazardous
--	10/22/2002	--	1.92 tons	BFI Landfill	Tires	Non-Hazardous
TG-001	12/12/2002	236169	3.74 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-002	12/12/2002	236174	7.11 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-003	12/12/2002	236175	7.12 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-004	12/12/2002	236177	6.67 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-005	12/13/2002	236227	6.21 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-006	12/13/2002	236236	7.83 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-007	12/13/2002	236251	7.56 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-008	12/13/2002	236255	7.86 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-009	12/13/2002	236289	10.14 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-011	12/13/2002	236313	5.33 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-010	12/13/2002	236316	5.23 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-012	12/13/2002	236329	8.76 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-013	12/13/2002	236336	6.68 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
PAG457645	12/13/2002	--	5 drums	Cycle Chem Inc.	Drums	Hazardous
TG-014	12/14/2002	236357	13.86 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous

FIGURES

XREF Files: IMAGE Files: 809401IM1.jpg
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 Plotted By: arthur.smith

OFFICE: Pittsburgh, PA
 DRAWING NUMBER: 809401-A2



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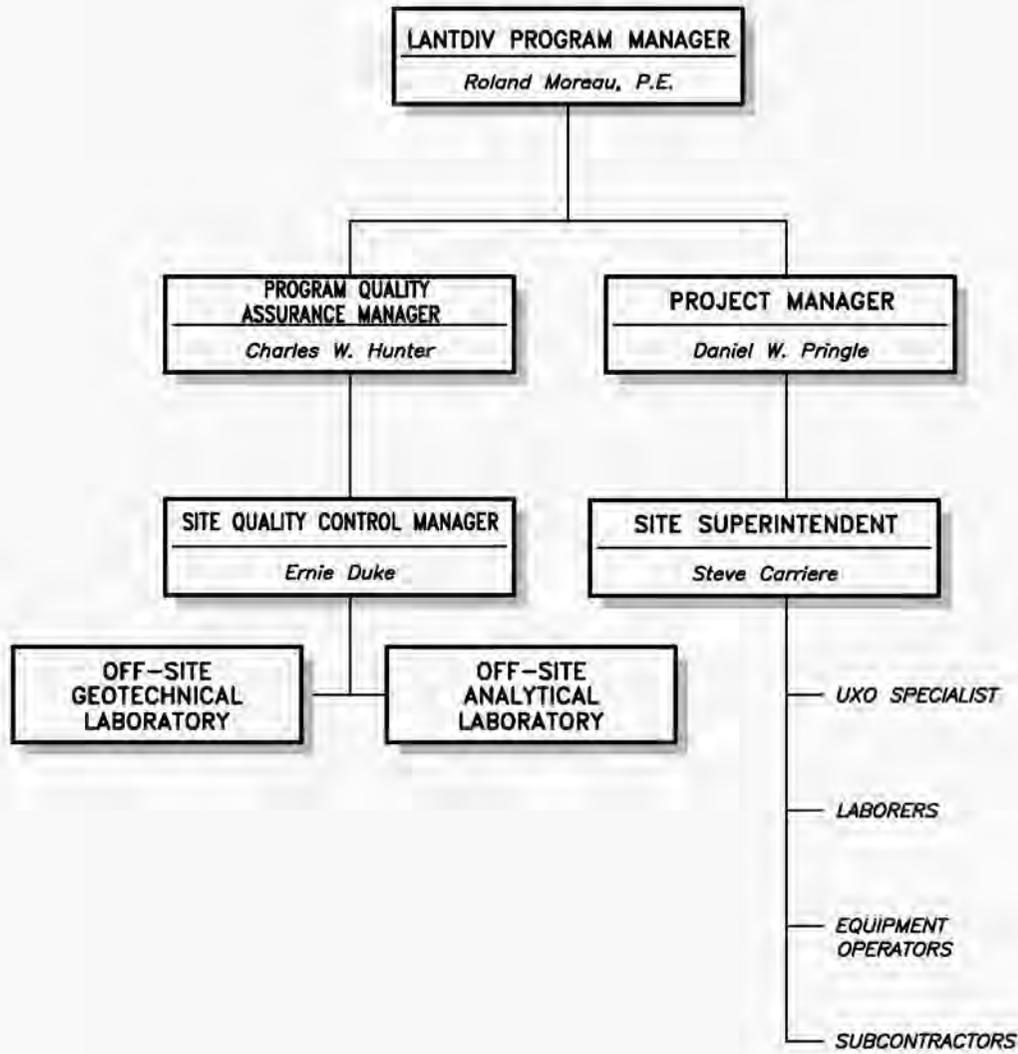
UNITED STATES ROAD ATLAS, DATED: 1997,
 APPROXIMATE SCALE: 1"=8.3 MILES.

APPROXIMATE SCALE

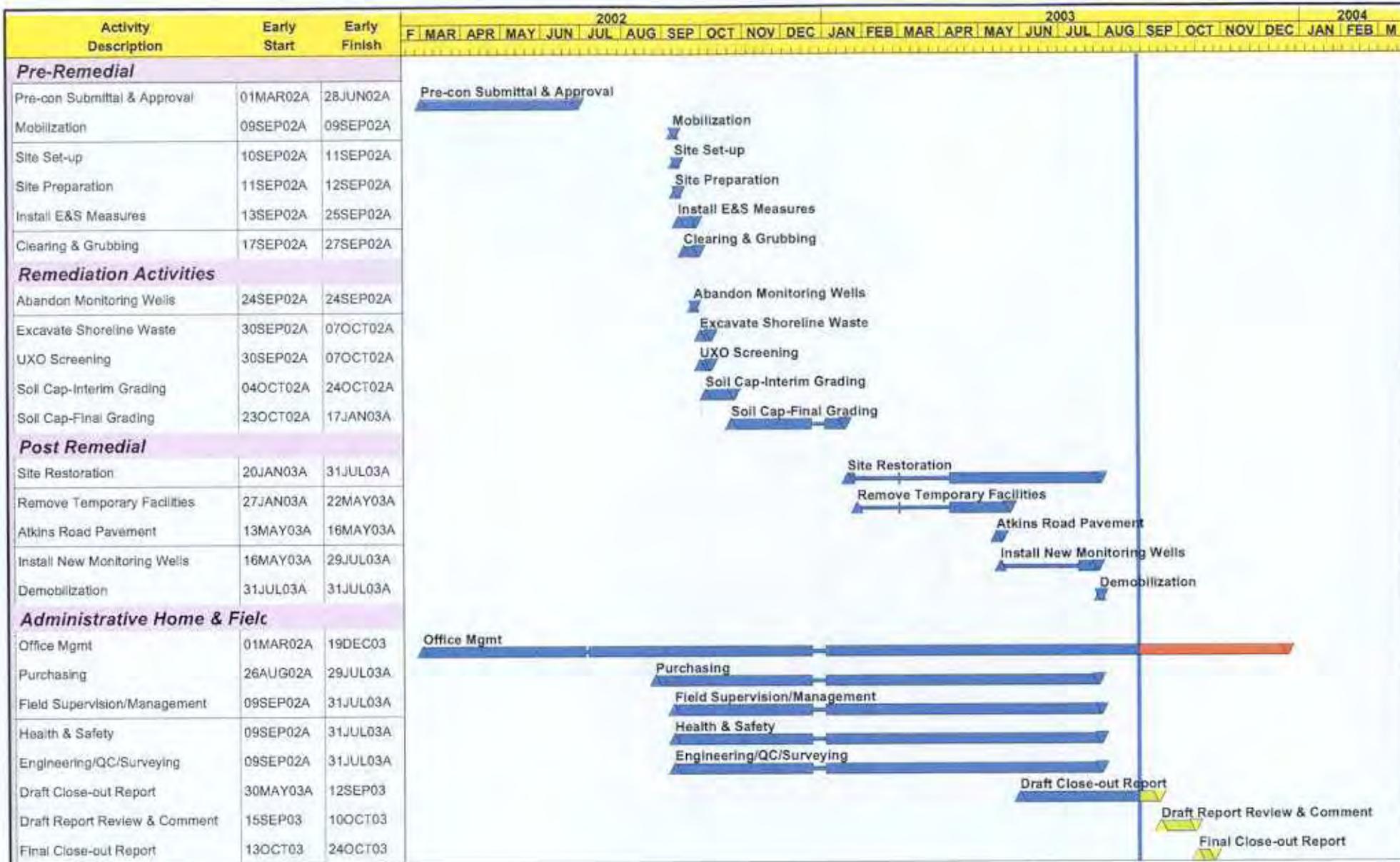


DEPARTMENT OF THE NAVY WASHINGTON NAVY YARD NAVAL SURFACE WARFARE CENTER		NAVAL FACILITIES ENGINEERING COMMAND WASHINGTON, D.C. INDIAN HEAD, MARYLAND	
ATLANTIC DIVISION		REMOVAL ACTION	
SITE 12 - TOWN GUT LANDFILL		SITE LOCATION MAP	
SCALE: AS SHOWN	SIZE: A	DESIGNED BY E. Rhodes 3/7/02	CHECKED BY D.W. Pringle 3/7/02
TASK ORDER NO. 0062	CONSTR. CONTRACT NO. N62470-97-D-5000	REV	DATE
NAVFAC DRAWING NO.		BY	CHK'D APPROV
SHEET I.D. FIGURE 1-1		REVISIONS	





		DESIGNED BY	---	CHECKED BY	D.W.Pringle	7/27/99	REV	---	DATE	---	BY	---	CHK'D	APR'00	DESCRIPTION/ISSUE
		DRAWN BY	B.B.O'Connor	7/27/99	APPROVED BY	---	---	---	---	---	---	---	---	---	---
DEPARTMENT OF THE NAVY WASHINGTON NAVY YARD NAVAL SURFACE WARFARE CENTER ATLANTIC DIVISION WASHINGTON, D.C. INDIAN HEAD, MARYLAND REMOVAL ACTION SITE 12 - TOWN GUT LANDFILL QUALITY CONTROL ORGANIZATIONAL CHART															
SCALE: AS SHOWN		SIZE: A		DELIVERY ORDER NO. 008 CONSTR. CONTRACT NO. N62470-97-D-5000 NAVFAC DRAWING NO.											
SHEET I.D. FIGURE 1-2															



Start Date	15FEB02		Early Bar
Finish Date	19DEC03		Progress Bar
Data Date	29AUG03		Critical Activity
Run Date	05SEP03 14:37		

Site 12-Town Gut Landfill
 NSWG-Indian Head, Maryland
 August 29, 2003 Schedule

FIGURE 2-1



APPENDIX A
RECORD DRAWINGS

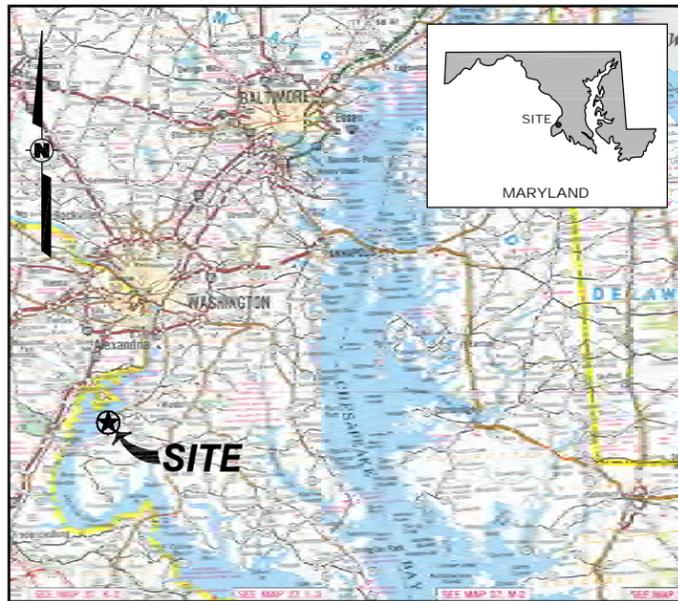
APPENDIX A

RECORD DRAWINGS

- RD-1 Title Sheet
- RD-C1 Preconstruction Site Conditions
- RD-C2 Operational Layout
- RD-C3 Final Site Conditions
- RD-C4 Miscellaneous Sections and Details
- IH-12 Final Certified Survey

OFFICE
Pittsburgh, PA

DRAWING
NUMBER 809401-T1

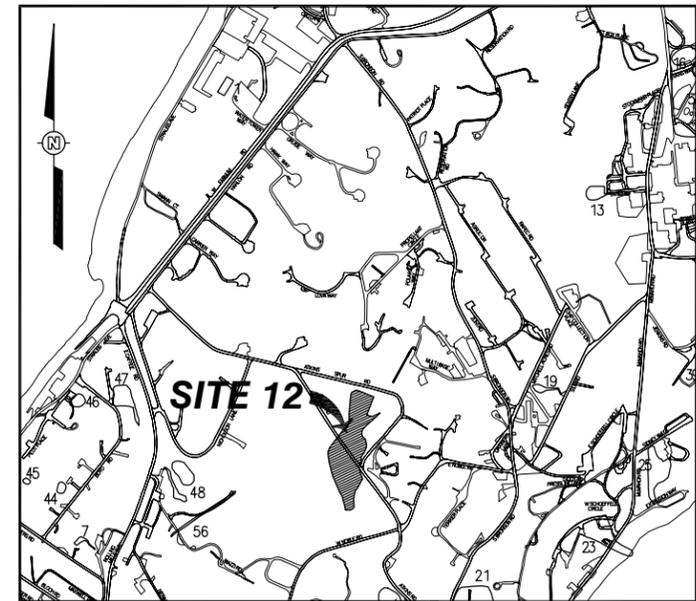


SITE LOCATION MAP



INDEX OF DRAWINGS

SHAW DRAWING NUMBER	SHEET REFERENCE NUMBER	DESCRIPTION
809401-T1	RD-T1	TITLE SHEET
809401-D6	RD-C1	PRE-CONSTRUCTION SITE CONDITIONS
809401-D7	RD-C2	OPERATIONAL LAYOUT
809401-D8	RD-C3	FINAL SITE CONDITIONS
809401-D9	RD-C4	MISCELLANEOUS SECTIONS AND DETAILS



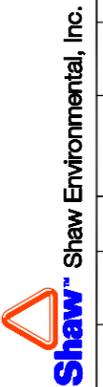
SITE VICINITY MAP



RECORD DRAWINGS
LANTDIV CONTRACT NO. N62470-97-D-5000/0062
REMOVAL ACTION
SITE 12 - TOWN GUT LANDFILL

PREPARED FOR

DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
WASHINGTON NAVY YARD, D.C.



DESIGNED BY J. Staszak 9/15/03
 DRAWN BY R. Weible 9/15/03
 CHECKED BY D. Pringle 9/17/03
 APPROVED BY D. Pringle 11/20/03

DEPARTMENT OF THE NAVY
 NAVAL FACILITIES ENGINEERING COMMAND
 ATLANTIC DIVISION
 WASHINGTON, D.C.
 INDIAN HEAD, MARYLAND
 NAVAL SURFACE WARFARE CENTER
 REMOVAL ACTION
 SITE 12 - TOWN GUT LANDFILL
 TITLE SHEET

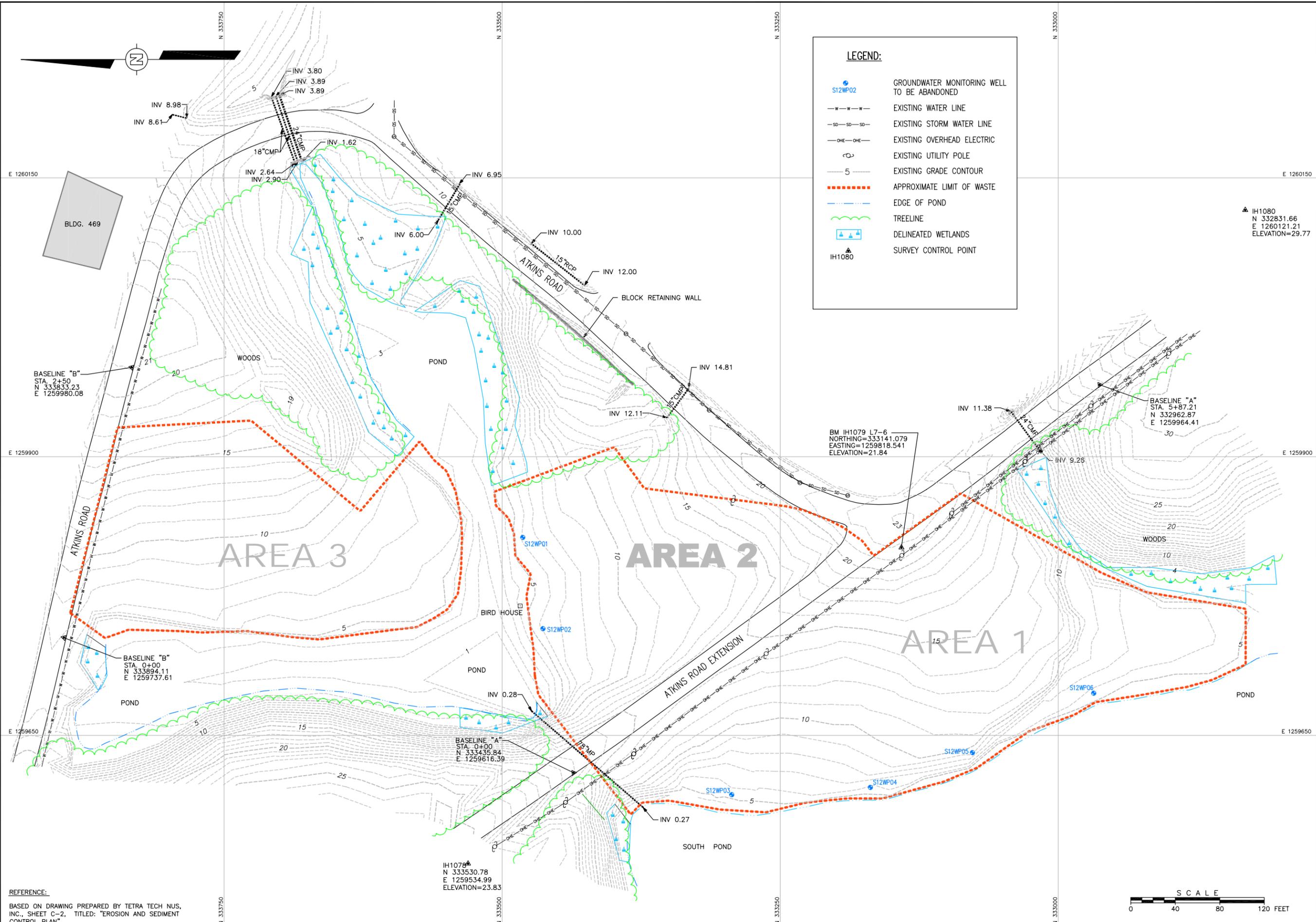
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REV	DATE	BY	CHK'D	APR'D	DESCRIPTION/ISSUE
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REVISIONS

OFFICE NUMBER 809401-D6
Pittsburgh, PA

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Plotted By: arthur.smith



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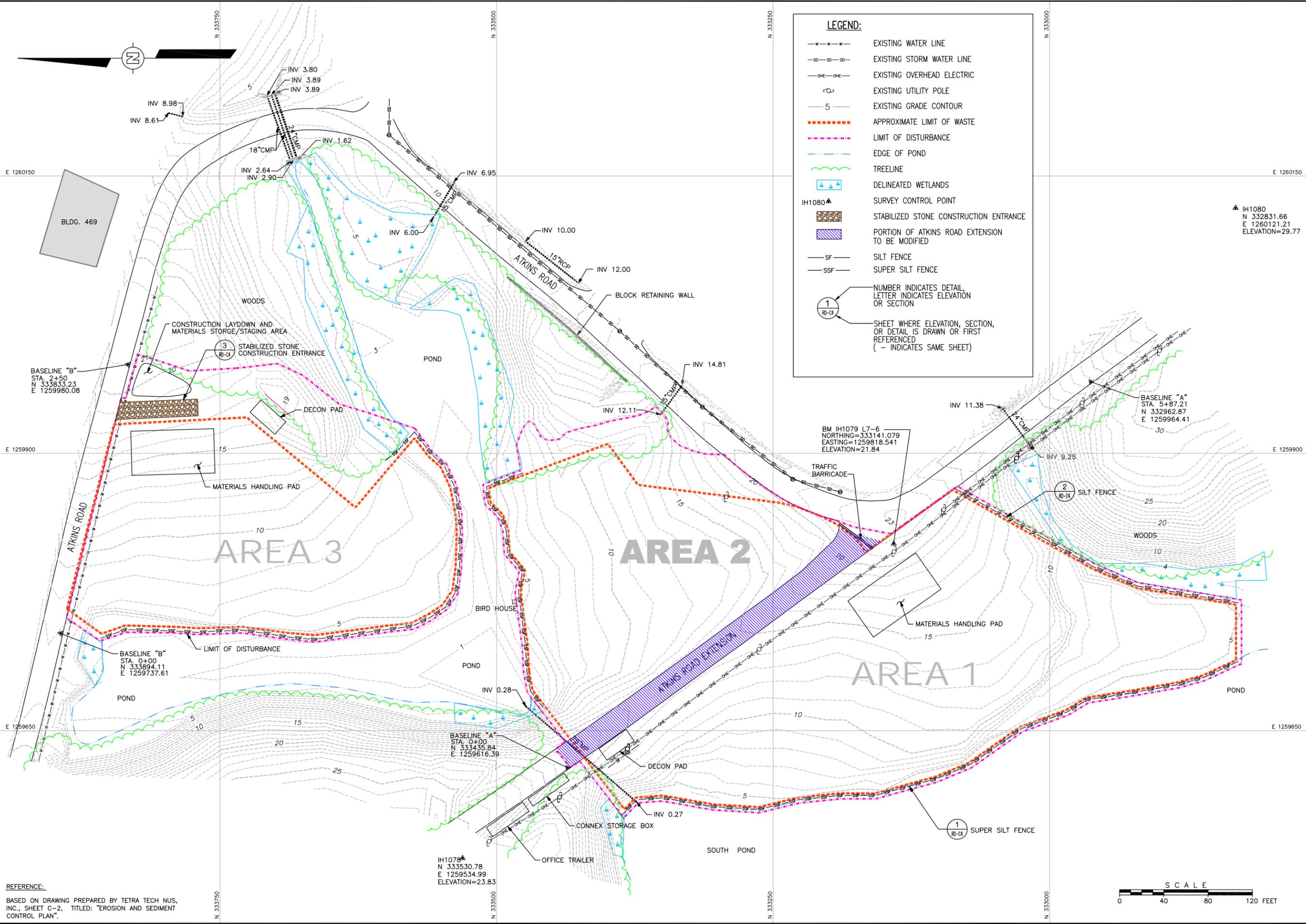
LEGEND:

- S12WP02 GROUNDWATER MONITORING WELL TO BE ABANDONED
- — — — — EXISTING WATER LINE
- SD — SD — SD — EXISTING STORM WATER LINE
- OHE — OHE — EXISTING OVERHEAD ELECTRIC
- EXISTING UTILITY POLE
- 5 — EXISTING GRADE CONTOUR
- · · · · · APPROXIMATE LIMIT OF WASTE
- — — — — EDGE OF POND
- — — — — TREELINE
- ▭ DELINEATED WETLANDS
- ▲ IH1080 SURVEY CONTROL POINT

DEPARTMENT OF THE NAVY WASHINGTON NAVY YARD NAVAL SURFACE WARFARE CENTER		NAVAL FACILITIES ENGINEERING COMMAND WASHINGTON, D.C. INDIAN HEAD, MARYLAND					
ATLANTIC DIVISION		REMOVAL ACTION SITE 12 - TOWN GUT LANDFILL					
PRE-CONSTRUCTION SITE CONDITIONS							
SCALE: AS SHOWN	SIZE: D	DELIVERY ORDER NO. 0062	CONSTR. CONTRACT NO. N62470-97-D-5000				
NAVFAC DRAWING NO. N/A		SHEET I.D.					
SHAW ENVIRONMENTAL, INC.		DESIGNED BY J. Staszok 9/15/03	CHECKED BY D. Pringle 9/17/03				
DRAWN BY A. Smith 9/16/03		APPROVED BY D. Pringle 11/20/03	REVISIONS				
0	12/15/03	ACS	DP	JS	CHK'D	APRVD	DESCRIPTION/ISSUE
SUBMITTED FOR FINAL AS-BUILT							

OFFICE NUMBER 809401-D7
Pittsburgh, PA

File: O:\Project\LAN\DIV\Indian Head\809401\809401D7.dwg
Plot Date/Time: Dec 15, 2003 - 10:02am
Plotted By: arthur.smith



LEGEND:

- w-w-w- EXISTING WATER LINE
- s-s-s- EXISTING STORM WATER LINE
- o-e-o-e- EXISTING OVERHEAD ELECTRIC
- EXISTING UTILITY POLE
- 5- EXISTING GRADE CONTOUR
- - - - - APPROXIMATE LIMIT OF WASTE
- - - - - LIMIT OF DISTURBANCE
- - - - - EDGE OF POND
- ~ ~ ~ ~ ~ TREELINE
- ▲▲▲▲ DELINEATED WETLANDS
- ▲ IH1080 SURVEY CONTROL POINT
- STABILIZED STONE CONSTRUCTION ENTRANCE
- PORTION OF ATKINS ROAD EXTENSION TO BE MODIFIED
- SF- SILT FENCE
- SSF- SUPER SILT FENCE

1
RD-C4

NUMBER INDICATES DETAIL, LETTER INDICATES ELEVATION OR SECTION

SHEET WHERE ELEVATION, SECTION, OR DETAIL IS DRAWN OR FIRST REFERENCED (- INDICATES SAME SHEET)

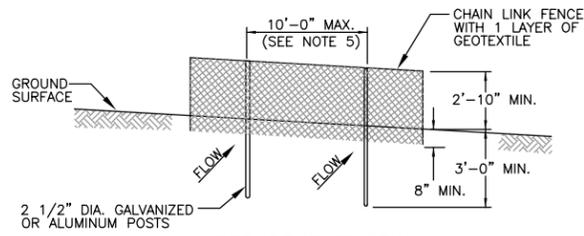
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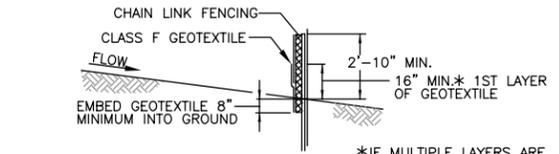
DESIGNED BY J. Staszok 9/15/03	CHECKED BY D. Pringle 9/17/03
DRAWN BY A. Smith 9/16/03	APPROVED BY D. Pringle 11/20/03
DEPARTMENT OF THE NAVY WASHINGTON NAVY YARD NAVAL SURFACE WARFARE CENTER INDIAN HEAD, MARYLAND ATLANTIC DIVISION REMOVAL ACTION SITE 12 - TOWN GUT LANDFILL OPERATIONAL LAYOUT	
SCALE: AS SHOWN	SIZE: D
DELIVERY ORDER NO. 0062	
CONSTR. CONTRACT NO. N62470-97-D-5000	
NAFAC DRAWING NO. N/A	
SHEET I.D.	

REV	DATE	BY	DESCRIPTION/ISSUE
0	12/15/03	ACS	SUBMITTED FOR FINAL AS-BUILT
		JS	CHK'D APP'VD

REV	DATE	BY	DESCRIPTION/ISSUE
		DP	



PERSPECTIVE VIEW



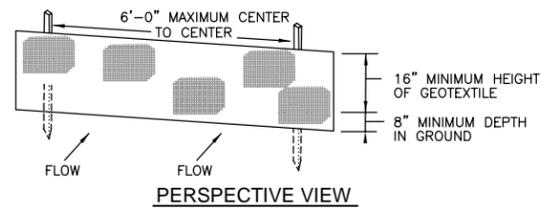
CROSS SECTION

- NOTES:
- FENCE POST SPACING SHALL NOT EXCEED 10'-0" CENTER TO CENTER. WHEN GEOTEXTILE SECTIONS ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED BY 6" AND FOLDED.
 - FENCING SHALL BE 42" IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST MARYLAND STATE HIGHWAY DETAILS FOR CHAIN LINK FENCING.
 - CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS, AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE.
 - GEOTEXTILE SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED 24" AT THE TOP AND MID-SECTION AND SHALL MEET THE REQUIREMENTS OF CLASS F GEOTEXTILE. CHAIN LINK FENCE AND GEOTEXTILE WILL BE EMBEDDED A MINIMUM OF 8" INTO THE GROUND.
 - THE DISTANCE BETWEEN POSTS IS 12'-0" IN AREA 1 ALONG THE POND.

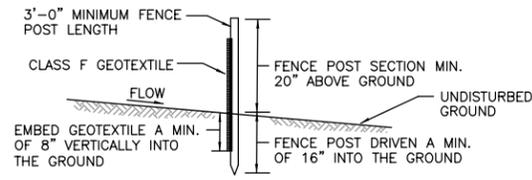
DETAIL 1 RD-C2

SUPER SILT FENCE INSTALLATION

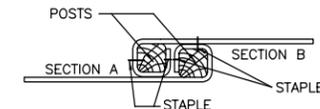
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PERSPECTIVE VIEW



CROSS SECTION



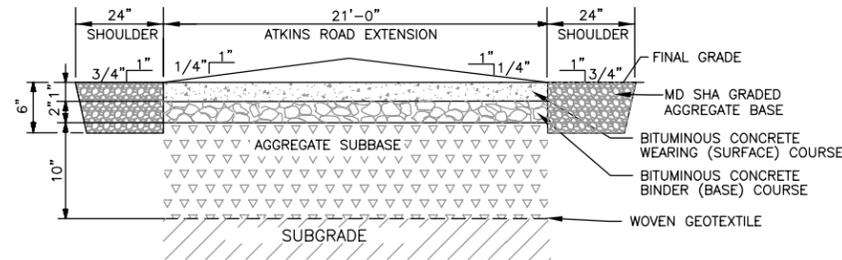
TOP VIEW - JOINING TWO ADJACENT SILT FENCE SECTIONS

- NOTES:
- FENCE POSTS SHALL BE A MINIMUM OF 36" LONG DRIVEN 16" MINIMUM INTO THE GROUND. WOOD POSTS SHALL BE 1.5" BY 1.5" SQUARE (MIN) CUT OR 1.75" DIAMETER (MIN) ROUND AND SHALL BE OF SOUND HARDWOOD. STEEL POSTS WILL BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
 - GEOTEXTILE SHALL BE FASTENED SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION AND SHALL MEET THE REQUIREMENTS OF CLASS F GEOTEXTILE.

DETAIL 2 RD-C2

SILT FENCE INSTALLATION

SCALE: N.T.S.



DETAIL 6 RD-C3

PAVEMENT MODIFICATION TO ATKINS ROAD EXTENSION

SCALE: N.T.S.

SEED MIXTURE				FERTILIZER RATE (18-24-12)	LIME RATE
SPECIES	APPLICATION RATE (lb/ac)	SEEDING DATES	SEEDING DEPTHS		
SWITCHGRASS	10	3/1-5/15 AND 8/15-11/15	1/4-1/2 INCHES	350 lb/ac	4000 lb/ac
PARTRIDGE PEA	5	3/1-5/15 AND 8/15-11/15	1/4-1/2 INCHES		
LITTLE BLUESTEM	15	3/1-5/15 AND 8/15-11/15	1/4-1/2 INCHES		
ANNUAL RYE GRASS	20	3/1-5/15 AND 8/15-11/15	1/4-1/2 INCHES		
CANADIAN WILD RYE	6	3/1-5/15 AND 8/15-11/15	1/4-1/2 INCHES		
INDIAN GRASS	7	3/1-5/15 AND 8/15-11/15	1/4-1/2 INCHES		
BIG BLUESTEM	15	3/1-5/15 AND 8/15-11/15	1/4-1/2 INCHES		

DETAIL 7 RD-C3 PERMANENT SEEDING SUMMARY

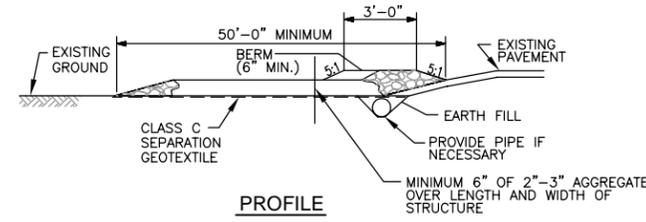
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PERMANENT SEEDING

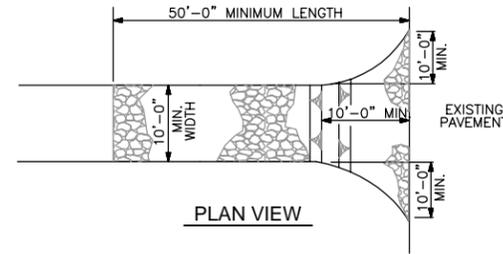
SEEDING GRASS AND LEGUMES TO ESTABLISH GROUND COVER FOR A MINIMUM PERIOD OF ONE YEAR ON DISTURBED AREAS GENERALLY RECEIVING LOW MAINTENANCE.

NOTES:

- IN LIEU OF PROVIDING MARYLAND STANDARD FERTILIZER AND LIME, PERFORM OIL TEST TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES.
- THE FERTILIZATION RATE (18-24-12) REFERS TO THE PERCENT OF NITROGEN, PHOSPHORUS AND POTASSIUM PROVIDED IN THE FERTILIZER.



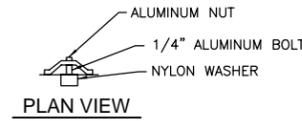
PROFILE



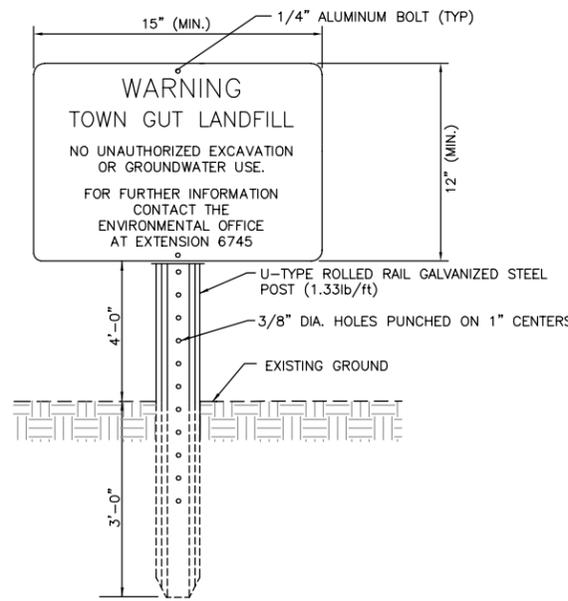
PLAN VIEW

DETAIL 3 RD-C2
STABILIZED STONE CONSTRUCTION ENTRANCE

SCALE: N.T.S.



PLAN VIEW



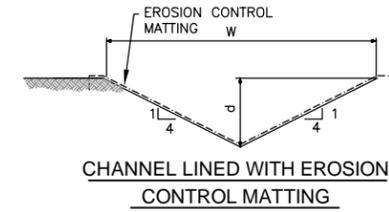
PROFILE

NOTES:

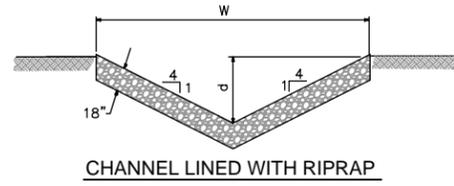
- DRIVING CAP TO BE USED WHEN DRIVING POST.
- PANEL TO BE FABRICATED OF ASTM B209 ALLOY 6061-T6 OR 5052-H38, 0.080" THICK.
- TOP OF PANEL TO BE FLUSH WITH TOP OF POST.

DETAIL 8 RD-C3 WARNING SIGN AND POST

SCALE: N.T.S.



CHANNEL LINED WITH EROSION CONTROL MATTING



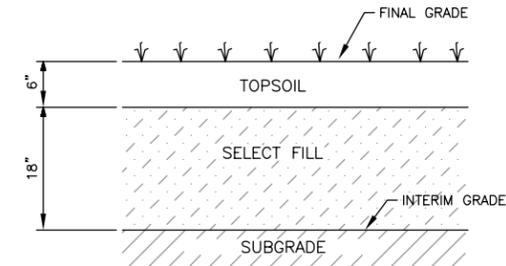
CHANNEL LINED WITH RIPRAP

NOTES:

- EROSION CONTROL MATTING SHALL WITHSTAND FLOWS EQUAL TO 6.74 FPS.
- FOR NORTHERN CHANNEL $d = 1$ FOOT AND $W = 8$ FOOT
- FOR SOUTHERN CHANNEL $d = 1.5$ FEET AND $W = 12$ FEET
- PROVIDE d_{50} RIPRAP = TO 6" WHERE INDICATED ON DESIGN DRAWING C-2.

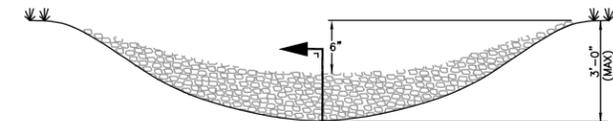
DETAIL 4 RD-C3 DRAINAGE CHANNEL

SCALE: N.T.S.

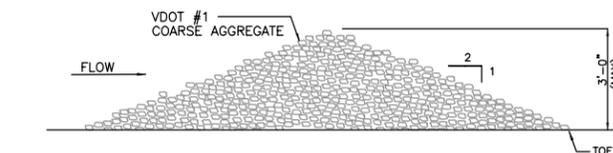


DETAIL 5 RD-C3 SOIL COVER SYSTEM

SCALE: N.T.S.



PROFILE



SECTION

NOTES:

- ROCK CHECK DAMS WILL BE REMOVED FOLLOWING FINAL STABILIZATION.
- ROCK CHECK DAMS TO BE PLACED WHERE INDICATED ON DRAWING C-2 SO THAT THE TOE OF THE UPSTREAM DAM (CHANNEL INVERT) IS AT THE SAME ELEVATION AS THE TOP OF THE DOWNSTREAM ROCK CHECK DAM.
- SEDIMENT SHALL BE REMOVED FROM BEHIND ROCK CHECK DAM WHEN IT HAS ACCUMULATED TO ONE HALF OF THE ORIGINAL HEIGHT OF THE ROCK CHECK DAM.

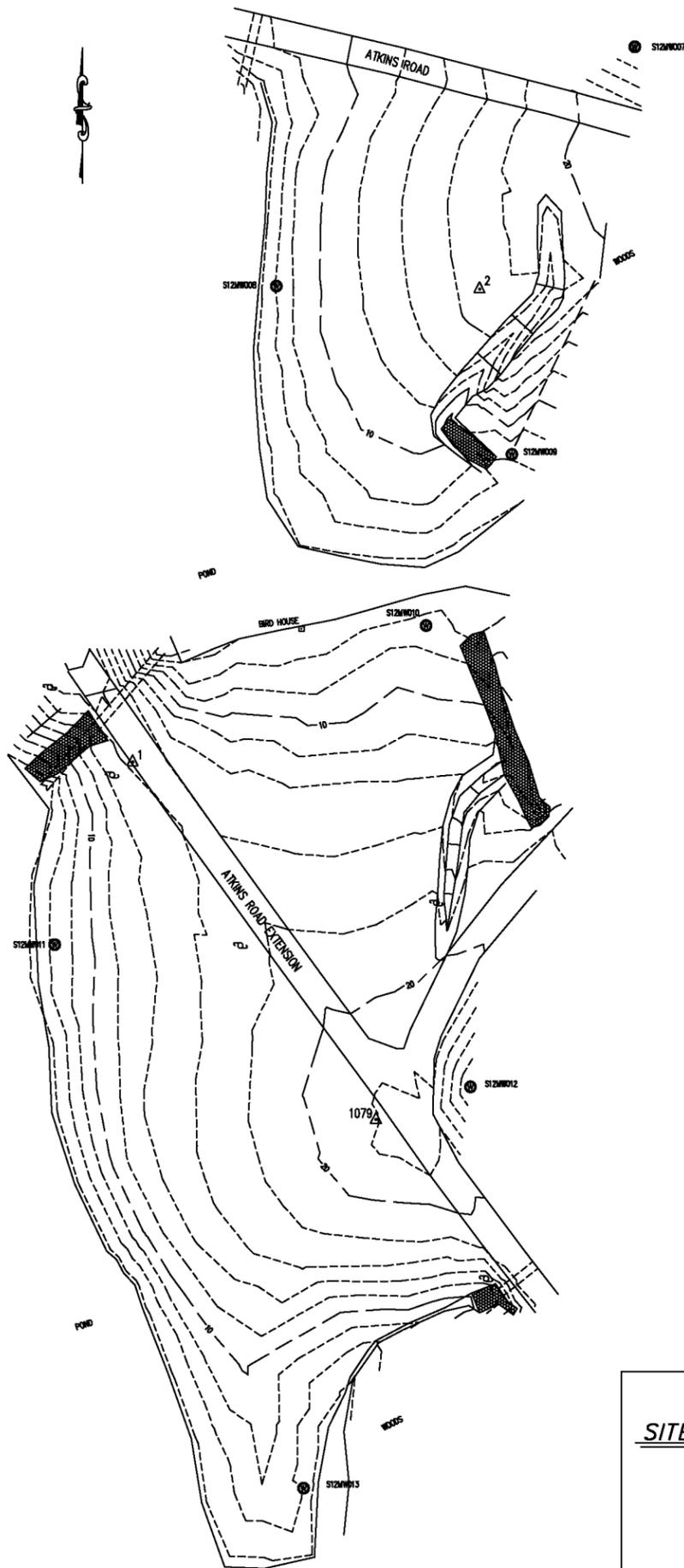
DETAIL 9 RD-C3 ROCK CHECK DAM

SCALE: N.T.S.

REV	DATE	BY	CHK'D	DESCRIPTION/ISSUE	
0	12/15/03	ACS	JS	DP	SUBMITTED FOR FINAL AS-BUILT
					CHK'D APP'VD

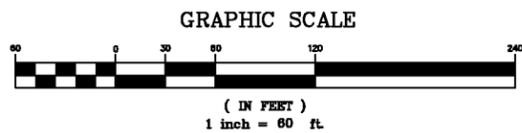
MONITORING WELL SCHEDULE			
WELL	NORTHING	EASTING	PVC ELEVATION (FT NGVD 29)
S12MWD07	333890.19	1260000.48	30.26
S12MWD08	333723.72	1259748.46	9.14
S12MWD09	333605.29	1259913.89	9.00
S12MWD10	333485.81	1259854.20	9.25
S12MWD11	333263.73	1259593.20	9.26
S12MWD12	333163.35	1259885.12	32.28
S12MWD13	332883.52	1259767.63	8.86

TRAVERSE POINTS				
NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	333390.89	1259647.88	16.22	PKNAIL
2	333721.22	1259891.15	17.06	BCS
1079	333141.08	1259818.54	21.84	BCF



LEGEND	
	GROUNDWATER MONITORING WELL
	EXISTING ELEVATION - MINOR
	EXISTING ELEVATION - MAJOR
	RIPRAP

NOTE:
 ORIGINAL HARD COPY IN PROJECT FILE THAT WAS PROVIDED BY KLS CONSULTANTS CONTAINS STATE OF MARYLAND LICENSED SURVEYORS SIGNATURE AND CERTIFYING SEAL.



AS-BUILT		K.L.S. CONSULTANTS, INC.	
SITE 12 - TOWN GUT LANDFILL		ENGINEERS AND SURVEYORS	
CONTRACT NO. N62470-97-D-5000 TASK ORDER 0062		4401 PHILADELPHIA ROAD BEL AIR, MARYLAND 21015 (410) 734-0445	
PREPARED FOR: SHAW ENVIRONMENTAL, INC. 2790 MOSSIDE BOULEVARD MONROEVILLE, PENNSYLVANIA 15146		DRAWN: JULIE CAMPBELL	
INDIAN HEAD DIVISION NAVAL SURFACE WARFARE CENTER		CHECKED: JOHN A. STALEY	
		DATE: 8/22/03	
		SCALE: 1"=60'	
		FILE NO.: IH-12	

APPENDIX B

PHOTOGRAPHIC DOCUMENTATION

APPENDIX B

PHOTOGRAPHIC DOCUMENTATION

Photo No. 1:	Tributary And Area 3	Date: 09-09-2002
Photo No. 2:	Southern Pond Adjacent To Area 1	Date: 09-09-2002
Photo No. 3:	Survey Support Using Trimble Robotic Total Station	Date: 01-27-2003
Photo No. 4:	Hi-Visibility Fence To Designate Work Zone	Date: 01-12-2003
Photo No. 5:	Weir At The Discharge End Of The Southern Pond	Date: 09-09-2002
Photo No. 6:	Cutting Steel Weir To Lower Pool Elevation	Date: 09-17-2002
Photo No. 7:	Temporary Removal Of Weir	Date: 09-18-2002
Photo No. 8:	Super Silt Fence Installation	Date: 09-18-2002
Photo No. 9:	Additional Silt Fence Installation In Area 1	Date: 01-16-2003
Photo No. 10:	Accumulated Sediment Removal Along Super Silt Fence	Date: 12-17-2002
Photo No. 11:	Portable Sediment Tank	Date: 11-09-2002
Photo No. 12:	Riprap Placement In Area 2 Channel	Date: 10-08-2002
Photo No. 13:	Erosion Control Matting Lined Channel In Area 3	Date: 01-21-2003
Photo No. 14:	Rock Check Dams In Area 2	Date: 01-14-2003
Photo No. 15:	Site Clearing In Area 2	Date: 09-16-2002
Photo No. 16:	Chipping	Date: 09-13-2002
Photo No. 17:	Monitoring Well Abandonment	Date: 09-24-2002
Photo No. 18:	Old Metal Truck Frame Along South Pond Shore	Date: 09-13-2002
Photo No. 19:	Large Pieces Of Concrete Along South Pond Shore	Date: 09-13- 2002
Photo No. 20:	Pond Shoreline Excavation In Area 1	Date: 10-01-2002
Photo No. 21:	Stumps And Log Debris Along South Pond Shoreline	Date: 09-18-2002
Photo No. 22:	Unexploded Ordnance Specialist Monitoring Excavation Area	Date: 10-01-2002
Photo No. 23:	Large Concrete Debris Removed From Pond Shoreline	Date: 09-19-2002
Photo No. 24:	Hoe-Ram Used To Down-Size Concrete Debris	Date: 10-04-2002
Photo No. 25:	Decontamination Of Metal Debris Prior To Off-Site Disposal	Date: 10-10-2002
Photo No. 26:	Miscellaneous Wood Debris Loaded Out For Off-Site Disposal	Date: 12-12-2002

Photo No. 27:	Regrading Waste In Area 1	Date: 10-15-2002
Photo No. 28:	Compaction By A Vibratory Smooth Drum Roller	Date: 10-14-2002
Photo No. 29:	Portable Truck Scales Used To Weigh Delivery Trucks	Date: 11-05-2002
Photo No. 30:	Compaction Of Select Fill In Area 1	Date: 10-24-2002
Photo No. 31:	Select Fill Stockpile	Date: 11-29-2002
Photo No. 32:	Topsoil Placement In Area 2	Date: 01-13-2003
Photo No. 33:	Application Of Leafgrow To Increase The Organic Content	Date: 01-13-2003
Photo No. 34:	Asphalt Placement Along Atkins Road Extension	Date: 04-17-2003
Photo No. 35:	Sawcutting Existing Asphalt Road	Date: 01-20-2003
Photo No. 36:	Transition Between New And Existing Asphalt	Date: 01-20-2003
Photo No. 37:	Newly Paved Atkins Road Extension	Date: 04-18-2003
Photo No. 38:	Hydroseeding	Date: 01-14-2003
Photo No. 39:	Application Of Hydroblanket [®]	Date: 01-15-2003
Photo No. 40:	Site 1 After Hydroblanket [®] Application	Date: 01-15-2003
Photo No. 41:	Installation Of Wetland Plants In Area 1	Date: 04-07-2003
Photo No. 42:	Sign Installation	Date: 01-16-2003
Photo No. 43:	Atkins Road Culvert Extension	Date: 11-09-2002
Photo No. 44:	Partially Blocked Culvert Under Atkins Road	Date: 11-09-2002
Photo No. 45:	Cover Extension South Of Area 1	Date: 12-03-2002
Photo No. 46:	Soil Erosion From Atkins Road Extension Onto Area 1	Date: 11-08-2002
Photo No. 47:	Erosion In Area 1 Adjacent To Inlet Culvert	Date: 11-06-2002
Photo No. 48:	Silt Fence And Soil Erosion Repair In Area 1	Date: 11-07-2002
Photo No. 49:	Riprap Lined Channel In Area 1 To Minimize Soil Erosion	Date: 11-20-2002
Photo No. 50:	Silt Fence Requiring Repair Due To Soil Erosion	Date: 12-20-2002
Photo No. 51:	Semi-Intact Drums Uncovered During Waste Regrading In Area 1	Date: 10-10-2002
Photo No. 52:	Overpacked Drums Awaiting Off-Site Disposal	Date: 12-09-2002
Photo No. 53:	New Monitoring Well Installation	Date: 07-18-2003
Photo No. 54:	Nuclear Density Gauge To Check Compactive Effort	Date: 10-24-2002



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DATE: 09-09-2002



PHOTO NO. 2: Southern Pond Adjacent to Area 1
DATE: 09-09-2002



PHOTO NO. 3: Survey Support Using Trimble Robotic Total Station
DATE: 01-27-2003



PHOTO NO. 4: Hi-visibility Fence to Designate Work Zone
DATE: 01-12-2003



PHOTO NO. 5: Weir at the Discharge End of the Southern Pond
DATE: 09-09-2002



PHOTO NO. 6: Cutting Steel Weir to Lower Pool Elevation
DATE: 09-17-2002



PHOTO NO. 7: Temporary Removal of Weir
DATE: 09-18-2002



PHOTO NO. 8 Super Silt Fence Installation
DATE: 09-18-2002



PHOTO NO. 9: Additional Silt Fence Installation in Area 1
DATE: 01-16-2003



PHOTO NO. 10: Accumulated Sediment Removal Along Super Silt Fence
DATE: 12-17-2002



PHOTO NO. 11: Portable Sediment Tank
DATE: 11-09-2002



PHOTO NO. 12: Riprap Placement in Area 2 Channel
DATE: 10-08-2002



PHOTO NO. 13: Erosion Control Matting Lined Channel in Area 3
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PHOTO NO. 14: Rock Check Dams in Area 2
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DATE: 10-04-2002



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DATE: 10-10-2002



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PHOTO NO. 28: Compaction by a Vibratory Smooth Drum Roller
DATE: 10-14-2002



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DATE: 11-05-2002



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DATE: 11-29-2002



PHOTO NO. 32: Topsoil Placement in Area 2
DATE: 01-13-2003



PHOTO NO. 33: Application of Leafgrow to Increase the Organic Content.
DATE: 01-13-2003



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DATE: 04-17-2003



PHOTO NO. 35: Sawcutting Existing Asphalt Road
DATE: 01-20-2003



PHOTO NO. 36: Transition Between New and Existing Asphalt
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PHOTO NO. 37: Newly Paved Atkins Road Extension
DATE: 04-18-2003



PHOTO NO. 38: Hydroseeding
DATE: 01-14-2003



PHOTO NO. 39: Application of Hydroblanket®
DATE: 01-15-2003



PHOTO NO. 40: Site 1 After Hydroblanket® Application
DATE: 01-15-2003



PHOTO NO. 41: Installation of Wetland Plants in Area 1
DATE: 04-07-2003



PHOTO NO. 42 Sign Installation
DATE: 01-16-2003



PHOTO NO. 43: Atkins Road Culvert Extension
DATE: 11-09-2002



PHOTO NO. 44: Partially Blocked Culvert Under Atkins Road
DATE: 11-09-2002



PHOTO NO. 45: Cover Extension South of Area 1
DATE: 12-3-2002



PHOTO NO. 46: Soil Erosion From Atkins Road Extension Onto Area 1
DATE: 11-08-2002



PHOTO NO. 47: Erosion in Area 1 Adjacent to Inlet Culvert
DATE: 11-06-2002



PHOTO NO. 48: Silt Fence and Soil Erosion Repair in Area 1
DATE: 11-7-2002

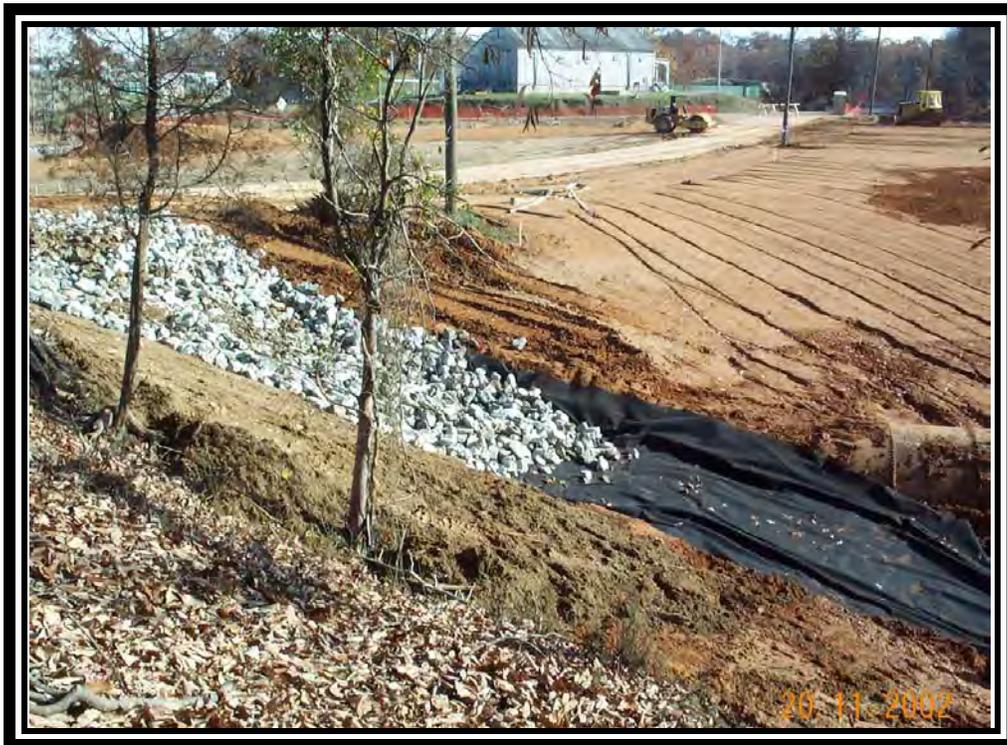


PHOTO NO. 49: Riprap Lined Channel in Area 1 to Minimize Soil Erosion
DATE: 11-20-2002



PHOTO NO. 50: Silt Fence Requiring Repair Due to Soil Erosion
DATE: 12-20-2002



PHOTO NO. 51: Semi-Intact Drums Uncovered During Waste Regrading in Area 1
DATE: 10-10-2002



PHOTO NO. 52: Overpacked Drums Awaiting Off-Site Disposal
DATE: 12-9-2002



PHOTO NO. 53: New Monitoring Well Installation

DATE: 07-18-2003



PHOTO NO. 54: Nuclear Density Gauge to Check Compactive Effort

DATE: 10-24-2002

APPENDIX C

***TRANSPORTATION AND DISPOSAL
DOCUMENTATION***

APPENDIX C

TRANSPORTATION AND DISPOSAL DOCUMENTATION

- Transportation and Disposal Log
- Non-hazardous Waste Manifests
- Hazardous Waste Manifests

**Table 1
Transportation and Disposal Log**

Manifest Number	Date	Ticket Number	Quantity	Destination	Description	Type
	10/13/2002	--	5 drums	C-MAC - Fisher Industrial Service, Inc.	IDW Soil & Water from Monitoring Well Installation	Non-Hazardous
--	10/15/2002	--	5.43 tons	Prince George Scrap	Metal Scrap	Non-Hazardous
--	10/17/2002	--	4.26 tons	Prince George Scrap	Metal Scrap	Non-Hazardous
--	10/22/2002	--	1.92 tons	BFI Landfill	Tires	Non-Hazardous
TG-001	12/12/2002	236169	3.74 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-002	12/12/2002	236174	7.11 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-003	12/12/2002	236175	7.12 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-004	12/12/2002	236177	6.67 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-005	12/13/2002	236227	6.21 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-006	12/13/2002	236236	7.83 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-007	12/13/2002	236251	7.56 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-008	12/13/2002	236255	7.86 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-009	12/13/2002	236289	10.14 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-011	12/13/2002	236313	5.33 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-010	12/13/2002	236316	5.23 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-012	12/13/2002	236329	8.76 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
TG-013	12/13/2002	236336	6.68 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous
PAG457645	12/13/2002	--	5 drums	Cycle Chem Inc.	Drums	Hazardous
TG-014	12/14/2002	236357	13.86 tons	King George County Landfill	Miscellaneous Debris	Non-Hazardous

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 01575N-08
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.6.3	Non-Hazardous Manifests for the Disposal of Non-Hazardous Debris (14 Loads)	1	Documentation	E	A

<u>SUBMITTAL CODES</u> D – Forwarded to ROICC FOR ACTION E – Forwarded to ROICC for Record Purposes	<u>APPROVAL CODES</u> A – Approved as Submitted AN – Approved as Noted	RR – Disapproved, Revise and Resubmit NR – Not Reviewed
---	--	--

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	January 22, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave. Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	--	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority	
NA	



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236174
DATE: 10/12/2002
TIME: 10:00 17:00

CUSTOMER: A13 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROPOSE # 5219
Origin: MD / MARYLAND
TRUCK: M1 LICENSE:
ROUTE: NA / NON APP MANIFEST: 000
Carrier: NA / NON APP

P.C.: 0
GROSS: 38600 LBS
TARE: 24600 LBS
NET: 14000 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CB T 7.11

Russell Worrell

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER: *Russell Worrell II*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

SECTION 1

GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC; Generating Location: SAME; Address: 101 STRAUSS AVENUE CODE 044; Disposal Volume: 200 TONS; WASTE MANAGEMENT APPROVAL CODE: MD 586 120602 5219; Description of Waste: RESIDUAL EXCAVATION DEBRIS; Type of Containers: TR; Generator's Authorized Agent: Heidi A Morgan; Date: 12/12/02

TYPE OF CONTAINERS: TR - TRUCK, DM - METAL DRUM, DP - PLASTIC DRUM, BA - BAG, BB - 6 MIL. PLASTIC BAG, BC - 12 MIL. PLASTIC BAG

SECTION 2

TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC.; Address: P.O. BOX 2155; Telephone: 804 301-7944; Vehicle License: TWO BROS VA; Driver: Russell Worrell; Date of Receipt: 12-12-02

SECTION 3

TRANSFER FACILITY

Complete if applicable

Transfer Facility's Name, Address, Telephone, Vehicle License, Trailer or Container No., Name of Transfer Facility's Authorized Agent, Date of Receipt, Date of Delivery

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

Transporter's Name, Address, Telephone, Vehicle License, Trailer or Container No., Name of Driver, Date of Receipt, Date of Delivery

SECTION 5

DESTINATION (Disposal Facility)

Disposal Facility's Name: KING GEORGE LANDFILL; Address: 10376 BULLOCK DRIVE RG VA; Telephone: 540 775-3123; Date of Receipt: 12/12

SECTION 6

ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

Operator's Name, Address, Telephone, Recommended special handling instructions, Operator's Certification, Operator's Name (print/type), Signature of Operator's Authorized Agent, Date, Responsible Agency Name and Address



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 230169
DATE: 12/18/2002
TIME: 16:42 - 16:43

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5819
Origin: MD / MARYLAND
TRUCK: 2900 LICENSE
ROUTE: NA / NON APP MAND: 0
Carrier: NA / NON APP

P.O.: 0
GROSS: 32520 LBSManual
TARE: 25040 LBSManual
NET: 7480 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CD T 3.74

Russell Worrell

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

Russell Worrell

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



KING GEORGE LANDFILL
 A WASTE MANAGEMENT COMPANY
 10376 Bullock Drive • King George, VA 22485



000093

DATE 11/12/02 ACCOUNT # 1219 P.O. # _____

COMPANY Tadum Head NWS

PLEASE CIRCLE ONE OF THE FOLLOWING

MSW C&D SLU SOL TIR RES ASH RGC

TRAILER _____ YDS. 374 TONS GROSS 32500 TARE 25040

VEHICLE TYPE: RO FEL REL GROSS _____ TARE _____

CUBIC YARDS/TONS _____ AMOUNT \$ _____

DRIVER NAME/SIG Russell Worrell Russell Worrell LICENSE PLATE # _____

TRK #: 01 TIME _____ PREPARED BY: _____

WHITE: FILE COPY

GREEN: CUSTOMER COPY

PINK: DO NOT REMOVE



NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1

GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC
j) Generating Location (Name): SAME
b) Generator's Address: 101 STRAUSS CODE 044 INDIAN HEAD, MD 20640
k) Address: SAME
c) Generator's Representative: SHAWN JORGENSEN
l) Telephone Number: () SAME
d) Telephone Number: (301) 744-2263
e) WASTE MANAGEMENT APPROVAL CODE MD 586 20602 5219
f) Common Name of Waste: EXCAVATION DEBRIS
g) Description of Waste: RESIDUAL
h) Disposal Volume: 20.400 TONS IX
i) Number of Containers:
m) Asbestos ONLY - Friable, Both, Non-Friable, N/A
n) Type of Containers: TR
o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Generator's Authorized Agent Name (print/type): Heidi A. Morgan
Signature of Generator's Authorized Agent: Heidi A. Morgan
Shipment Date: 12/12/02

TYPE OF CONTAINERS
TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2

TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.
b) Transporter's Address: P.O. Box 2155
c) Telephone Number: (804) 301-7944
d) Vehicle License No./State: Two Bros VA
e) Trailer or Container No.: 1
f) Name of Driver (print/type): Russell Worrell
g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Signature of Driver: Russell Worrell
Date of Receipt: 12/12/02
h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver:
Date of Delivery:

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name:
b) Transfer Facility's Address:
c) Telephone Number: ()
d) Vehicle License No./State:
e) Trailer or Container No.:
f) Name of Transfer Facility's Authorized Agent (print/type):
g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent:
Date of Receipt:
h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent:
Date of Delivery:

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name:
b) Transporter's Address:
c) Telephone Number: ()
d) Vehicle License No./State:
e) Trailer or Container No.:
f) Name of Driver (print/type):
g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver:
Date of Receipt:
h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver:
Date of Delivery:

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL
b) Physical Address: 10376 BULLOCK DRIVE RG VA
c) Telephone Number: (540) 775-3123
d) Mailing Address: SAME
e) Name of Disposal Facility's Authorized Agent (print/type):
f) The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent:
Date of Receipt: 12/12
g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent:
Date of Rejection:
Signature of Driver:
Date of Rejection:

SECTION 6

ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
a) Operator's Name:
c) Telephone Number: ()
b) Operator's Address:
d) Recommended special handling instructions and additional information:
e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.
Operator's Name (print/type):
Signature of Operator's Authorized Agent:
Date:
f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236255
DATE: 12/13/2002
TIME: 11:11 - 12:03

CUSTOMER: 413 / INDIAN DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 01 LICENSE:
ROUTE: NA / NON APP MANIFEST: 000
Carrier: NA / NON APP

P. O. : 0
GROSS: 40860 LBS
TARE: 25140 LBS
NET: 15720 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	7.06

Russell Worrell

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

Russell Worrell

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-008

SECTION 1

GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC; Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD, MD 20640; Representative: SHAWN JORGENSEN; Telephone: (301) 744-2263; Waste Management Approval Code: MD 5861206025219; Common Name of Waste: EXCAVATION DEBRIS; Description of Waste: RESIDUAL; Disposal Volume: 20400 TONS IX; Type of Containers: TR; Number of Containers: 780; Signature of Heidi A. Morgan, 12/13/02.

Table with 1 column: TYPE OF CONTAINERS. Rows: TR - TRUCK, DM - METAL DRUM, DP - PLASTIC DRUM, BA - BAG, BB - 6 MIL. PLASTIC BAG, BC - 12 MIL. PLASTIC BAG.

SECTION 2

TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC; Address: P.O. BOX 2155; Telephone: (804) 301-7944; Vehicle License No./State: TWO BROS VA; Name of Driver: Russell Worrell; Date of Receipt: 12-13-02; Date of Delivery.

SECTION 3

TRANSFER FACILITY - (Complete if applicable)

Transfer Facility's Name, Address, Telephone, Vehicle License No./State, Trailer or Container No., Name of Transfer Facility's Authorized Agent, Date of Receipt, Date of Delivery.

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

Transporter's Name, Address, Telephone, Vehicle License No./State, Trailer or Container No., Name of Driver, Date of Receipt, Date of Delivery.

SECTION 5

DESTINATION (Disposal Facility)

Disposal Facility's Name: KING GEORGE LANDFILL; Physical Address: 10376 BULLOCK DRIVE RG VA; Telephone: (540) 775-3123; Name of Disposal Facility's Authorized Agent; Date of Receipt: 12/13; Date of Rejection.

SECTION 6

ASBESTOS (operator to complete)

Operator's Name, Address, Telephone, Recommended special handling instructions, Operator's Certification, Signature of Operator's Authorized Agent, Date, Responsible Agency Name and Address.



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

TICKET: 236329
DATE: 12/13/2002
TIME: 15:42 - 16:27

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 01 LICENSE:
ROUTE: NA / NON APP MANIFEST: 012
Carrier: NA / NON APP

P.O. : 6
GROSS: 42700 LBS
TARE: 25200 LBS
NET: 17500 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	8.76

IN OPERATOR: CINDY SIMMONS O U T OPERATOR: CINDY SIMMONS

DRIVER:

Russell Wood III

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

WASTE MANAGEMENT

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1

GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODE 044
INDIAN HEAD, MD 20640 k) Address: SAME

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE

MD	5	8	6	1	2	0	6	0	2	5	2	1	9
----	---	---	---	---	---	---	---	---	---	---	---	---	---

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; _____ % friable _____ % non-friable

g) Description of Waste: RESIDUAL Non-Friable, N/A

h) Disposal Volume: EST 20400 TONS 1X n) Type of Containers:

TR

i) Number of Containers: _____

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Heidi A Morgan Heidi A Morgan 12/13/02
Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

TYPE OF CONTAINERS	
TR	- TRUCK
DM	- METAL DRUM
DP	- PLASTIC DRUM
BA	- BAG
BB	- 6 MIL. PLASTIC BAG
BC	- 12 MIL. PLASTIC BAG

SECTION 2

TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. Box 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: Two Bros VA

e) Trailer or Container No.: 1

f) Name of Driver (print/type) Russell Worell

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Russell Worell III 12-13-02
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type) _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type) _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type) _____

f) The material delivered by the Transporter has been received at the Disposal Facility.

[Signature] 12/13
Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6

ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236177
DATE: 12/12/2002
TIME: 17:15 - 17:15

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 135 LICENSE:
ROUTE: NA / NON APP MANIFEST: 004
Carrier: NA / NON APP

P.O.: 0
GROSS: 30120 LBS
TARE: 24780 LBS Manual
NET: 13340 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CD T 6.67

*AJ + Brian
Truck # 135
AJ + Brian
Truck # 135*

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER:

Cindy Simmons

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections.
If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-004

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD MD 20640 k) Address: SAME

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE MD 586 170602 5219

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; ___% friable ___% non-friable
 Non-Friable; N/A

g) Description of Waste: RESIDUAL

h) Disposal Volume: 20400 TONS IX
X Tons ___ Cubic Yards ___ Others let

i) Number of Containers: TR

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal location identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Heidi A Morgan Heidi A Morgan 12/2/02
Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. BOX 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: VA 14298P

e) Trailer or Container No.:

f) Name of Driver (print/type): BRIAN K. FIELDS

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Brian K Fields 12-12-02
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name:

b) Transfer Facility's Address:

c) Telephone Number: ()

d) Vehicle License No./State:

e) Trailer or Container No.:

f) Name of Transfer Facility's Authorized Agent (print/type):

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name:

b) Transporter's Address:

c) Telephone Number: ()

d) Vehicle License No./State:

e) Trailer or Container No.:

f) Name of Driver (print/type):

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type):

f) The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: c) Telephone Number: ()

b) Operator's Address:

d) Recommended special handling instructions and additional information:

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236251
DATE: 12/13/2002
TIME: 10:29 - 11:36

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5819
Origin: MD / MARYLAND
TRUCK: 41130 LICENSE:
ROUTE: NA / NON APP MANIFEST: 907
Carrier: NA / NON APP

P.O.: 8
GROSS: 39920 LBS
TARE: 24800 LBS
NET: 15120 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	7.56

*AJ + Brian
Truckings Inc.*

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

[Signature]

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

23425

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-007

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODE 044
INDIAN HEAD MD 20640 k) Address: SAME

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SA

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; % friable; % non-friable
 Non-Friable; N/A

g) Description of Waste: RESIDUAL

h) Disposal Volume: EST. 20400 TONS 1X n) Type of Containers: TR

i) Number of Containers: 750

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Hiedi A Morgan Generator's Authorized Agent Name (print/type) Hiedi A Morgan Signature of Generator's Authorized Agent 10/13/02 Shipment Date

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. Box 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: VA 14298P

e) Trailer or Container No.: 41130 VA ID #

f) Name of Driver (print/type): BRIAN K. FIELDS

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Brian Fields Signature of Driver 12-13-02 Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name:

b) Transfer Facility's Address:

c) Telephone Number: ()

d) Vehicle License No./State:

e) Trailer or Container No.:

f) Name of Transfer Facility's Authorized Agent (print/type):

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name:

b) Transporter's Address:

c) Telephone Number: ()

d) Vehicle License No./State:

e) Trailer or Container No.:

f) Name of Driver (print/type):

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type):

f) The material delivered by the Transporter has been received at the Disposal Facility.

[Signature] Signature of Disposal Facility's Authorized Agent 12/13 Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name:

b) Operator's Address:

c) Telephone Number: ()

d) Recommended special handling instructions and additional information:

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236316
DATE: 12/13/2002
TIME: 15:06 - 15:41

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 41130 LICENSE:
ROUTE: NA / NON APP MANIFEST: 010
Carrier: NA / NON APP

P.O.: 0
GROSS: 34900 LBS
TARE: 24440 LBS
NET: 10460 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	5.23

*AJ & Brian
Truck Inc.*

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER:

Cindy Simmons

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

WASTE MANAGEMENT

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

Generator's Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD, MD 20640 k) Address: SAME

Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

Telephone Number: (301) 744-2263

WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - [] Friable; [] Both; [] % friable [] % non-friable

Description of Waste: RESIDUAL [] Non-Friable; [] N/A

Disposal Volume: EST 20400 TONS 1X n) Type of Containers: TR

X Tons [] Cubic Yards [] Others

Number of Containers: _____

I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Heidi A Morgan Generator's Authorized Agent Name (print/type) Heidi A Morgan Signature of Generator's Authorized Agent 12/13/02 Shipment Date

TYPE OF CONTAINERS TR - TRUCK DM - METAL DRUM DP - PLASTIC DRUM BA - BAG BB - 6 MIL. PLASTIC BAG BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC.

Transporter's Address: P.O. Box 2155

Telephone Number: (804) 301-7944

Vehicle License No./State: Va. 14298-P

Trailer or Container No.: VA. # 41130

Name of Driver (print/type) Brian Fields

I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below. Brian Fields 12-13-02 Signature of Driver Date of Receipt

I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type) _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below. Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type) _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below. Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDELL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type) _____

f) The material delivered by the Transporter has been received at the Disposal Facility. Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility. Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236227
DATE: 12/13/2002
TIME: 09:51 - 10:23

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 107 LICENSE:
ROUTE: NA / NON APP MANIFEST: 005
Carrier: NA / NON APP

P. O. : 0
GROSS: 38400 LBS
TARE: 25900 LBS
NET: 12480 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	6.21

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

W A Harris

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

Generator's Address: 101 STRAUSS AVENUE k) Address: SAME

Generator's Representative: S. JORGENSEN l) Telephone Number: () SAME

WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; % friable % non-friable Non-Friable; N/A

Description of Waste: Disposal Volume: n) Type of Containers: TYPE OF CONTAINERS TR - TRUCK DM - METAL DRUM DP - PLASTIC DRUM BA - BAG BB - 6 MIL. PLASTIC BAG BC - 12 MIL. PLASTIC BAG

Number of Containers: Tons Cubic Yards Others 6.21

I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below. Heidi A. Moran Heidi A. Moran 10/13/02 Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

SECTION 2 TRANSPORTER 1

Transporter's Name: Red Bone Trucking, Inc. Transporter's Address: PO Box 2155

Telephone Number: (804) 301-2944 Vehicle License No./State: 20-798 P Va.

Trailer or Container No.: Name of Driver (print/type): William Harris

I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below. W. Harris 12-13-02 Signature of Driver Date of Receipt

I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below. Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: b) Transfer Facility's Address:

c) Telephone Number: () d) Vehicle License No./State:

e) Trailer or Container No.: f) Name of Transfer Facility's Authorized Agent (print/type):

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below. Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below. Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

Transporter's Name: Transporter's Address:

Telephone Number: () Vehicle License No./State:

Trailer or Container No.: Name of Driver (print/type):

I hereby warrant that the above named and described material was received on the date of receipt referenced below. Signature of Driver Date of Receipt

I hereby warrant that the above named and described material was delivered on the delivery date referenced below. Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL, INC. b) Physical Address: 10376 BULLOCK DR.

c) Telephone Number: (KING GEORGE, VA 22485) (540)775-3123

d) Mailing Address: e) Name of Disposal Facility's Authorized Agent (print/type):

f) The material delivered by the Transporter has been received at the Disposal Facility. Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility. Signature of Disposal Facility's Authorized Agent Date of Rejection Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

Operator's Name: Operator's Address: c) Telephone Number: ()

Recommended special handling instructions and additional information:

Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

TICKET: 236289
DATE: 12/13/2002
TIME: 13:40 - 14:35

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 107 LICENSE:
ROUTE: NA / NON APP MANIFEST: 009
Carrier: NA / NON APP

P.O.: 0
GROSS: 45840 LBS
TARE: 25560 LBS
NET: 20280 LBS

COMMENT:

COMMODITY UNIT NET/TONS

CD T 10.14

IN OPERATOR: CINDY SIMMONS O U T OPERATOR: CINDY SIMMONS

DRIVER: W. J. Harris

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

Generator's Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD, MD 20640 k) Address: SAME

Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

Telephone Number: (301) 744-2263

WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - [] Friable; [] Both; [] % friable [] % non-friable

Description of Waste: RESIDUAL [] Non-Friable; [] N/A

Disposal Volume: EST 20400 TONS 1X n) Type of Containers: TR

X Tons [] Cubic Yards [] Others

Number of Containers: _____

I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Heidi A Morgan Heidi A Morgan 12/13/02 Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

TYPE OF CONTAINERS

- TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1 SECTION 3 TRANSFER FACILITY - (Complete if applicable)

Transporter's Name: RED BONE TRUCKING, INC. a) Transfer Facility's Name: _____

Transporter's Address: P.O. Box 2155 b) Transfer Facility's Address: _____

Telephone Number: (804) 301-7944 c) Telephone Number: () _____

Vehicle License No./State: 20-798 P Va. d) Vehicle License No./State: _____

Trailer or Container No.: 107 e) Trailer or Container No.: _____

Name of Driver (print/type) William Harris f) Name of Transfer Facility's Authorized Agent (print/type) _____

I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

W A Harris 12-13-02 Signature of Driver Date of Receipt

I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver Date of Delivery Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable) SECTION 5 DESTINATION (Disposal Facility)

Transporter's Name: _____ a) Disposal Facility's Name: KING GEORGE LANDFILL

Transporter's Address: _____ b) Physical Address: 10376 BULLOCK DRIVE KG VA

Telephone Number: () _____ c) Telephone Number: (540) 775-3123

Vehicle License No./State: _____ d) Mailing Address: SAME

Trailer or Container No.: _____ e) Name of Disposal Facility's Authorized Agent (print/type) _____

Name of Driver (print/type) _____ f) The material delivered by the Transporter has been received at the Disposal Facility.

I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver Date of Receipt Signature of Disposal Facility's Authorized Agent Date of Receipt

I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver Date of Delivery Signature of Disposal Facility's Authorized Agent Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY
 10376 Bullock Drive
 King George, VA 22485
 540-775-3123

10376 BULLOCK DRIVE
 KING GEORGE VA 22485
 540.775.3123

TICKET: 236336
 DATE: 12/13/2002
 TIME: 17:44 - 17:45

CUSTOMER: 413 / INDIAN HEAD DIVISION
 GENERATOR: NA / NON APP PROFILE #: 5219
 Origin: MD / MARYLAND
 TRUCK: 107 LICENSE:
 ROUTE: NA / NON APP MANIFEST: 013
 Carrier: NA / NON APP

P.O.: 0
 GROSS: 39340 LBS
 TARE: 25980 LBS Manual
 NET: 13360 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	6.68

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

W L Harris

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME
 Generator's Address: 101 STRAUSS AVENUE CODED44 k) Address: SAME
INDIAN HEAD, MD 20640
 Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME
 Telephone Number: (301) 744-2263

WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; % friable % non-friable
 Description of Waste: RESIDUAL Non-Friable; N/A
 Disposal Volume: EST 20400 TONS IX n) Type of Containers: TR
 Tons Cubic Yards Others

TYPE OF CONTAINERS
 TR - TRUCK
 DM - METAL DRUM
 DP - PLASTIC DRUM
 BA - BAG
 BB - 6 MIL. PLASTIC BAG
 BC - 12 MIL. PLASTIC BAG

I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
 Heidi A Morgan Heidi A Morgan 12/13/02
 Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

SECTION 2 TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC.
 Transporter's Address: P.O. Box 2155
 Telephone Number: (804) 301-7944
 Vehicle License No./State: 20-798 P Va.
 Trailer or Container No.: 107
 Name of Driver (print/type): William Harris

I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
 Wd Harris 12-13-02
 Signature of Driver Date of Receipt
 I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
 Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____
 b) Transfer Facility's Address: _____
 c) Telephone Number: () _____
 d) Vehicle License No./State: _____
 e) Trailer or Container No.: _____
 f) Name of Transfer Facility's Authorized Agent (print/type) _____
 g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
 Signature of Transfer Facility's Authorized Agent Date of Receipt
 h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
 Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

Transporter's Name: _____
 Transporter's Address: _____
 Telephone Number: () _____
 Vehicle License No./State: _____
 Trailer or Container No.: _____
 Name of Driver (print/type) _____

I hereby warrant that the above named and described material was received on the date of receipt referenced below.
 Signature of Driver Date of Receipt
 I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
 Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDELL
 b) Physical Address: 10376 BULLOCK DRIVE KG VA
 c) Telephone Number: (540) 775-3123
 d) Mailing Address: SAME
 e) Name of Disposal Facility's Authorized Agent (print/type) _____
 f) The material delivered by the Transporter has been received at the Disposal Facility.
 Signature of Disposal Facility's Authorized Agent Date of Receipt
 g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
 Signature of Disposal Facility's Authorized Agent Date of Rejection
 Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

Operator is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
 Operator's Name: _____ c) Telephone Number: () _____
 Operator's Address: _____
 Recommended special handling instructions and additional information: _____
 Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.
 Operator's Name (print/type) Signature of Operator's Authorized Agent Date

Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236175
DATE: 12/12/2002
TIME: 16:40 - 17:11

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: @03
Carrier: NA / NON APP

P.O.: 0
GROSS: 38660 LBS
TARE: 24420 LBS
NET: 14240 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CD T 7.12

B. Veneq Jr. Inc

IN OPERATOR: CINDY SIMMONS O U T OPERATOR: CINDY SIMMONS

DRIVER: *[Signature]*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-003

SECTION 1

GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC; Generating Location: SAME; Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD MD 20640; Representative: SHAWN JORGENSEN; Telephone: (301) 744-2263; WASTE MANAGEMENT APPROVAL CODE: MD 586 120602 5219; Common Name of Waste: EXCAVATION DEBRIS; Description: RESIDUAL; Disposal Volume: 400 TONS IX; Number of Containers: 12; Generator's Authorized Agent Name: Heidi A Morgan; Signature: Heidi A Morgan; Shipment Date: 12/12/02

TYPE OF CONTAINERS: TR - TRUCK, DM - METAL DRUM, DP - PLASTIC DRUM, BA - BAG, BB - 6 MIL. PLASTIC BAG, BC - 12 MIL. PLASTIC BAG

SECTION 2

TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC.; Address: P.O. Box 2155; Telephone: (804) 301-7941; Vehicle License No./State: 14664 P VA; Trailer or Container No.: 11602; Name of Driver: Decker L Venej; Signature of Driver: Decker L Venej; Date of Receipt: Dec 12, 2002

SECTION 3

TRANSFER FACILITY - (Complete if applicable)

Transfer Facility's Name: ; Address: ; Telephone: ; Vehicle License No./State: ; Trailer or Container No.: ; Name of Transfer Facility's Authorized Agent: ; Signature of Transfer Facility's Authorized Agent: ; Date of Receipt: ; Signature of Transfer Facility's Authorized Agent: ; Date of Delivery:

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

Transporter's Name: ; Address: ; Telephone: ; Vehicle License No./State: ; Trailer or Container No.: ; Name of Driver: ; Signature of Driver: ; Date of Receipt: ; Signature of Driver: ; Date of Delivery:

SECTION 5

DESTINATION (Disposal Facility)

Disposal Facility's Name: KING GEORGE LANDFILL; Physical Address: 10376 BULLOCK DRIVE RG VA; Telephone: (540) 775-3123; Mailing Address: SAME; Name of Disposal Facility's Authorized Agent: ; Signature of Disposal Facility's Authorized Agent: ; Date of Receipt: ; Signature of Disposal Facility's Authorized Agent: ; Date of Rejection: ; Signature of Driver: ; Date of Rejection:

SECTION 6

ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both. Operator's Name: ; Telephone Number: ; Operator's Address: ; Recommended special handling instructions and additional information: ; Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards. Operator's Name (print/type): ; Signature of Operator's Authorized Agent: ; Date: ; Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236236
DATE: 12/13/2002
TIME: 10:25 - 10:44

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: 006
Carrier: NA / NON APP

P.O.: 0
GROSS: 41300 LBS
TARE: 25700 LBS
NET: 15600 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CO	T	7.83

B. Kney Jr. Inc.

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER:

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-006

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC; Address: 101 STRAUSS AVENUE CONE D44; Representative: SHAWN JORGENSEN; Telephone: 301-744-2263; WASTE MANAGEMENT APPROVAL CODE: MD 586120602 52191; Common Name of Waste: EXCAVATION DEBRIS; Description: RESIDUAL; Disposal Volume: 400 TONS IX; Type of Containers: TR; Generator's Authorized Agent: Heidi A Mortan; Signature: Heidi A Mortan; Shipment Date: 12/13/02

- TYPE OF CONTAINERS: TR - TRUCK, DM - METAL DRUM, DP - PLASTIC DRUM, BA - BAG, BB - 6 MIL. PLASTIC BAG, BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC.; Address: P.O. BOX 2155; Telephone: (804) 301-7944; Vehicle License No./State: 146641 VA; Trailer or Container No.: 41602; Name of Driver: Beecher L Venej; Signature of Driver: Beecher L Venej; Date of Receipt: 12.13.02

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

Transfer Facility's Name: ; Address: ; Telephone Number: ; Vehicle License No./State: ; Trailer or Container No.: ; Name of Transfer Facility's Authorized Agent: ; Signature of Transfer Facility's Authorized Agent: ; Date of Receipt: ; Signature of Transfer Facility's Authorized Agent: ; Date of Delivery: ;

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

Transporter's Name: ; Address: ; Telephone Number: ; Vehicle License No./State: ; Trailer or Container No.: ; Name of Driver: ; Signature of Driver: ; Date of Receipt: ; Signature of Driver: ; Date of Delivery: ;

SECTION 5 DESTINATION (Disposal Facility)

Disposal Facility's Name: KING GEORGE LANDFILL; Physical Address: 10376 BULLOCK DRIVE KG VA; Telephone Number: (540) 775-3123; Mailing Address: SAME; Name of Disposal Facility's Authorized Agent: ; Signature of Disposal Facility's Authorized Agent: ; Date of Receipt: 12/13; Signature of Disposal Facility's Authorized Agent: ; Date of Rejection*:

SECTION 6 ASBESTOS (operator to complete)

Operator's Name: ; Address: ; Telephone Number: ; Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards. Operator's Name (print/type): ; Signature of Operator's Authorized Agent: ; Date: ; Responsible Agency Name and Address: ;



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236313
DATE: 12/13/2002
TIME: 15:08 - 15:36

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: 011
Carrier: NA / NON APP

P. O. : 0
GROSS: 36000 LBS
TARE: 25340 LBS
NET: 10660 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	5.33

B Verney Jr. Inc

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER: *[Signature]*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

SECTION 1

GENERATOR INFORMATION (generator to complete)

j) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

k) Generator's Address: 101 STRAUSS AVENUE CODED44
INDIAN HEAD, MD 20640 k) Address: SAME

l) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

m) Telephone Number: (301) 744-2263

n) WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

o) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; _____ % friable _____ % non-friable
 Non-Friable; N/A

p) Description of Waste: RESIDUAL

q) Disposal Volume: EST 20400 TONS IX n) Type of Containers: TR

r) Tons _____ Cubic Yards _____ Others _____

s) Number of Containers: _____

t) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

u) Generator's Authorized Agent Name (print/type): Heidi A Morgan Signature of Generator's Authorized Agent: Heidi A Morgan Shipment Date: 12/13/02

TYPE OF CONTAINERS

- TR - TRUCK
- DM - METAL DRUM
- DP - PLASTIC DRUM
- BA - BAG
- BB - 6 MIL. PLASTIC BAG
- BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. Box 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: 14C64P VA

e) Trailer or Container No.: 41600

f) Name of Driver (print/type): Beecher L. Veney

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Signature of Driver: [Signature] Date of Receipt: 12-13-02

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver: _____ Date of Delivery: _____

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type): _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent: _____ Date of Receipt: _____

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent: _____ Date of Delivery: _____

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

SECTION 5 DESTINATION (Disposal Facility)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type): _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver: _____ Date of Receipt: _____

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver: _____ Date of Delivery: _____

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type): _____

f) The material delivered by the Transporter has been received at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent: [Signature] Date of Receipt: 12/13

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent: _____ Date of Rejection: _____

Signature of Driver: _____ Date of Rejection: _____

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type): _____ Signature of Operator's Authorized Agent: _____ Date: _____

f) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236357
DATE: 12/14/2002
TIME: 06:22 - 08:54

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: 014
Carrier: NA / NON APP

P.O. : 0
GROSS: 51000 LBS
TARE: 24160 LBS
NET: 27720 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	13.86

B. Verney Jr. Inc.

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER: *Eric H*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODED44
INDIAN HEAD, MD 20640 k) Address: SAME

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; _____ % friable _____ % non-friable
 Non-Friable; N/A

g) Description of Waste: RESIDUAL

n) Disposal Volume: EST 20400 TONS IX n) Type of Containers: TR

X Tons _____ Cubic Yards _____ Others _____

i) Number of Containers: _____

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Heidi A Morgan Generator's Authorized Agent Name (print/type) Heidi A Morgan Signature of Generator's Authorized Agent 12/13/02 Shipment Date

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. Box 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: 14664 P VA

e) Trailer or Container No.: 41602

f) Name of Driver (print/type): Beecher J. Vener

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Beecher J. Vener Signature of Driver 12-13-02 Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver _____ Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type): _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent _____ Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent _____ Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type): _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver _____ Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver _____ Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type): _____

f) The material delivered by the Transporter has been received at the Disposal Facility.

[Signature] Signature of Disposal Facility's Authorized Agent 12/14 Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent _____ Date of Rejection

Signature of Driver _____ Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) _____ Signature of Operator's Authorized Agent _____ Date _____

f) Responsible Agency Name and Address: _____

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-10
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.6.1	Solid Waste Facility Permit Permit for Disposal of Non-hazardous Drums of Drill Cuttings and Development Water	1	Documentation	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – If approved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa. 15146-2972	Copies to: File PM Con Rep No. Returned
--	---	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority
NA

To: DAN PRINGLE

10-22-03

From ERNIE DUKE

4 Pages.

Re: Disposal Facility

ATTACHED is the permit for

C-MAC. This is the facility

that accepted the waste (non-haz

drums from drilling) This is to be

attached to the submittal form that

~~was in the package sent up before.~~

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

HAZARDOUS WASTE FACILITY PERMIT

ISSUED TO: FISHER INDUSTRIAL SERVICE, INC.

EPA ID / PERMIT NUMBER: ALD 981 020 894

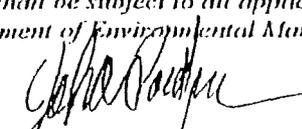
LOCATION: 402 Webster Chapel Road
Glencoe, Alabama

UNITS PERMITTED: Container Storage (3 Units)
Tank Storage/Treatment (10 Units)

ISSUANCE DATE: November 5, 1992
Modification 1 -- May 2, 1994
Modification 2 -- August 15, 1994
Modification 3 -- April 18, 1996
Modification 4 -- February 12, 1997
Modification 5 -- May 15, 1998

EXPIRATION DATE: November 4, 2002

This Permit is issued pursuant with the Code of Alabama 1975, §§ 22-30-1-et. seq., as amended, and regulations adopted thereunder and the Hazardous Wastes Management and Minimization Act and in accordance with the plans and specifications and applications filed with the Department subject to the conditions appended hereto, all of which are considered a part of this Permit. This Permit shall be subject to all applicable laws of the State of Alabama, rules and regulations and orders of the Department of Environmental Management and shall be effective from the date of issuance.



Alabama Department of Environmental Management

July 15, 2003

Don Mangan
Earthcare Services
100113 Windridge Drive
Fredericksburg, VA 22407

**Subject: C-MAC Part B, Storage and Treatment Operating Permit
ALD 981 020 894**

Dear Mr. Mangan:

The purpose of this correspondence is to follow up on your request for information pursuant to our permit renewal.

The Hazardous Waste Facility Permit (ID Number: ALD 981 020 894) was issued November 5, 1992, pursuant with the Code of Alabama 1975 Section 22-30-1 et seq., as amended and regulations adopted thereunder and the Hazardous Wastes Management Act of 1978 and in accordance with the plans and specifications and applications filed with the Alabama Department of Environmental Management (ADEM). The expiration date of the permit is November 5, 2002.

Renewal of the permit is specified in the facility permit (I.E. Duties and Requirements) Paragraph 2. Simply stated the notification for renewal must be submitted 180 days prior to expiration. The application for renewal of the above described permit was submitted May 7, 2002.

Pursuant to subsection 335-14-8-.05 Expiration and Continuation of Permits – Treatment, Storage, and Disposal Facilities: (2) Continuation of expiring permits ... The conditions of an expired permit continue in force until the effective date of a new permit....

In summary, should the state fail to respond to our request for renewal by November 5, 2002 we are required by law to continue operating under our existing permit.

Discussions with ADEM, as recently as January 2003, indicate that our permit is in good standing and that the timing of our review is contingent upon the review of other permits currently under review by the Department. On February 3, 2003, C-MAC received comments pursuant to our permit renewal submittal. These comments are not significant in the context of our operating permit were responded to in March 2003. Mr. David Matthews, EHS Manager for C-MAC Environmental Group, Inc., has identified Mr. Narveen Sharma (334-270-5608) as our assigned permit reviewer.

Should you have any additional questions or comments please contact the undersigned.

Best Regards,

Brett C. Hensley, CHMM, PG
Vice President, C-MAC Environmental Group, Inc.

Dave E. Mathews
EHS Manager

*C-MAC Purchased Fisher Industrial Services, Inc.
And their permit renewal will change the name.*

*Re D. Mangan
10-22-03*



Indian Head Division
Naval Surface Warfare Center
101 Strauss Avenue
Indian Head, MD 20640-5035

Waste Management & Prevention Division
Air, Water & Natural Resources Division

FAX (301) 744-4180

DSN: 354

PHONE: (301) 744-6745 (Office Line)
(301) 744-2263 (Direct Line)

DATE: 24 September 2003

TO: Don Mangan
TO: Dan Pringle

PHONE #: (540) 898-7633
PHONE #: (412) 380-6248

FAX #: (540) 898-7639
FAX #: (412) 858-3979

TOTAL PAGES: 5 (Including Cover Sheet)

COMMENTS:

Don and Dan,

Attached are the two, signed Waste Profile Sheets for the soil and groundwater IDW from the installation of monitoring wells at IR Site 12, Town Gut Landfill, based on the provided sample results. If you have any questions, please contact me on (301) 744-2263.

Sincerely,
Shawn Jorgensen
Code 044SJ, Phone - (301) 744-2263

EARTHCARE SOLUTIONS, INC.

Phone: (540) 898-7633
Fax: (540) 898-7639
E-Mail: dnmangan@earthlink.net

Waste Profile

Page 1

1. General Information

SHIPPING FACILITY:

EPA ID # MD 417 002 4109
Facility Name INDIAN HEAD NWC
Address 101 STRAUSS AVE. CODE 044
City INDIAN HEAD
State MD Zip 20640
Phone # 301-744-6745 Fax # _____
Contact SHAWN JORGENSEN

CUSTOMER: (If different from Shipping Facility)

Company Name SHAW ENVIRONMENTAL INC
Address 2790 MOSSIDE BLVD.
City MONROEVILLE
State PA
Zip 15146
Phone # 412-380-6248 Fax # 412-858-3979
Contact DAW PRINGLE

2. General Waste Information Waste Name DRUMMED GROUND WATER

Process Generating Waste GROUND WATER PUMPED FROM NEW MONITORING WELLS DURING WELL DEVELOPMENT

(or check one of the following) Discarded Product Off/Spec Product Cleaning Degreasing Empty containers

3. Physical Properties (at 70° unless otherwise specified)

Physical State

Liquid
 Solid
 Gas

Free Liquid 100%

Odor

None
 Strong
 Mild

Color SEMI-CLEAR

Layers

Single
 Double
 Multi

Viscosity

Low (water)
 Medium (oil)
 High (syrup)
 N/A

Boiling Point

<95
 95 to 100
 >100
 N/A

pH

<2
 2.1 to 4
 4.1 to 10
 10.1 to 12.5
 >12.5
 N/A

Specific Gravity

<0.8
 0.9 to 1.0
 1.0
 1.1 to 1.4
 >1.4
 N/A

BTU/lb

<1,000
 1,000 to 5,000
 5,000 to 10,000
 10,000 to 15,000
 >15,000

Total Suspended Solids (%)

0 to 1
 2 to 5
 6 to 10
 11 to 20
 N/A

Flash Point (°F)

<73
 73 to 100
 100 to 140
 140 to 200
 >200
 N/A

4. Waste Codes

List all applicable USEPA hazardous waste codes: THIS IS A NON-HAZARDOUS LIQUID

List any State Waste Codes or other state designations: N/A

Source Codes: A N/A Form Code: B N/A Origin Code N/A

5. Shipping Information

Proper Shipping Description:

RQ S - 55 GALLON STEEL DRUMS CONTAINING GROUND WATER

Hazard Class NON-HAZ ID # _____ PG _____ Poison Inhalation Hazard Marine Pollutant

Technical N.O.S. descriptions (_____)

6. Management Method

Most Appropriate Method Incineration Only Recycling Fuel Blending Water Treatment
 Landfill Stabilization Microencapsulation Macroencapsulation Other _____

TSD Facility: _____

EARTHCARE SOLUTIONS, INC.

Phone: (540) 898-7633
Fax: (540) 898-7639
E-Mail: dmangan@earthlink.net

Waste Profile	
#	_____
Page 1	

1. General Information

SHIPPING FACILITY: _____ CUSTOMER: (If different from Shipping Facility) _____
 EPA ID # MD 417 002 4109 Company Name SHAW ENVIRONMENTAL INC
 Facility Name INDIAN HEAD NSWC Address 2790 MOSSIDE BLVD.
 Address 101 STRAUSS AVE. CODE 044 City MONROEVILLE
 City INDIAN HEAD State PA
 State MD Zip 20640 Zip 15146
 Phone # 301-744-6745 Fax # _____ Phone # 412-380-6278 Fax # 412-858-3979
 Contact SHAWN JORGENSEN Contact DAN PRINGLE

2. General Waste Information Waste Name DRUMMED SOIL ~~LEFT OVER FROM THE~~
 Process Generating Waste SOIL LEFT OVER FROM THE INSTALLATION OF NEW MONITORING
WELLS
 (or check one of the following) Discarded Product Off/Spec Product Cleaning Degreasing Empty containers

3. Physical Properties (at 70° unless otherwise specified)

Physical State <input type="checkbox"/> Liquid <input checked="" type="checkbox"/> Solid <input type="checkbox"/> Gas Free Liquid <u>0</u> %	Odor <u>0</u> <input checked="" type="checkbox"/> None <input type="checkbox"/> Strong <input type="checkbox"/> Mild Color <u>BROWN</u>	Layers <input checked="" type="checkbox"/> Single <input type="checkbox"/> Double <input type="checkbox"/> Multi	Viscosity <input type="checkbox"/> Low (water) <input type="checkbox"/> Medium (oil) <input type="checkbox"/> High (syrup) <input checked="" type="checkbox"/> N/A	Boiling Point <input type="checkbox"/> <95 <input type="checkbox"/> 95 to 100 <input type="checkbox"/> >100 <input checked="" type="checkbox"/> N/A
pH <input type="checkbox"/> <2 <input type="checkbox"/> 2.1 to 4 <input checked="" type="checkbox"/> 4.1 to 10 <input type="checkbox"/> 10.1 to 12.5 <input type="checkbox"/> >12.5 <input type="checkbox"/> N/A	Specific Gravity <input type="checkbox"/> <0.8 <input type="checkbox"/> 0.9 to 1.0 <input type="checkbox"/> 1.0 <input type="checkbox"/> 1.1 to 1.4 <input checked="" type="checkbox"/> >1.4 <input type="checkbox"/> N/A	BTU/Lb <input checked="" type="checkbox"/> <1,000 <input type="checkbox"/> 1,000 to 5,000 <input type="checkbox"/> 5,000 to 10,000 <input type="checkbox"/> 10,000 to 15,000 <input type="checkbox"/> >15,000	Total Suspended Solids (%) <input type="checkbox"/> 0 to 1 <input type="checkbox"/> 2 to 5 <input type="checkbox"/> 6 to 10 <input type="checkbox"/> 11 to 20 <input checked="" type="checkbox"/> N/A	Flash Point (°F) <input type="checkbox"/> <73 <input type="checkbox"/> 73 to 100 <input type="checkbox"/> 100 to 140 <input type="checkbox"/> 140 to 200 <input type="checkbox"/> >200 <input checked="" type="checkbox"/> N/A

4. Waste Codes

List all applicable USEPA hazardous waste codes: THIS IS A NON-HAZARDOUS SOLID
 List any State Waste Codes or other state designations: N/A
 Source Codes: A N/A Form Code: B N/A Origin Code N/A

5. Shipping Information

Proper Shipping Description:
 RQ 5 - 55 GALLON STEEL DRUMS CONTAINING SOIL
 Hazard Class NON-HAZ ID # _____ PG _____ Poison Inhalation Hazard Marine Pollutant
 Technical N.O.S. descriptions (_____)

6. Management Method

Most Appropriate Method Incineration Only Recycling Fuel Blending Water Treatment
 Landfill Stabilization Microencapsulation Macroencapsulation Other _____
 TSD Facility: _____

BFI OLD DOMINION
2001 CHARLES CITY RD
RICHMOND VA
23231

001179
REDBONE TRUCKING
P.O. BOX 2155

TAPPAHANNOCK, VA 22560-
Contract: TIRES

SITE 01	TICKET 156314	GRID
SUSAN		WEIGHMASTER
DATE IN 22 October 2002	TIME IN 10:31 am	
DATE OUT 22 October 2002	TIME OUT 10:45 am	
VEHICLE REDBONE	ROLL OFF	
REFERENCE INDAIN HEAD	ORIGIN NAVSEA	

01 Gross Weight 28,860.00 LB
Tare Weight 25,040.00 LB
Net Weight 3,820.00 LB 1.91 TN

Inbound - SCALE TICKET

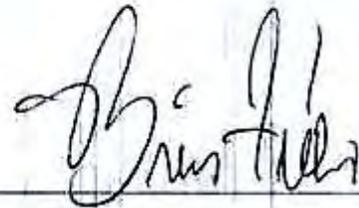
QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1.91	TN	27 T TIRES (Out)				

REDBONE TRUCKING

HAVE A GREAT DAY !!!

AJ & BRIAN

SIGNATURE



NET AMOUNT
TENDERED
CHANGE
CHECK NO.

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02223-01
Specification Section No. (Only 1 section with each transmittal) <p style="text-align: center;">02223</p>	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-07	1.1	Permit for Hazardous Waste Storage, Treatment and Disposal Permit Number PAD 067098822 Commonwealth of Pa. Disposal of Hazardous Drums	1	Documentation	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	December 11, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature		Date
NA		

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority		
NA		

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT PROGRAM
SOUTHEASTERN REGION

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, as amended, Solid Waste Permit Number PAD067098512, issued on February 16, 1993 to:

Remtech Environmental Lewisberry, Inc.
150 Industrial Drive
Lewisberry, PA 17339-9537

Fairview Township
York County

is hereby modified as follows:

This permit modification is issued approving the reissuance of the Remtech Environmental (Lewisberry) L.P. Hazardous Waste Storage/Treatment Permit to Cycle Chem, Inc. This approval is issued based on the following submissions:

1. Change of ownership request, submitted under Cycle Chem, Inc. cover, received April 1, 1999, consisting of the following:
 - General Information Form
 - Form A, Hazardous Waste Permit Application
 - Application for a Hazardous Waste Treatment, Storage, and Disposal Permit
 - Form HW-C, Compliance History
 - Notification of Regulated Waste Activity
 - Proof of Public Notification
2. Updated Form HW-C, Remtech's statement of liability transfer, and proof of publication submitted under Cycle Chem, Inc. cover, received June 16, 1999.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof, effective as of the date of the sale of the Remtech Environmental (Lewisberry) L.P. facility to Cycle Chem, Inc.

Keith G. Kern
FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

PERMIT

FOR HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL

Permittee: Remtech Environmental LewisberryPermit Number: PAD067098822Facility: Remtech Environmental LewisberryFairview Township, York County

This permit is issued by the Commonwealth of Pennsylvania Department of Environmental Resources (DER) under authority of the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. Section 5018.101 et seq. (the Act) and DER hazardous waste regulations to REMTECH Environmental Lewisberry, Inc. (hereafter called the Permittee), to operate a hazardous waste management facility located in Lewisberry, Pennsylvania at latitude 40°10'001" North and longitude 076°50'017" West.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Parts I - V, consisting of pages 1 through 48 and Attachments 1 through 12) and the applicable regulations contained in 25 Pa. Code Chapters 260-270 as specified in the permit.

This permit is based on the assumption that the information submitted in the permit application dated March 31, 1991 as modified by subsequent amendments dated July 3, 1991; February 24, 1992; June 19, 1992; and August 27, 1992 (hereafter referred to as the application) is accurate and that the facility will be constructed and/or operated as specified in the application. Any inaccuracies found in this information may be grounds for the revocation or modification of this permit and potential enforcement action. The Permittee must inform DER of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is conditioned upon full compliance with all applicable provisions of the Act; DER regulations contained in 25 Pa. Code Chapter 75; the Clean Streams Law, 35 P.S. §691.1 et seq.; the Air Pollution Control Act, 35 P.S. §4001 et seq.; the Dam Safety and Encroachments Act, 32 P.S. §893.1 et seq.; the Surface Mining Conservation and Reclamation Act, 52 P.S. §1396.1 et seq.; the Coal Refuse Disposal Control Act, 52 P.S. §30.51 et seq.; all other Pennsylvania statutes related to the protection of the environment; and all Pennsylvania statutes related to the protection of public health, safety, and welfare.

This permit is effective as of February 16, 1993, and shall remain in effect until February 15, 2003, unless revoked and reissued, or revoked in accordance with 25 Pa. Code §§270.31, 270.32 and 270.33, or continued.

Let's protect our earth



STATE OF NEW JERSEY
DIVISION OF SOLID AND HAZARDOUS WASTE
Bureau of Hazardous Waste Regulation
PO BOX 414
Trenton, NJ 08625-0414
(609)-292-7081

Expiration Date:	08/30/01
Decal No. :	00B2997
Vehicle ID# :	1GRAA9D26CB102201 NJ
License # :	T78F2Z
Certified :	CLEAN VENTURE INCORPORATED 201 SOUTH FIRST STREET ELIZABETH NJ 07208
DEP No. :	05811
Type :	3

Transporter Vehicle Registration Card

CLEAN VENTURE INCORPORATED
201 SOUTH FIRST STREET
ELIZABETH NJ 07208

SEE BACK FOR INSTRUCTIONS ON MOUNTING
YOUR DECALS.

HAZARDOUS WASTE

Document #:

TR. 299 B.05

*ATT: Andy Potter
Lewisberry*

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT PROGRAM
SOUTHCENTRAL REGION

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, as amended, Solid Waste Permit Number 301280, issued on April 17, 1997 to:

Remtech Environmental Lewisberry, Inc.
550 Industrial Drive
Lewisberry, PA 17339-9537

Fairview Township
York County

is hereby modified as follows:

This permit modification is issued approving the reissuance of the Remtech Environmental (Lewisberry) L.P. residual waste processing/transfer permit to Cycle Chem, Inc. This approval is issued based on the following submissions:

- o Change of ownership request, submitted under Cycle Chem, Inc. cover, received April 1, 1999, consisting of the following:
 - General Information Form
 - Form A, Application for Municipal Waste Permit
 - Form B, Professional Certification
 - Form HW-C, Compliance History
 - Statement of Liability
 - Proof of Public Notification (received June 16, 1999)

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof, effective as of the date of the sale of the Remtech Environmental (Lewisberry) L.P. facility to Cycle Chem, Inc.

Keith C. Kern

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT PROGRAM
SOUTHCENTRAL REGION

FORM NO. 8

PERMIT FOR SOLID WASTE DISPOSAL AND/OR PROCESSING FACILITY

Permit No. 301280
Date Issued April 17, 1997
Date Expired April 16, 2007

Under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980, Act 97, as amended, a permit for a solid waste disposal and/or processing at Fairview Township in the County of York is granted to:

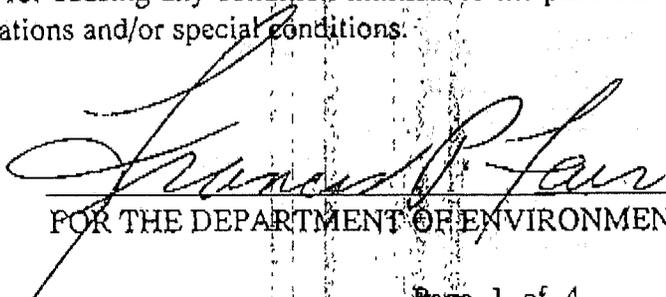
REMTECH Environmental (Lewisberry), L.P.
550 Industrial Drive
Lewisberry, PA 17339-9537

(Consisting of approximately 0.6 acres)

Latitude 76° 50' 18" N

Longitude 40° 10' 00" W

This permit is subject to modification by the Department of Environmental Protection and is further subject to revocation or suspension by the Department of Environmental Protection for any violation of the applicable laws or the rules and regulations adopted thereunder, for failure to comply in whole or in part with the conditions of this permit and the provisions set forth in Application No. 301280 which is made a part hereof, or for causing any condition inimical to the public health, safety or welfare. See attachment for waste limitations and/or special conditions.


FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02223-02
Specification Section No. (Only 1 section with each transmittal) 02223	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.2.2.1 and 1.2.2.2	Hazardous Waste Manifest and Certificate of Receipt for the Disposal of Hazardous Drums (5 Drums)	1	Documentation	E	A

<u>SUBMITTAL CODES</u> D – Forwarded to ROICC FOR ACTION E – Forwarded to ROICC for Record Purposes	<u>APPROVAL CODES</u> A – Approved as Submitted AN – Approved as Noted	<u>RR – Disapproved, Revise and Resubmit</u> NR – Not Reviewed
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I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature <i>Emie Duke</i>	Date January 22, 2003
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PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management
P.O. Box 8550
Harrisburg, PA 17105-8550

Form approved.
OMB No. 2050-0039

2500-FM-LRWM0051 REV. 7/99

OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MD4170024109	Manifest Document No. 57645	2. Page 1 of 1	Information within the bold red border is not required by Federal law but may be required by State law.
3. Generator's Name and Mailing Address Attn: INDIAN HEAD NAVAL SURFACE WAREFARE 101 STRAUSS AVENUE INDIAN HEAD MD 20640			A. State Manifest Document Number PAG 457645		
4. Generator's Phone (201-744-2283)		6. US EPA ID Number NJ0000027193		B. State Gen. ID SAME	
5. Transporter 1 Company Name CLEAN VENTURE INC		8. US EPA ID Number		C. State Trans. ID PA-AH 9299	
7. Transporter 2 Company Name		10. US EPA ID Number PAD067099822		D. Transporter's Phone (908-355-5900)	
9. Designated Facility Name and Site Address CYCLE CHEM INC. 550 INDUSTRIAL DRIVE LEWISBURG, PA 17033				E. State Trans. ID PA-AH	
				F. Transporter's Phone ()	
				G. State Facility's ID	
				H. Facility's Phone () 717-938-4700	

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers		13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
	No.	Type			
a. <input checked="" type="checkbox"/> HM RC WASTE FLAMMABLE SOLIDS, ORGANIC NOS(CHROMIUM, XYLENE) 4.1 UN325, P 0.1 FRAGILES	5	DM	1000	P	0001 0007
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above	K. Handling Codes for Wastes Listed Above
8 Note: LE, 125.0%	a. 301
Note:	c.
Note:	b.
	d.

15. Special Handling Instructions and Additional Information

11a. CAP027-A-3838 MD PERMITS 006465-CHS11941

11b. 02-

11c.

11d.

Emergency Response # 908-355-5900

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name Michelle Lynn Bohm	Signature Michelle Lynn Bohm	MONTH DAY YEAR 12 13 02
--	---------------------------------	----------------------------

17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ATILIO REYES	Signature Atilio Reyes	MONTH DAY YEAR 12 13 02
---	---------------------------	----------------------------

18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	Signature	MONTH DAY YEAR
---	-----------	----------------

19. Discrepancy Indication Space

M

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name Annie E. Hied	Signature Annie E. Hied	MONTH DAY YEAR 12 13 02
---	----------------------------	----------------------------

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DEP (717) 787-4343

GENERATOR

TRANSPORTER

FACILITY

December 2, 2002

Mr. Shawn Jorgensen
Indian Head Naval Surface Warefare center
101 Strauss Avenue
Indian Head, MD 20640

Pickup Site:
Indian Head Naval Surface Warefare
101 Strauss Avenue
Indian Head, MD

RE: Notification of Facility Ability and Willingness to Accept Generator's Waste:

<u>Gencode:</u>	<u>Waste Stream Name:</u>	<u>Waste Codes:</u>
CAP027 - A - SSM	Drum Carcasses cont w/paint	D001 D007

Dear Mr. Jorgensen :

As directed by 40 CFR 264.12(b) and Cycle Chem, Inc.'s hazardous waste facility permit, Cycle Chem, Inc. hereby informs you the above referenced waste stream has been granted Pre-Acceptance Approval.

Cycle Chem, Inc. is permitted, is capable, has capacity and is willing to accept your waste via Capitol Environmental Services, provided it conforms to the Material Profile Sheet upon which the Pre-Acceptance Approval was granted.

This document is important. Please file it for safekeeping. A copy is also held at the Cycle Chem, Inc. facility.

Please direct any questions to Capitol Environmental Services at 703-356-3135.

Sincerely,

Todd Meyer
Account Manager

cc: Capitol Environmental Services





PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management

P.O. Box 8550
Harrisburg, PA 17105-8550

Form approved
OMB No. 2050-0039

2500-FM-LRWM0051 REV. 7-99

OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MD4170024109	Manifest Document No. 57645	2. Page 1 of 1	Information within the bold red border is not required by Federal law but may be required by State law.		
3. Generator's Name and Mailing Address Attn: INDIAN HEAD NAVAL SURFACE WAREHOUSE 101 STRAUSS AVENUE INDIAN HEAD MD 20640		6. US EPA ID Number MD0000027195		A. State Manifest Document Number PAG 457645		B. State Gen. ID SAME	
4. Generator's Phone (301-714-3283)		7. Transporter 1 Company Name CLEAN VENTURE INC		C. State Trans. ID PA-AH 0299		D. Transporter's Phone (908-355-5800)	
5. Transporter 1 Company Name		8. US EPA ID Number		E. State Trans. ID PA-AH		F. Transporter's Phone ()	
9. Designated Facility Name and Site Address CYCLE CHEM INC 650 INDUSTRIAL DRIVE EMERSON PA 17334		10. US EPA ID Number PA0067098822		G. State Facility's ID		H. Facility's Phone (717-938-4700)	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM a. X RC WASTE FLAMMABLE SOLIDS ORGANIC NON-CRYSTALLINE LIQUID b. c. d.		12. Containers No. Type	13. Total Quantity	14. Unit Wt Vol	1. Waste No.		
		5 DM	1000	F	2501 200		
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above					
a. Note		b. Note		c. Note		d. Note	
15. Special Handling Instructions and Additional Information 11b CAP027-4-88M MD REFNOTE 006465-CHS11941 11c 11d		Emergency Response # 908-355-5800					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Lynn Bolin		Signature Lynn Bolin		MONTH DAY YEAR 12 13 02			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ATILIO REYES		Signature Atilio Reyes		MONTH DAY YEAR 12 13 02			
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH DAY YEAR			
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name							
Signature		MONTH DAY YEAR					

GENERATOR

TRANSPORTER

FACILITY

PAG 457645

CC Cycle Chem, Inc.

Voice (908) 355-5800

Fax (908) 355-0562

www.cyclachem.com

ELIZABETH

217 South 1ST St. 550 Industrial Dr.

Elizabeth, NJ

07206

LEWISBERRY

550 Industrial Dr.

Lewisberry, PA

17339

(717)938-4700, (717)938-3301

Material Profile Sheet

Product Code: SSM

Generator No: CA027-A-

A. GENERATOR INFORMATION

GENERATOR NAME IHDIV NAV SURF WAR CEN

MAILING ADDRESS Code 044SJ, 101 Strauss Avenue
Indian Head, MD 20640

GENERATOR CONTACT Shawn Jorgensen

GENERATOR PHONE # 301-744-2263

SITE ADDRESS same

NAME OF WASTE Drum carcasses contaminated with
Paint residue

GENERATOR USEPA ID MD4170024109

BILLING ADDRESS Capitol Environmental Services, Inc.
8229 Boone Blvd., Suite 310, Vienna, VA 22182

CONTACT Mike Schubert

PHONE # 302-652-8999 FAX # 302-652-5330

PROCESS GENERATING WASTE Rusted drum carcasses containing
paint residues excavated from remedial site, tested, and
placed in overpacks

B. PHYSICAL CHARACTERISTICS OF WASTE

Color, Physical Description: orange/white/varies/metal

STRONG INCIDENTAL ODOR PRESENT
 YES NO Pains

PHYSICAL STATE @ 20°F

SOLID SINGLE PHASE
 LIQUID BI-LAYERED
 POWDER MULTI-LAYERED
 SEMI SOLID SLUDGE

WAS TEWATER
 NON-WASTEWATER

SPECIFIC GRAVITY: 2.10

FLASH POINT
 < 70°F
 70°F - 100°F
 101°F - 141°F
 142°F - 200°F
 > 200°F
 NO FLASH
 SOLID
Ignitable (solid) Yes No
Ignitable (liq) Yes No
Open Cup

LIQUID/SOLID/SLUDGE
% Sludge 0
% Suspended Solids 0
% Solids/Debris 100
% Free Liquids 0

pH
 < 2.0
 2.01-5
 5.01-9
 9.01-12.4
 > 12.50
 EXACT

Drumable? Yes No
Pumpable? Yes No
Pourable? Yes No

D. REGULATORY INFORMATION

USEPA HAZARDOUS WASTE? YES NO

USEPA CODE(S): D001, D007

APPLICABLE SUBCATEGORIES: _____

STATE HAZARDOUS WASTE? YES NO

STATE CODE(S): D001, D007

D. O. T. HAZARDOUS WASTE? YES NO

PROPER SHIPPING NAME: RO, Waste Flammable Solids, Organic, n.o.s.
(Paint residue)

CLASS: 4.1 I.D. NO: UN1325 P.G.: II R. Q.: 100 lbs

E. SHIPPING INFORMATION/SHIPMENT METHOD:

BULK LIQUID ANTICIPATED VOLUME: 4-6

BULK SOLID

DUMP TRAILER QUANTITY: drums

ROLL-OFF

DRUM SIZE 55/10P UNITS: drums

PALLETS PRICE: \$270/ST + 50¢/P

CUBIC YARD BOX FREQUENCY: one time

F. SPECIAL HANDLING CONSIDERATIONS

CERCLA FACILITIES XXX INCINERATE ONLY _____

NO LANDFILL _____ CCI SALES CODE Ryan

PROJECT CODE _____

OTHER _____

C. CHEMICAL COMPOSITION Is MSDS Attached? Yes No Is Analysis Attached? Yes No

	RANGE MINIMUM	RANGE MAXIMUM
Debris (Drum carcasses)	95	99%
Paint residue	1	5%

G. TRANSPORTATION ARRANGEMENTS

CUSTOMER WILL DELIVER TO CCI

CUSTOMER WILL DELIVER TO END FACILITY VIA CCI

CCI TO PROVIDE TRANSPORTATION

H. OTHER HAZARDOUS CHARACTERISTICS

INDICATE IF THE WASTE IS:

- RCRA REACTIVE
- WATER REACTIVE
- RADIOACTIVE
- SUBJECT TO SUBPART FF HAZARDOUS REGULATIONS
- LITHOLOGICAL
- TSCA REGULATED
- OXIDIZING MATERIAL
- PYROPHORIC
- EXPLOSIVE/SHOCK SENSITIVE
- NONE OF THE ABOVE

Indicate if This Waste Contains Any Of The Following:

	None	or Less Than	or Actual
PCB's	<input checked="" type="checkbox"/>	< 50PPM	PPM
Cyanides	<input checked="" type="checkbox"/>	< 250PPM	PPM
Phenolics	<input checked="" type="checkbox"/>	< 50 PPM	PPM
Sulfides	<input checked="" type="checkbox"/>	< 500 PPM	PPM
VOC's	<input type="checkbox"/>	< 500 PPM	> 500 PPM

Is this waste characteristically hazardous for metals or organics (EPA Waste Codes D004-D013)? Yes No. If yes, please list the constituents and concentrations in Section D.

Does this waste contain underlying hazardous constituents as defined in 40 CFR 261 (2)(1) at concentrations exceeding the UTS treatment standards? Yes No. If yes, please list constituents and concentrations in Section D.

GENERATOR CERTIFICATION: I hereby certify that all information submitted in this and all attached documents is complete, contains true and accurate descriptions, and is representative of the waste material, and that all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. If CCI discovers, after having taken delivery of the waste, that any waste does not conform to the identification and description on this MPS then CCI shall provide notice of such condition to the Generator and coordinate the return of the nonconforming waste to the point of origin as set forth on the manifest or to such other locations designated in writing by the Generator. Generator agrees to reimburse CCI for all handling, packaging, clean-up and transportation costs or charges, damage to equipment, and costs associated with lost time incurred by CCI during the receipt, handling, temporary storage and return of such nonconforming waste to point of origin or to such other location designated by Generator. I hereby authorize CCI to amend, and/or correct any information on the MPS with the full understanding that if any amendment or correction is performed, I will be contractually bound as such to issue any appropriate amendments to this manifest.
AUTHORIZED SIGNATURE: [Signature] TITLE: Warehouse Worker DATE: 12-13-02



Recycling Treatment & Disposal of Hazardous Waste

550 Industrial Drive, Lewisberry, PA 17339-9537 • 717-938-4700, Fax 717-938-3301

LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM

Generator Name: Indian Head Naval Surface Warfare

Generator EPA ID #: MD 417 0024 109

Manifest #: PA 6457645

This land disposal restriction (LDR) notification must be submitted with the initial shipment of all new waste streams. Due to revised LDR notification requirements effective after August 23, 1998, previously approved waste streams will require re-notification on this form with the first shipment after that date. Subsequent notification is not required unless the waste stream changes.

(1) WASTE STREAM INFORMATION

Box A: Check this box if this LDR certification has been supplied with a previous shipment. Additional information and certification is not required on this form.

Box B: Indicate if waste stream is a wastewater (WW) or non-wastewater (NWW) (aqueous waste streams containing < 1% total organic carbon (TOC) and < 1% total suspended solids (TSS) are wastewaters. All other streams are non-wastewaters).

Box C: List all EPA waste codes and subcategory reference letters (if applicable). Alternatively, attach and reference additional pages (e.g. profiles or lab pack slips) containing required information.

	A	B	C
Line #	Previously shipped LDR on file	NWW/WW	EPA Waste Codes and subcategory reference letter (if applicable)
A			D001, B, D007
B			
C			
D			

Subcategory Reference Letters (EPA codes not listed here do not have subcategories)

D001	A	Ignitable characteristic wastes, except high TOC ignitable liquids subcategory
D001	B	High TOC (> 10%) ignitable liquid subcategory
D003	A	Reactive sulfide subcategory
D003	B	Reactive cyanide subcategory
D003	C	Water reactive subcategory
D003	D	Other reactive subcategory
D006	A	Cadmium non-battery subcategory
D006	B	Cadmium containing batteries subcategory
D008	A	Lead non-battery subcategory
D008	B	Lead acid batteries subcategory
D009	A	High mercury organic subcategory (>260 PPM Total Mercury)
D009	B	High mercury inorganic subcategory (> 260 PPM Total Mercury)
D009	C	Low mercury subcategory (< 260 PPM Total Mercury)
D009	D	Mercury wastewater subcategory

(2) SPENT SOLVENT WASTE CONSTITUENTS

Circle applicable waste code(s) and constituent(s) for each manifest line item containing EPA spent solvent waste codes F001-F005.

Table with 5 columns: F001, F002, F003, F004, F005. Each column lists chemical constituents with 'A B C D' checkboxes for selection.

(3) UNDERLYING HAZARDOUS CONSTITUENTS

For characteristically hazardous waste streams (EPA codes D001-D043), please list all underlying hazardous constituents as defined in 40 CFR 268(2)(i) that are present at concentrations exceeding the universal treatment standards listed in 40 CFR 268.48 (F001-F005 constituents identified in section (2) and specific constituents for EPA U-, P-, and D004-D043 codes listed in Section (1) do not need to be listed in this section).

- A. _____ None Present
B. _____ None Present
C. _____ None Present
D. _____ None Present

(4) HOW MUST THESE WASTE STREAMS BE MANAGED?

For each manifest line item, circle applicable treatment/requirement. For contaminated soil, circle applicable choice as indicated.

- A B C D _____ This waste is non-hazardous per 40 CFR 261, and is not restricted from land disposal under 40 CFR 268 subpart D.
A B C D _____ This is an EPA hazardous waste that is not a contaminated soil or hazardous debris. Waste must be treated to the appropriate treatment standard set forth in 40 CFR subpart D prior to land disposal.
A B C D _____ This is a hazardous debris and is subject to the alternative treatment standards of 40 CFR 268.45.
A B C D _____ This is a hazardous waste contaminated soil. This contaminated soil does/does not (circle one) contain listed hazardous wastes and does/does not (circle one) exhibit a characteristic of hazardous waste and is subject to/complies with (circle one) the soil treatment standards as provided by 268.49(c) or the universal treatment standards.
A B C D _____ This is an EPA hazardous waste that meets all applicable treatment standards set forth in 40 CFR 268 subpart D, and can be landfilled without further treatment. I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing or thorough knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(5) CERTIFICATION

I certify that all information on this and all associated documents is complete and accurate to the best of my knowledge.

Signature: [Handwritten Signature]
Printed Name: Debbie Lynn Bolin

Title: Warehouse Worker
Date: 12-13-02



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management

P.O. Box 8550
Harrisburg, PA 17105-8550

Form approved.
OMB No. 2050-0039

2500-FM-LRWM0051 REV. 7-99

OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MD4170024109	Manifest Document No. 57645	2. Page 1 of 1	Information within the bold red border is not required by Federal law but may be required by State law.		
3. Generator's Name and Mailing Address ATTN: INDIAN HEAD NAVAL SURFACE WAREHOUSE 101 STRAUSS AVENUE INDIAN HEAD MD 20640		6. US EPA ID Number MD00002793		A. State Manifest Document Number PAG 457645		B. State Gen. ID SAME	
4. Generator's Phone () 301-744-3263		7. Transporter 1 Company Name CLEAN VENTURE INC		C. State Trans. ID PA-AH 0299		D. Transporter's Phone () 908-355-5800	
5. Transporter 2 Company Name		8. US EPA ID Number		E. State Trans. ID PA-AH		F. Transporter's Phone ()	
9. Designated Facility Name and Site Address CYCLE CHEM. INC. 550 INDUSTRIAL DRIVE INDUSTRIAL BLVD		10. US EPA ID Number PA0087098822		G. State Facility's ID		H. Facility's Phone () 717-939-4700	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM a. X LIQ. WASTE FLAMMABLE SOLIDS ORG. LIQ. NOB. CHRONICALLY TOXIC (EPA) UN2818 b. c. d.				12. Containers No. Type	13. Total Quantity	14. Unit Wt/Vol	15. Waste No.
				5	DM	1000	P
J. Additional Descriptions for Materials Listed Above				K. Handling Codes for Wastes Listed Above			
a. Note: EPCRA				a. 80			
b. Note:				b.			
15. Special Handling Instructions and Additional Information 11a. CAP027-4-38M NO PERMITS 006465-CHS11941 11b. 11c. 11d. Emergency Response # 908-355-5800							
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Lynn Bolin		Signature <i>Lynn Bolin</i>		MONTH DAY YEAR 12 13 02			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ATILIO BEYES		Signature <i>Atilio Reyes</i>		MONTH DAY YEAR 12 13 02			
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH DAY YEAR			
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name				Signature			
				MONTH DAY YEAR			

GENERATOR

TRANSPORTER

FACILITY

PAG 457645

CC Cycle Chem, Inc.
 Voice (908) 355-5800
 Fax (908) 355-0562
 www.cyclechem.com

ELIZABETH LEWISBERRY
 217 South 1st St. 550 Industrial Dr.
 Ellizabeth, NJ Lewisberry, PA
 07206 17339
 (717)938-4700, (717)938-3301

Material Profile Sheet
 Product Code: SSM
 Generator No: CA027-A-

A. GENERATOR INFORMATION

GENERATOR NAME IHDIV NAV SURF WAR CEN
 MAILING ADDRESS Code 044SJ, 101 Straus Avenue
Indian Head, MD 20640
 GENERATOR CONTACT Shawn Jorgensen
 GENERATOR PHONE # 301-744-2263
 SITE ADDRESS same
 NAME OF WASTE Drum carcasses contaminated with
Paint residue

GENERATOR USEPA ID MD4170024109
 BILLING ADDRESS Capitol Environmental Services, Inc.
8229 Boone Blvd., Suite 310, Vienna, VA 22182
 CONTACT Mike Schubert
 PHONE # 302-652-8999 FAX # 302-652-5330
 PROCESS GENERATING WASTE Rusted drum carcasses containing
paint residues excavated from remedial site, tested, and
placed in overpacks

B. PHYSICAL CHARACTERISTICS OF WASTE
 Color, Physical Description: orange/white/varies/metal

STRONG INCIDENTIAL ODOR PRESENT
 YES NO Paints

PHYSICAL STATE @ 70°F
 SOLID SINGLE PHASE
 LIQUID BI-LAYERED
 POWDER MULTI-LAYERED
 SEMI SOLID SLUDGE

WAS T/WATER NON-WASTE WATER

SPECIFIC GRAVITY: 2.10

FLASH POINT
 < 70°F
 70°F - 100°F
 100°F - 140°F
 140°F - 200°F
 > 200°F
 NO FLASH
 EXACT (open to solid) (no) (no)
 (open to gas) (open to gas)

LIQUID/SOLID/SLUDGE
 % Sludge 0
 % Suspended Solids 0
 % Solids/Debris 100
 % Free Liquids 0

pH
 < 2.0
 2.01-5
 5.01-9
 9.01-12.4
 > 12.50
 EXACT

Drumable? Yes No
 Pumpable? Yes No
 Pourable? Yes No

D. REGULATORY INFORMATION

USEPA HAZARDOUS WASTE? YES NO

USEPA CODE(S): D001, D007

APPLICABLE SUBCATEGORIES: _____

STATE HAZARDOUS WASTE? YES NO

STATE CODE(S): D001, D007

D.O.T. HAZARDOUS WASTE? YES NO

PROPER SHIPPING NAME: RO, Waste Flammable Solids, Organic, n.e.s.
 (Paint residue)

CLASS: 4.1 I.D. NO: UN1325 P.G.: II R. Q.: 100 lbs

C. CHEMICAL COMPOSITION Is MSDS Attached? Yes No
 Is Analysis Attached? Yes No

	RANGE MINIMUM	RANGE MAXIMUM
Debris (Drum carcasses)	95	99%
Paint residue	1	5%

E. SHIPPING INFORMATION/SHIPMENT METHOD:

BULK LIQUID ANTICIPATED VOLUME: 4-6

BULK SOLID

DUMP TRAILER QUANTITY: drums

ROLL-OFF

DRUM SIZE 5510P UNITS: drums

PALLETS PRICE: \$270/55 + 50

CUBIC YARD BOX FREQUENCY: one time

F. SPECIAL HANDLING CONSIDERATIONS

CERCLA FACILITIES XXX INCINERATE ONLY _____

NO LANDFILL _____ CCI SALES CODE Ryan

PROJECT CODE _____

OTHER _____

G. TRANSPORTATION ARRANGEMENTS
 CUSTOMER WILL DELIVER TO CCI CUSTOMER WILL DELIVER TO END FACILITY VIA CCI CCI TO PROVIDE TRANSPORTATION

H. OTHER HAZARDOUS CHARACTERISTICS

INDICATE IF THE WASTE IS:

RCRA REACTIVE
 WATER REACTIVE
 RADIOACTIVE
 SUBJECT TO SUBPART FF HAZARDOUS REGULATIONS
 LITHOLOGICAL
 TSCA REGULATED
 OXIDIZING MATERIAL
 POLYCHLORIC
 EYE/ SKIN/SHOCK SENSITIVE
 NONE OF THE ABOVE

Indicate If This Waste Contains Any Of The Following:

	None	or Less Than	or Actual
PCBs	<input checked="" type="checkbox"/>	< 50PPM	PPM
Organics	<input checked="" type="checkbox"/>	< 250PPM	PPM
Phenolics	<input checked="" type="checkbox"/>	< 50 PPM	PPM
Sulfides	<input checked="" type="checkbox"/>	< 500 PPM	PPM
VOC's	<input type="checkbox"/>	< 500 PPM	≥ 500 PPM

Is this waste characteristically hazardous for metals or organics (EPA Waste Codes D004-D043)? Yes No. If yes, please list the constituents and concentrations in Section D.

Does this waste contain underlying hazardous constituents as defined in 40 CFR 268 (2)(1) at concentrations exceeding the UTS treatment standards? Yes No. If yes, please list constituents and concentrations in Section D.

GENERATOR CERTIFICATION: I hereby certify that all information submitted in this and all attached documents is complete, contains true and accurate descriptions and is representative of the waste material, and that all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. If CCI discovers, after having taken delivery of the waste, that any waste does not conform to the identification and description on this MPS then CCI shall provide notice of such condition to the Generator and coordinate the return of the nonconforming waste to the point of origin as set forth on the manifest or to such other locations designated in writing by the Generator. Generator agrees to reimburse CCI for all handling, packaging, clean-up and transportation costs or charges, damage to equipment, and costs associated with lost time incurred by CCI during the receipt, handling, temporary storage and return of such nonconforming waste to point of origin or to such other location designated by Generator. I hereby authorize CCI to amend and/or correct any information on the MPS with the full understanding that if any amendment or correction is performed, I will be deemed to have approved such amendment or correction.

AUTHORIZED SIGNATURE: [Signature] TITLE: Warehouse Worker DATE: 12-13-02



Recycling Treatment & Disposal of Hazardous Waste

550 Industrial Drive, Lewisberry, PA 17339-9537 • 717-938-4700, Fax 717-938-3301

LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM

Generator Name: Indian Head Naval Surface Warfare

Generator EPA ID #: MD 417 0024109

Manifest #: PA 6457645

This land disposal restriction (LDR) notification must be submitted with the initial shipment of all new waste streams. Due to revised LDR notification requirements effective after August 23, 1998, previously approved waste streams will require re-notification on this form with the first shipment after that date. Subsequent notification is not required unless the waste stream changes.

(1) WASTE STREAM INFORMATION

Box A: Check this box if this LDR certification has been supplied with a previous shipment. Additional information and certification is not required on this form.

Box B: Indicate if waste stream is a wastewater (WW) or non-wastewater (NWW) (aqueous waste streams containing < 1% total organic carbon (TOC) and < 1% total suspended solids (TSS) are wastewaters. All other streams are non-wastewaters).

Box C: List all EPA waste codes and subcategory reference letters (if applicable). Alternatively, attach and reference additional pages (e.g. profiles or lab pack slips) containing required information.

	A	B	C
Line #	Previously shipped LDR on file	NWW/WW	EPA Waste Codes and subcategory reference letter (if applicable)
A			D001.B D007
B			
C			
D			

Subcategory Reference Letters (EPA codes not listed here do not have subcategories)

D001	A	Ignitable characteristic wastes, except high TOC ignitable liquids subcategory
D001	B	High TOC (> 10%) ignitable liquid subcategory
D003	A	Reactive sulfide subcategory
D003	B	Reactive cyanide subcategory
D003	C	Water reactive subcategory
D003	D	Other reactive subcategory
D006	A	Cadmium non-battery subcategory
D006	B	Cadmium containing batteries subcategory
D008	A	Lead non-battery subcategory
D008	B	Lead acid batteries subcategory
D009	A	High mercury organic subcategory (>260 PPM Total Mercury)
D009	B	High mercury inorganic subcategory (> 260 PPM Total Mercury)
D009	C	Low mercury subcategory (< 260 PPM Total Mercury)
D009	D	Mercury wastewater subcategory

(2) SPENT SOLVENT WASTE CONSTITUENTS

Circle applicable waste code(s) and constituent(s) for each manifest line item containing EPA spent solvent waste codes F001-F005.

Table with 5 columns for waste codes F001-F005 and rows for various chemical constituents like acetone, benzene, alcohols, disulfide, tetrachloride, chlorobenzene, cresols, acids, cyclohexanone, dichlorobenzene, ethyl acetate, ethyl benzene, ethyl ether, methanol, methylene chloride, methyl ethyl ketone, methyl isobutyl ketone, nitrobenzene, pyridine, tetrachloroethylene, toluene, trichloroethane, trichloroethylene, trichloromonofluoromethane, and xylenes.

(3) UNDERLYING HAZARDOUS CONSTITUENTS

For characteristically hazardous waste streams (EPA codes D001-D043), please list all underlying hazardous constituents as defined in 40 CFR 268(2)(i) that are present at concentrations exceeding the universal treatment standards listed in 40 CFR 268.48 (F001-F005 constituents identified in section (2) and specific constituents for EPA U-, P-, and D004-D043 codes listed in Section (1) do not need to be listed in this section).

Table with 2 columns: A, B, C, D (rows) and None Present (column).

(4) HOW MUST THESE WASTE STREAMS BE MANAGED?

For each manifest line item, circle applicable treatment/requirement. For contaminated soil, circle applicable choice as indicated.

- Four options for waste management: 1. Non-hazardous per 40 CFR 261. 2. EPA hazardous waste not a contaminated soil. 3. Hazardous debris subject to alternative standards. 4. Hazardous waste contaminated soil meeting standards.

(5) CERTIFICATION

I certify that all information on this and all associated documents is complete and accurate to the best of my knowledge.

Signature: [Handwritten Signature]
Printed Name: Debbie Lynn Bolin

Title: Warehouse Worker
Date: 12-13-02

APPENDIX D

QUALITY CONTROL DOCUMENTS

APPENDIX D

QUALITY CONTROL DOCUMENTS

- Coordination and Mutual Understanding Meeting Minutes
- Quality Control Meeting Minutes
- Daily Quality Control Reports
- Monthly Testing Plans and Logs
- Submittal Register and Submittals
- Utility Search Documentation
- Rework Items List
- Work Permit
- Well Installation Logs

**COORDINATION AND MUTUAL UNDERSTANDING MEETING MINUTES
SITE 12, TOWN GUT LANDFILL REMEDIAL ACTION
DELIVERY ORDER NO 0062
INDIAN HEAD DIVISION – NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SEPTEMBER 9, 2002**

Meeting conducted by Ernie Duke
QC Manager, Shaw E&I

Attendees:

Cathy Gardner, ROICC	Steve Carriere, Shaw E&I
Gregory Klaas, ROICC	Randy Johnson, Shaw E&I
Octavia Thornton, ROICC	Joe Walker, Shaw E&I
Dan Pringle, Shaw E&I by phone	Joey Guzzardo, Shaw E&I

The purpose of this meeting is to develop a mutual understanding of the QC detail, including forms to be used; administration of on-site and off-site work, and coordination of the Contractor's management and the QC Manager's duties with the Contracting Officer.

The QC program consists of the following:

- QC Organization
- QC Manager
- QC Plan for this Delivery Order
- Coordination and Mutual Understanding Meeting
- QC meetings
- Three phases of control
- Review and approval of submittals
- Coordination of submittals designated for Contracting Officer approval
- Testing
- QC certifications and documentation
- Inspection of materials, equipment, workmanship, fabrication, construction and operations to ensure compliance with the requirements of this contract

- 1.) Contract QC Manager duties
 - Conduct the Coordination and Mutual Understanding Meeting
 - Conduct the QC Meetings
 - Perform the three phases of control and daily reporting
 - Perform submittal reviews and maintain Submittal Register
 - Perform submittal approval where applicable
 - Ensure testing is performed and maintain the Test Plan and Log
 - QC certifications and documentation of materials and construction
 - Maintain the Rework Items List
- 2.) Submittal Reviewer Duties and Qualifications
 - The QC Manager, Ernie Duke, the Project Manager, Dan Pringle are the authorities for reviewing and certifying submittals for the Contractor.
- 3.) QC Plan
 - Program QC Plan
 - Site Specific QC Plan – Appendix C of the Workplan

- 4.) QC Meetings
- The QC Manager shall conduct QC meetings
 - QC Meetings to be conducted (Bi-weekly)
 - First QC Meeting is scheduled for Thursday 9-26-02 @ 1030 hrs.
 - Standard agenda and format to be followed
 - Meeting minutes to be prepared by the QC Manager as outlined in the contract and a copy provided to Cathy Gardner, ROICC Project Engineer within two working days of the meeting.
 - Copies also to be distributed to the following:

Greg Klaas, ROICC	Dan Pringle, Shaw PM
Octavia Thornton, ROICC	Steve Carriere, Shaw Supr
Jeff Morris, EFA Ches RPM	Pete Hunter, Shaw QC Program Mgr.
Shawn Jorgensen, IH Div Environmental	Rolland Moreau, Shaw Program Manager
- 5.) Three Phases of Control
- Preparatory Phase; Prior to the start of a Definable Feature of Work
First Preparatory meetings are scheduled for 9-9-02 following the Mutual Understanding Meeting to cover Site Preparation, Erosion and Sediment Controls and Clearing and Grubbing.
 - Initial Phase; At the start of a Definable Feature of Work
 - Follow-up Phase; On-going work to ensure continued compliance and quality of workmanship
 - Follow the Index Numbering System
- 6.) Submittal Review and Approval
- Follow and maintain the Submittal Register
Numbering system will follow the Submittal Register
 - QC Review / Government Approval
 - (1) Paper Copy and an electronic copy of the certification sheet to the ROICC
 - Lines of communication to be open during review process
Questions should be addressed to Ernie Duke regarding submittals
 - Contracting Officer to return 1 copy with original signature of the response to Shaw
 - QC Review and Approval
 - (1) Paper Copy and an electronic copy to the Contracting Officer
 - Review Actions
 - Approved as submitted
 - Approved as noted
 - Disapproved. Revise and Resubmit
 - Not Reviewed (For information only)
- 7.) Testing
- QC Manager is to ensure testing is performed as required
 - Test results to be submitted upon receipt
 - Daily field test reports to be submitted with Daily QC Report
- 8.) QC Certifications
- Daily reports and data submittals
- 9.) Documentation
- Daily Contractor Quality Control Report (QC Mgr)
 - Daily Contractor Production Report (Superintendent)
 - QC Meeting Minutes (QC Mgr)
 - Variance Requests (VR) and Log
 - Technical Directives (TD) and Log

- Requests for Information (RFI) and Log
- Testing Plan and Log (Monthly)
- Rework Items List (Monthly)
- Record Drawings
 - Redline changes on Project Drawings (2 Sets) (Current and available for review)
 - As-Built survey drawings
 The electronic GIS survey file to also be provided with the final as-built drawings

10.) Forms

Acceptable to use the forms presented by Shaw to provide the same information.

- Daily Production Form
- Daily QC Form
- LANTDIV RAC Field Form
 - Request for Information – Clarification of the Contract Documents Requested
 - Variance Request – Changes to the Contract Documents Requested
 - Technical Directive – Directives received through the Contracting Officer
- Submittal Form

11.) Other Discussion Items:

- Only one phone line is available for the site office trailers. This will create a problem with multiple personnel and activities ongoing at the same time. Communication with Project management, support staff, vendors and subcontractors via faxes and e-mail is essential. Other locations for placement of a command post office trailer were discussed.
- Nextel radios are proposed for use on-site for site communication. The number of radios and the frequency is to be provided to the ROICC to be submitted for approval.
- The Atkins Road extension will be closed for the duration of the project work. Detour barricades should be set up at the locations approved by Greg Klaas, ROICC. Greg will notify the Fire Department and Safety if Shaw provides a map showing where the road will be blocked. One lane should be kept open for use by emergency vehicles.
- Frank James of IH Div Safety will meet Shaw and Greg Klaas at the site at 1300 hrs to issue a Work Permit. A Hot Work Permit will still be needed when the weir is cut to drain the water.
- Deliveries to the site will need to be escorted. The Pass Office should be notified through the ROICC and then we should meet the delivery truck at the gate to show them the site. Once deliveries begin and a driver is familiar with the site location an escort will not be necessary.
- Discussed lowering the pond for removal of the debris. This has been approved by Jeff Bossart with IH Div Environmental. Precautions such as decanting the water at a controlled rate will be taken to minimize sedimentation downstream.
- Emergency Numbers:
 - Fire Department – 301-744-4370
 - Emergency Dispatch – 301-744-4333
 - Or use the emergency pull station located near the site.

QC Meeting Minutes
Bi-Weekly QC Meeting
January 30, 2003
Work performed from 1-16 to 1-30-2003
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.

Meeting conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Cathy Gardner	ROICC, IH	Steve Carriere	Shaw E&I
Greg Klaas	ROICC, IH	Dan Pringle by phone	Shaw E&I
Shawn Jorgensen	IHDiv-NSWC Env	Randy Johnson	Shaw E&I
George Latulippe by phone	Tetra Tech NUS		

1. COMMENTS FROM THE PREVIOUS

No comments

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
		None Pending	

2b. Technical Directives Approved since Last Meeting/Pending Approval

TD No.	DATE INITIATED	DESCRIPTION	STATUS
		None Pending	

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01575N Erosion and Sediment Controls	*Continued to inspect the erosion and sediment controls.	9-9-02	9-18-02	Ongoing	
02315 D Soil Cover Installation	*Finished final grading of the topsoil layer in the southern half of Area 1.	10-23-02	10-23-02	Completed	1-16-03
	*Completed delivery, placement and final grading of the topsoil layer in the northern half of Area 1			Completed	1-16-03
	*Tracked the surface of the topsoil layer perpendicular to the slope in both parts of Area 1 prior to hydroseeding.			Completed	1-16-03
	*Completed placement and final grading of the topsoil layer			Completed	1-28-03

	adjacent to the Atkins Road Extension modification.				
02951 Site Restoration	*Finished hydroseeding and application of the protective Hydro-Blanket in Areas 3, 2 and the southern half of Area 1 * Finished hydroseeding and application of the protective Hydro-Blanket in the northern half of Area 1 and the edges the Atkins Road Extension modification. *Installed the permanent erosion control mat in the channels including the channel south of the triangle area. Remainder of staples to be completed after the ground thaws.	1-14-03	1-14-03	Completed	1-16-03
				Completed	1-28-03
				Ongoing	
02742 Atkins Road Extension Modification	*Saw cut the existing pavement to tie-in the new asphalt surface for the road modification. Crushed up the asphalt, which was removed and placed it under the subgrade fill where it would have 2-feet of final cover. *Completed placement, compaction and testing of the road subgrade. *Completed delivery, placement, compaction and testing of the RC-6 Aggregate Subbase	1-20-03	1-20-03	Completed	1-20-03
				Completed	1-24-03
				Completed	1-27-03

3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Finish installation of the erosion control mat in the channels
- Finish demobilizing of the equipment
- Secure office trailer and connex to remain on-site until remobilization in March

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
None scheduled	

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
	None	

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
02742	Road Subbase Material	1-20-03
02525	Monitoring Well Abandonment Reports	1-20-03
01575N	Non-Hazardous Manifests for Waste Debris	1-22-03
02223	Hazardous Waste Manifest	1-22-03

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c. Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02742	Asphalt Materials		3-10-03	CQC
02525	Well Construction Materials		3-10-03	CQC
02951	Nursery Certification and Plant List		3-10-03	CQC

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
02315	In-Place Compaction Testing	1-24 & 1-27

Note: The modified proctor for the RC-6 was provided by the vendor. Based on the proctor provided the compaction requirement of 97% was difficult to achieve even after numerous passes of the vibratory smooth drum roller. The material density seems to be variable. A sample of the RC-6 will be submitted to determine the modified proctor for the actual material delivered.

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
	Modified Proctor for the RC-6	1-30-03

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
	None	

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	2-3-03

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

- Use of RC-6 for aggregate subbase.

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- No weather delays since the last meeting.

Total days of weather delays to date	Days of delay this period
31 Days	0 Days

10. OTHER ITEMS DISCUSSED:

- The work at Site 12 scheduled for this winter is nearly complete. Demobilization from the site is scheduled for February 5, 2003. Personnel and equipment will again be mobilized in March 2003 to complete the wetland plants, installation of the monitoring wells and asphaltting of Atkins Road Extension. The office trailer and connex storage box will be left until after all of the work is completed in the spring. Emergency numbers should be posted at the office trailer.
- The response to RFI-005 recommended installation of two rock check dams in the drainage ditch along Atkins Road Extension. These check dams have not yet been installed. These check dams do not appear to be necessary based on the flow capacity of the riprap channel constructed on the slope. The need for these check dams was further discussed during the meeting. Installation of these will be evaluated again in the spring.
- Daily Production and QC Reports will be suspended until remobilization in March. I should note on the last report that daily reporting will be suspended until activities start again in the spring.
- During the period of inactivity the weir needs to be maintained to prevent flooding of the areas where the wetland plants will be planted. This will either need to be maintained by Base personnel or by someone from Shaw. Shawn Jorgensen stated that he would check with Jeff Bossart to see if the Base could maintain the weir.
- Informed that Building 707 is to be thermally treated Saturday February 1, 2003 weather permitting and would restrict work on Site 12. No work is scheduled for Site 12 for that date.
- Tetra Tech NUS (TtNUS) is planning to dig test pits at Site 42 as part of their preliminary investigation. TtNUS will direct the activity and Shaw will provide the personnel and equipment to dig the test pits and provide support. Shaw will submit a Technical Directive with estimated costs for approval. The Site 12 Health and Safety Plan will be revised prior to the start of work. The work is anticipated to start the week of February 10 or sooner if feasible and clearance into the area can be received. A utility search will be done and a Dig Permit approved prior to digging in that area. Shawn Jorgensen will request the Dig Permit using the drawing provided in the Scope of Work. Shawn will also check with Jeff Bossart to assure the work is not within the restricted area of any eagle nests.
- Site 41: There is no additional information regarding the investigation or rescheduling of the work.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Post emergency phone numbers on the site office trailer.
- Shawn Jorgensen to check to see if Base personnel can maintain the weir.
- Shawn Jorgensen to request the Dig Permit for Site 42 and check with Jeff Bossart concerning any eagle nests that may be in the area.
- Shaw to submit a Technical Directive with cost estimate for digging the test pits.

12. DATE OF NEXT SCHEDULED QC MEETING:

No meetings are scheduled until remobilization in March.

QC Meeting Minutes
Bi-Weekly QC Meeting
January 15, 2003
Work performed from 12-12-2002 to 1-15-2003
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.

Meeting conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Greg Klaas	ROICC, IH	Jim Dunn	Shaw E&I
Jeff Morris	EFA Ches.	Steve Carriere	Shaw E&I
Shawn Jorgensen	IHDiv-NSWC Env	Dan Pringle	Shaw E&I
Jeff Bossart	IHDiv Nat Res	Janna Staszak	Shaw E&I
George Latulippe by phone	Tetra Tech NUS	Joe Walker	Shaw E&I

1. COMMENTS FROM THE PREVIOUS MEETING MINUTES

An item was discussed at the 12-12-02 QC Meeting but not included in the minutes: There could be potential to find single-base grains outside the fence at Site 41. These OE items could be a concern when working outside the fence in that area.

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
VR-003	12-12-02	Planting Schedule	Approved 12-12-02
VR-004	11-12-02	Road Base Aggregate	Received Response Via e-mail 12-13-02

Note: Unable to open response to VR-004, please resend.

2b. Technical Directives Approved since Last Meeting/Pending Approval

TD No.	DATE INITIATED	DESCRIPTION	STATUS
TD-004	12-12-02	Leaf-grow for Wetland Areas	Approved 12-13-02
TD-005	12-31-02	Hydroblanket for erosion control	Approved 1-7-03

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01575N Erosion and Sediment Controls	*Stabilized and reconstructed the perimeter super silt fence. Straightened the existing silt fence and installed 12' poles. Installed new silt fence where the old was damaged by repeated rain events.	9-9-02	9-18-02	Completed	1-12-03
02315 D Soil Cover	*Finished importing and placing select fill to complete final grading	10-23-02	10-23-02	Completed	1-10-03

Installation	and to repair erosion. Material was placed and compacted with a smooth drum roller. *Repaired eroded surface with new select fill and compacted it. *Tracked the surface of the select fill layer perpendicular to the slope in Areas 2 and 3 in preparation for the topsoil layer. *Began delivery and placement of the topsoil layer. *Completed placement and final grading of the topsoil layer in Areas 2 and 3. *Tracked the surface of the topsoil layer in Areas 2 and 3 perpendicular to the slope to reduce runoff from the seedbed.			Completed	1-12-03
				Completed	1-13-03
				Ongoing	
				Completed	1-14-03
				Completed	1-14-03
01575N B Transportation and Disposal, Non-Hazardous	*Completed load out of 14 truckloads of non-hazardous debris for off site disposal. Debris delivered to King George Landfill in Virginia.	10-22-02	10-22-02	Completed	12-13-02
02223 Transportation and Disposal, Hazardous	*Completed load out of 5 overpack drums for off site manifested disposal of Hazardous Waste. Drums were picked up by Clean Venture, Inc. and delivered to Cycle Chem in Pennsylvania.	11-20-02	11-20-02	Completed	12-13-02
02951 Site Restoration	*Began hydroseeding and application of the protective Hydro-Blanket	1-14-03	1-14-03	Ongoing	

3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Finish delivery, placement and final grading of the topsoil layer
- Finish hydroseeding and application of the Hydro-Blanket
- Install erosion control mat in the channels
- Place and compact the fill for the subgrade of Atkins Road Extension
- Place and compact the aggregate subbase for Atkins Road Extension

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
Atkins Road Modification	1-20-03

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
	None	

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
	None	

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c. Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02223	Disposal Manifests	1-20-03		CQC
02742	Road Construction Materials	1-20-03		CQC
02525	Monitoring Well Abandonment Logs	1-20-03		CQC
02742	Asphalt Materials	1-28-03		CQC
02525	Well Construction Materials	1-28-03		CQC

Note: The Hazardous Waste Manifest for the 5 overpack drums was sent directly to the Base. A copy is requested to be included in the final report.

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
02315	In-Place Compaction Testing	12/18 & 12/19

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
02315	In-Place Compaction Testing	Road Base

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
	None	

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	1-17-03

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

- Planting schedule revised to allow planting of permanent seed after the recommended dates.
- Application of Leaf-grow in the wetland areas.
- Use of Hydro-Blanket as an erosion control device.

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- Weather delays on the following days: 12/12, 12/13, 12/16, 12/20/02, 1/6, 1/7 and 1/8/03 – 1 day each.

Total days of weather delays to date	Days of delay this period
31 Days	7 Days

10. OTHER ITEMS DISCUSSED:

- The weather continues to be the cause of delays toward the completion of the project. Erosion of the select fill and subsequent repair of the erosion controls was necessary upon return to the site on 1-6-03. The super silt fence has been stabilized with 12' poles and the fence replaced where necessary. The slopes have been repaired with additional select fill.
- Safety stand down for the Base that was scheduled for Thursday, January 16 has been postponed until January 28, 2003.
- Discussed rescheduling the installation of the monitoring wells until March when we remobilize to plant the wetland plants and asphalt the road. It is acceptable to reschedule. Two of the wells are outside the Limits of Disturbance. A utility search will be necessary in those areas.
- The location of the monitoring wells was also discussed. Figure 2-2 of the Long Term Monitoring Plan is to be used to determine the locations. There is some flexibility in the locations of the wells and they can be adjusted in the field. The wells are to be surveyed once completed.
- In an effort to take advantage of the dry weather this past week the large number of trucks delivering topsoil to the site has caused some soil to be tracked onto the roads. The surface of the soil was sticky from the frost thawing each day during the deliveries. Attempts were made to keep the stabilized construction entrance clean and the road was cleaned by hand shoveling and sweeping periodically, however further measures have been requested. A street sweeper will be mobilized to sweep the roadways. Subsequently, the sweeper was delivered and the roadways swept.
- Shaw anticipates completing the work scheduled for this winter at Site 12 by the end of January, weather permitting. Personnel and equipment will again be mobilized to complete the wetland plants, the monitoring wells and asphaltting of Atkins Road Extension in March. The office trailer will be left until after all of the work is completed in the spring.
- Status at Site 41, Scrap yard:
 - The accident investigation is still ongoing. Shaw continues to provide information as requested.

- The office trailer, connex storage container and fuel tank have been removed from the site. Only the screener, which is off rent remains at the site

- No information is available at this time, concerning resuming work at Site 41. After the investigation is completed changes to the process will need to be developed and approved by multiple groups.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Sweep the roadways with a street sweeper. Subsequently completed.

12. DATE OF NEXT SCHEDULED QC MEETING:

Thursday, January 30, 2003 at 1030.

QC Meeting Minutes
Bi-Weekly QC Meeting
December 12, 2002
Work performed from 11-21 to 12-11-2002
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.

Meeting conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Cathy Gardner	ROICC, IH	George Latulippe by phone	Tetra Tech NUS
Jeff Morris	EFA Ches.	Steve Carriere	Shaw E&I
Heidi Morgan	IHDiv-NSWC Env	Dan Pringle	Shaw E&I
Jeff Bossart	IHDiv Nat Res	Randy Johnson	Shaw E&I
Ray Magnum	ROICC, IH	Joe Walker	Shaw E&I

1. COMMENTS FROM THE PREVIOUS MEETING MINUTES

No Comments

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
VR-002	10-24-02	Topsoil Organic Matter	Verbal Approval For Upland Seed
VR-003	12-12-02	Planting Schedule	Approved 12-12-02
VR-004	11-12-02	Road Base Aggregate	Pending

Note: Need signed copy of VR-002 for upland areas. VR-003 approved with warranty on both the permanent and temporary seed. Hydroseeding planned following placement of the topsoil. Wetland plants in pots to be planted in the spring of 2003. See discussion items for VR-004.

2b. Technical Directives Approved since Last Meeting/Pending Approval

TD No.	DATE INITIATED	DESCRIPTION	STATUS
TD-003	11-20-02	Road Drainage Erosion	Verbal Approval
TD-004	12-12-02	Leaf-grow for Wetland Areas	Pending

Note: Need signed copy of TD-003.

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01575N Erosion and Sediment Controls	*Inspected and maintained the erosion and sediment controls	9-9-02	9-18-02	Ongoing	11-21-02
	*Removed eroded select fill away from the silt fence for maintenance			Completed	

02315 D Soil Cover Installation	*Continued importing and placing select fill as approved. Material was placed in 8" lifts and compacted with a smooth drum roller. *Tested the in-place compaction	10-23-02	10-23-02	Ongoing Ongoing	
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3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Continue placement, grading and compaction of the select fill layer
- Continue testing of the in-place compaction of the select fill
- Final grade and test compaction of the west slope of Area 1
- Dispose of the non-hazardous debris
- Dispose of the 5 over-packed drums
- Begin topsoil placement
- Install Monitoring Wells

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
Monitoring Well Installation	Prior to the start of work

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
	None	

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
02742	Woven Geotextile for road subbase	12-11-02
01575N	Landfill Permit for Non-Hazardous Debris	12-11-02
02223	Permit for Treatment and Disposal of Hazardous Waste	12-11-02

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c.Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02223	Disposal Manifests	12-20-02		CQC
02742	Road Construction Materials	12-19-02		CQC
02525	Monitoring Well Construction	12-19-02		CQC

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
02315	In-Place Compaction Testing	11-26, 12-2, 12-3, 12-4

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
02315	In-Place Compaction Testing	As Necessary

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
	None	

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	12-16-02

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

- No changes this period.

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- Weather delays on the following days: 11-27,12-05,12-06, 12-09, 12-10 and 12-11 – 1 day each.

Total days of weather delays to date	Days of delay this period
24 Days	6 Days

10. OTHER ITEMS DISCUSSED:

- Variance Request-004 has been submitted to use recycled concrete for road subbase aggregate instead of crusher run stone. The material has been proposed as a cost savings and representative test results submitted demonstrate that RC-6 meets the required specification. VR-004 will be forwarded by the ROICC to Tetra Tech NUS for review.
- The weather continues to cause delays in the completion of the project. Shaw has been taking steps to minimize the impacts by sealing the areas prior to forecasted rain events, and tracking the surface after rain to promote drying.

- Information regarding the application of Hydro-blanket was forwarded via e-mail to Site Personnel for review prior to the meeting. This alternative to erosion control matting appears to be more cost effective than erosion control matting and more protective of the surface soil. It would be applied at the same time as the hydroseeding application. After a discussion during the meeting, it was determined that it may be a good solution for the slopes of Area 1. A Technical Directive will be prepared for an area of approximately one acre around the slopes.

Jeff Bossart, IH Div Natural Resources, questioned what monitoring and maintenance of the site will be conducted during the winter months after the site is hydroseeded. Dan Pringle stated that Shaw personnel would monitor and maintain the site while on-site. If not on-site, IH Div. Environmental staff will monitor the site following the Long Term Monitoring Plan.

- Building 705 is to be thermally treated on Saturday, December 14. No work is to be conducted that date.
- Holiday schedule as previously discussed; Site crew will demobilize for the Holidays on 12-20-02 and return on January 6, 2003.
- Dan Pringle distributed the updated project schedule. Wetland plants and asphalt paving of Atkins Road Extension is to be completed in the spring.
- Status at Site 41, Scrap yard:

No work at the site until all investigations and approvals are completed.

The on-site investigation of the accident is complete. Shaw received approval from both Base Security and the ROICC Office to enter the site to remove equipment. Equipment was removed on Tuesday, 12-10-02 to clean and prepare it for return to source.

Production and QC reports are to continue on a weekly basis, one summary report per week unless work is done at the site.

Discussed the possibility of resuming work outside the fence until the demilitarization of the OE items is resolved.

A separate meeting was conducted at 1300 hrs to discuss the site work. No resolution was accomplished.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Submit a Technical Directive for the application of Hydro-blanket on the slopes of Area 1.

12. DATE OF NEXT SCHEDULED QC MEETING:

Thursday, January 16, 2003 at 1030.

QC Meeting Minutes
Bi-Weekly QC Meeting
November 21, 2002
Work performed from 11-7 to 11-20-2002
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.

Meeting conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Cathy Gardner	ROICC, IH	George Latulippe by phone	Tetra Tech NUS
Jeff Morris	EFA Ches.	Dan Pringle	Shaw E&I
Joe Rail	EFA Ches.	Steve Carriere	Shaw E&I
Shawn Jorgensen	IHDiv-NSWC Env.	Jim Dunn	Shaw E&I
Greg Klaas	ROICC	Janna Staszak	Shaw E&I
Joe Walker	Shaw E&I	Randy Johnson	Shaw E&I

1. COMMENTS FROM THE PREVIOUS MEETING MINUTES

No comments

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
VR-002	10-24-02	Topsoil Organic Matter	Verbal Approval For Upland Seed
RFI-005	11-7-02	Road Drainage Erosion	Response Received

2b. Technical Directives Approved since Last Meeting/Pending Approval

TD No.	DATE INITIATED	DESCRIPTION	STATUS
TD-003	11-20-02	Road Drainage Erosion	Verbal Approval

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01575N Erosion and Sediment Controls	*Inspected and maintained the erosion and sediment controls	9-9-02	9-18-02	Ongoing	
	*Installed the culvert extension per TD-001			Completed	11-9-02
	*Installed the riprap apron below the culvert as part of TD-002			Completed	11-12-02
	*Constructed the riprap slope to control the drainage from the roadside ditch per RFI-005 and TD-003			Completed	11-20-02
	*Installed an additional line of silt fence above the crest of the slope in Area 1			Completed	11-20-02
	*Began pulling back eroded select			Ongoing	

	fill away from the silt fence for maintenance.				
02315C Regrading	*Finished removal and regrading of the existing waste in the triangle area. *Over excavated the waste down slope of the riprap channel *Continued survey control	10-2-02	10-2-02	Completed	11-8-02
				Completed	11-8-02
01575N B Transportation and Disposal, Non-hazardous	*Resubmitted the Generator Waste Profile Sheet to the proposed disposal facility. Waiting for acceptance.	10-22-02	10-22-02	Completed	11-18-02
02315 D Soil Cover Installation	*Continued importing and placing select fill as approved. Material was placed in 8" lifts and compacted with a smooth drum roller. *Tested the in-place compaction	10-23-02	10-23-02	Ongoing	
				Ongoing	

3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Continue placement and compaction of the select fill layer
- Continue testing of the in-place compaction of the select fill
- Make repairs to the west slope of Area 1
- Dispose of the non-hazardous debris after acceptance by the disposal facility
- Begin topsoil placement

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
None Scheduled	

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
	None	

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
02223	Drum Waste Analysis	11-07-02

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c. Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02223	Drum Waste Analysis	11-07-02		GVMT

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
02315	In-Place Compaction Testing	11-10

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
02315	In-Place Compaction Testing	As Necessary

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
	None	

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	11-25-02

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

- Extension of disturbed area/ waste area south of the site.
- Extension of disturbed area/waste area down slope of the riprap channel
- Addition of the riprap apron at the culvert south of the site
- Addition of the riprap protected slope along the 78" culvert

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- Weather delays on the following days: 11/11, 11/12, 11/13, 11/14, 11/18, 11/19 and 11/20 – 1 day each.

Total days of weather delays to date	Days of delay this period
18 Days	7 Days

10. OTHER ITEMS DISCUSSED:

- Information and pricing has been obtained for the use of leafgrow to enhance the organic content of the topsoil for the wetland areas. The material cost for placing 2" of leafgrow will be approximately \$6,000.

The leafgrow will raise the organic content of the topsoil from approximately 1.5 percent to approximately 10 percent. A technical directive and cost estimate will be prepared and submitted after Thanksgiving.

- During a 2.1" rain event over the weekend of November 16 and 17 significant erosion to the west slope of Area 1 occurred. RFI-006 was submitted and a response has been received from Tetra Tech NUS. The response to RFI-006 includes the installation of a drying pad. Tetra Tech NUS has included the drying pad as a quick way to dry the soil; however, pulling the wet material up onto the slope to dry is an acceptable alternative.
- The weather delays may cause a delay in the completion of the Atkins Road Extension modification. The shutdown date of the asphalt plants will be investigated. Additionally, the use of RC-6 instead of CR-6 will be considered and a Variance Request submitted.
- The application of Hydroblanket on the slopes will be considered as an alternative to the mulch and tacking agent normally used during hydroseeding.
- No work will be performed on Saturday, December 12, due to the demolition of Building 705.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Technical Directive for leafgrow.
- Variance Request for RC-6 instead of CR-6.

12. DATE OF NEXT SCHEDULED QC MEETING:

Thursday, December 12, 2002 at 1030.

QC Meeting Minutes
QC Meeting Bi-Weekly QC Meeting
November 7, 2002
Work performed from 10-24 to 11-6-2002
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.

Meeting conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Cathy Gardner	ROICC, IH	Tim Smith by phone	Tetra Tech NUS
Jeff Morris	EFA Ches.	Steve Carriere	Shaw E&I
Shawn Jorgensen	IHDiv-NSWC Env	Dan Pringle	Shaw E&I
Jeff Bossart	IHDiv Nat Res	Randy Johnson	Shaw E&I
Steve Hiortdhal	USGS w EFA Ches	Joe Walker	Shaw E&I
George Latulippe by phone	Tetra Tech NUS		

1. COMMENTS FROM THE PREVIOUS MEETING MINUTES

Comments period is open until the next meeting.

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
RFI-002R	10-24-02	Waste Debris in triangle south of the site	E-mail Response Received
RFI-004R	10-24-02	Waste Debris down slope of the Riprap Channel	E-mail Response Received
VR-002	10-24-02	Topsoil Organic Matter	Verbal Approval See Discussion Item

2b. Technical Directives Approved since Last Meeting/Pending Approval

TD No.	DATE INITIATED	DESCRIPTION	STATUS
TD-001	10-24-02	Culvert Extension	Approved 10-24-02
TD-002	11-04-02	Cap Extension	Approved 11-7-02

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01575N Erosion and Sediment Controls	*Inspected and maintained the erosion and sediment controls	9-9-02	9-18-02	Ongoing	
02315C Regrading	*Finished regrading of the existing waste to the lines and grades of the Interim Grading Plan. The subgrade was compacted with a	10-2-02	10-2-02	Ongoing	10-22-02

	smooth drum roller. *Continued survey control			Ongoing	
01575N B Transportation and Disposal, Non-hazardous	*Submitted the Generator Waste Profile Sheet to the proposed disposal facility. Waiting for acceptance.	10-22-02	10-22-02	Completed	10-25-02
02315 D Soil Cover Installation	*Began importing and placing select fill as approved. Material was placed in 8" lifts and compacted with a smooth drum roller. *Tested the in-place compaction	10-23-02	10-23-02	Ongoing Ongoing	

3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Continue placement and compaction of the select fill layer
- Continue testing of the in-place compaction of the select fill
- Install the culvert extension and stabilizing riprap
- Excavate the additional waste for the cap extension
- Install the riprap apron at the culvert south of the site
- Dispose of the non-hazardous debris after acceptance by the disposal facility
- Begin topsoil placement

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
None Scheduled	

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
	None	

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
02315	Analytical Test Data Select Fill and Topsoil	Approved

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c. Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02223	Drum Waste Analysis	11-07-02		GVMT

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
02315	In-Place Compaction Testing	10-23, 11-4, 11-5

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
02315	In-Place Compaction Testing	As Necessary

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
02223	Waste profiling Analysis of drums found	Received

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	11-11-02

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

No Changes this period.

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- Weather delays on the following days: 10/28 – ½ day, 10/29, 10/30, 10/31, 11/1 and 11/6 – 1 day each.

Total days of weather delays to date	Days of delay this period
11 Days	5.5 Days

10. OTHER ITEMS DISCUSSED:

- The drums found on the site have been tested for waste profiling analysis. The Six drums of solids have been composited together. The analysis demonstrates the material is hazardous for both the flash point which is 65 degrees F. and for Chromium. The single drum containing a grease-like material was tested separately. No hazardous results were detected. The single drum contains only about 15 – 20 gallons of material. It was agreed by those at the meeting that the single drum is to be included in with the hazardous drums to prevent the additional cost of transportation. The waste profile sheet is to be submitted to Shawn Jorgensen for signature. The waste manifest is to be signed by Joe Minter.
- Variance Request VR-002 for the organic matter of the topsoil was discussed. The proposed topsoil is acceptable for the upland areas. The use of leaf grow to enhance the organic matter of the topsoil for the wetlands areas is to be investigated to determine if it would be effective and feasible. One local source to be contacted is Moran's Tree Service, which is located north of the Base along Rt. 210. A Technical Directive is to be submitted for the addition of leaf grow, if determined feasible.

- The planting schedule for the site was discussed. The site will be ready for planting of the permanent seed mix after the recommended date of November 15. Based on past practice on other Bases in the area and the recommendation of the hydroseeding subcontractor the date can be extended with successful results. The subcontractor recommends additional temporary seed is added to the mix for better cover during the winter months, and then the site will be mowed in the spring with additional amendments added at that time. The subcontractor will warrant 90% coverage of the mix for one year. A Variance Request to extend the planting schedule will be submitted.

The wetland plants are to be planted next spring when the weather is acceptable. Potted plants are to be used at that time.

- During a 1" rain event on Tuesday night the runoff from the roadside ditch caused significant erosion. The erosion was on the reconstructed slope adjacent to the 78" culvert under Atkins Road Extension. RFI-005 was submitted via e-mail with a photo of the slope attached. The location was inspected after the meeting. Cathy Gardner, ROICC requested several additional photos be e-mailed to George Latulippe of Tetra Tech NUS for a better evaluation.
- Several large trees are within the channel at the south end of the additional waste triangle. The waste from this area has been excavated with no waste under the trees. Agreed during the meeting that the trees do not need to be removed. The erosion control mat is to be installed around the trees.
- Site 41 Status:
 - The Technical Directive for screening, segregation, identification and demilitarization of the OE items at the scrap yard has been approved.
 - A Pre-Construction Meeting is scheduled for Tuesday, November 12, 2002 at 1000 hrs.
 - UXO Specialists for the inspection, identification and demilitarizing of the items are mobilizing for Tuesday. No work will start until after the Pre-con Meeting.
 - A Preparatory Meeting for Site Setup and Segregation of OE and non-OE items will be conducted prior to the start of work activities.
 - Dan Pringle distributed a Project schedule during the meeting. The concrete pad is to be cleared for sampling as part of the site activities. The removal of scrap and waste piles and cleaning of the pad is to be completed by December 20, 2002. TetraTech NUS will plan to sample the pad in Mid January 2003.
 - Large non-OE items are to be inspected by Steve Carriere, Site Superintendent and Dan Pringle, Project Manager after the QC Meeting to work up an estimate for removal. Subsequently, the large non-OE items were inspected. Based on the makeup and size of these items a quick estimate is not practical. The Base has been working with scrap vendors and waste haulers that are more familiar with these items that can provide a faster estimate.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Waste profile sheet for the waste drums to be submitted to Shawn Jorgensen
- Investigate the feasibility of adding leaf grow to the topsoil in the wetland areas.
- Additional photos of the erosion to be e-mailed to Tt NUS, subsequently, sent.
- A Variance Request for the extension of the planting schedule is to be submitted.

12. DATE OF NEXT SCHEDULED QC MEETING:

Thursday, November 21, 2002 at 1030.

QC Meeting Minutes
Bi-Weekly QC Meeting
October 24, 2002
Work performed from 10-10 to 10-23-2002
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.

Meeting to be conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Cathy Gardner	ROICC, IH	George Latulippe by phone	Tetra Tech NUS
Jeff Morris	EFA Ches.	Tim Smith by phone	Tetra Tech NUS
Shawn Jorgensen	IHDiv-NSWC Env	Dan Pringle	Shaw E&I
Heidi Morgan	IHDiv-NSWC Env	Randy Johnson	Shaw E&I
Steve Carriere	Shaw E&I	Joe Walker	Shaw E&I

1. COMMENTS FROM THE PREVIOUS MEETING MINUTES

No comments

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
VR-001	10-8-02	Southern Channel Plunge Pool	Tetra Tech Response Forwarded
RFI-002	10-8-02	Waste Debris in triangle south of the site	Tetra Tech Response Forwarded
RFI-003	10-11-02	Culvert Embankment	Tetra Tech Response Forwarded
RFI-004	10-16-02	Waste Debris down slope of the Riprap Channel	Tetra Tech Response Forwarded
VR-002	10-24-02	Topsoil Organic Matter	Pending

2b. Technical Directives Approved since Last Meeting/Pending Approval

TD No.	DATE INITIATED	DESCRIPTION	STATUS
		None	

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01575N Erosion and Sediment Controls	*Inspected and maintained the erosion and sediment controls *Finished placement of the riprap in the channels	9-9-02	9-18-02	Ongoing Completed	10-10-02
02315B Waste Removal	*Finished breaking up the concrete into small pieces and spread them into the fill area.	9-30-02	9-30-02	Completed	10-14-02

	*Pressure washed the scrap metal and hauled it to a local scrap dealer to be recycled. *Staged and sampled drums containing waste. Six drums of solids composited and 1 partial drum of grease sampled			Completed	10-17-02
				Completed	10-15-02
02315C Regrading	*Continued regrading of the waste to the lines and grades of the Interim Grading Plan filling in low areas with waste/soil material. The material was spread in 8" lifts and compacted with a smooth drum roller. *Continued survey control	10-2-02	10-2-02	Ongoing	
01575N B Transportation and Disposal, Non-hazardous	*Completed the analytical testing of the waste debris. *Hauled the tires to an off site disposal facility	10-22-02	10-22-02	Completed	10-22-02
02315 D Soil Cover Installation	*Began importing and placing select fill as approved. Material was placed in 8" lifts and compacted with a smooth drum roller. *Tested the in-place compaction	10-23-02	10-23-02	Ongoing	
				Ongoing	

3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Finish regrading of waste fill material
- Continue placement and compaction of the select fill layer
- Continue testing of the in-place compaction of the select fill
- Finish waste profiling of non-hazardous debris
- Remove the waste debris for off site, non-hazardous disposal
- Topsoil placement if approved

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
None Scheduled	

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
	None	

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
02315	Analytical Test Data Select Fill and Topsoil	Verbal 10-23-02
02315	Geotechnical Test Data	10-14-02
01575N	Laboratory Test Data for Waste Debris	10-22-02
01575N	Solid Waste Facility Permit	10-22-02

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c. Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02223	Drum Waste Analysis	10-29-00		GVMT

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
02223	Waste profiling Analysis of drums found	10-15-02

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
02315	In-Place Compaction Testing	As Necessary

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
02315	Analytical Test Data Select Fill and Topsoil	Received
02315	Geotechnical Test Data	Received
01575N	Laboratory Test Data for Waste Debris	Received
02951	Topsoil Composition Testing	Received
02223	Waste profiling Analysis of drums found	Pending

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	10-28-02
Sample Log	11-1-02
Rework Items List	11-1-02
Definable Features Status	11-1-02
Submittal Register	11-1-02

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

VR-001 – Plunge Pool at the end of the 15” culvert.

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- Weather delays on the following days: 10/11, 10/16, 10/17 and 10/18 – 1 day each.

Total days of weather delays to date	Days of delay this period
5.5 Days	4 Days

10. OTHER ITEMS DISCUSSED:

- Two areas of additional waste need to be incorporated into the project. Responses have been received as forwarded, however the responses do not give a specific scope of work for Shaw to work up a cost estimate. After a discussion with Cathy Gardner, the RFIs were resubmitted as revisions (RFI-002R & RFI-004R) asking for a specific scope of work. A Technical Directive with cost and schedule estimate to then be submitted. Subsequently, these have been resubmitted and responses with specific scopes of work received.
- Only one solution was identified in the response to RFI-003 for the culvert extension. A Technical Directive (TD-001) with cost estimate for the work has been prepared. If acceptable, the work will proceed. One note concerning the culvert extension, when cleaning around the culvert to determine the best method to attach the extension, the condition of the existing 15” culvert was observed to be badly deteriorated. The pipe was inspected after the meeting but it was determined that Shaw is only to install the extension at this time.
- For a short-term project like Town Gut, quick turn around of solutions and final direction to changes saves both time and money. Are there recommendations for myself in preparing documents or Shaw in general, which should be done differently to help streamline the process? Send documents, RFIs, etc. to Cathy Gardner, ROICC by e-mail, she will send them to Jeff Morris, RPM and George Latulippe, Tetra Tech NUS and they will collectively respond to them via e-mail or verbally and then sign the documents as a follow-up. I will need to confirm that the e-mails go through to Cathy, which has been a problem on occasion.
- A Generator Waste Profile Sheet has been received from the proposed disposal facility. Additional Generator information is needed and the profile needs to be signed by the Generator. Shawn Jorgenson, of IH Environmental will review the profile and will take care of the signature. . Subsequently, received from Shawn and forwarded to the disposal facility.
- The drums, which have been found, have been tested for waste profiling analysis. The Six drums of solids have been composited together. The single drum containing a grease like material was tested separately. The results of these tests are still pending.
- The schedule for permanent seeding of the site recommends completion by 11-15. The hydroseeding subcontractor that we have used on other LANTDIV projects recommends, and will guarantee coverage when seeding the permanent seed mix even after that date. He recommends increasing the amount of temporary seed included with the mix. This allows the temporary seed to protect the surface through the winter while the permanent seed remains dormant and then germinate early in the spring. A Variance Request will be submitted.
- Site 41 Status: A Technical Directive with the cost and estimated time required for the screening, segregation and demilling of the OE items will be prepared and submitted. Shaw is to begin setting up personnel and equipment and mobilize in approximately 2-weeks.

The Revised UXO Plan is to be resubmitted 10-24-02. If appropriate, demilling of items that can be certified inert should be able to begin.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Dan Pringle to update the project schedule every 2-weeks.
- Shawn Jorgenson to complete the waste profile and return it.
- Variance Request to be submitted for the seeding schedule.

12. DATE OF NEXT SCHEDULED QC MEETING:

Thursday, November 7, 2002 at 1030.

**QC Meeting Minutes
Bi-Weekly QC Meeting
October 10, 2002
Work performed from 9-26 to 10-9-2002
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.**

Meeting to be conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Greg Klaas	ROICC, IH	George Latulippe by phone	Tetra Tech NUS
Jeff Morris	EFA Ches.	Tim Smith by phone	Tetra Tech NUS
Shawn Jorgensen	IHDiv-NSWC Env	Dan Pringle	Shaw E&I
Jeff Bossart	IHDiv-Nat Res	Randy Johnson	Shaw E&I
Steve Hiortdahl	USGS EFA Ches		

1. COMMENTS FROM THE PREVIOUS MEETING MINUTES

No comments

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
VR-001	10-8-02	Southern Channel Plunge Pool	Pending
RFI-002	10-8-02	Waste Debris in triangle south of the site	Pending

Note: VR and RFI were sent out via e-mail on 10-8-02 and may not have been successfully received. Will follow up with ROICC.

2b. Work Directives Approved since Last Meeting/Pending Approval

WD No.	DATE INITIATED	DESCRIPTION	STATUS
		None	

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01575N Erosion and Sediment Controls	*Completed construction of the material handling pad	9-9-02	9-18-02	Completed	9-27-02
	*Completed excavation of the southern channel			Completed	10-3-02
	*Completed excavation of the northern channel			Completed	10-7-02
	*Installed the rock check dams in the southern channel			Completed	10-7-02
	*Began placement of the riprap in the channels			Ongoing	
02315B Waste Removal	*Removed the waste and sediments/soil to the lines and grades of the Interim Grading Plan	9-30-02	9-30-02	Completed	10-7-02

	<p>*Segregated the large debris during removal into piles of Metal - to be deconned, Concrete - to be broken into small pieces as fill, Treated wood - for off site disposal and UXO (No UXO found).</p> <p>*EOD Specialist on-site overseeing the excavation.</p> <p>*Overexcavated the waste found in the channels.</p>			Completed	10-7-02
02315C Regrading	<p>*Began regrading of the waste to the lines and grades of the Interim Grading Plan filling in low areas with waste/soil material. The material was spread in 8" lifts and compacted. Compacted first with the excavator as specified and then with a smooth drum roller.</p>	10-2-02	10-2-02	Ongoing	

3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Complete construction of the channels
- Complete breaking-up of the concrete debris and incorporate into the waste fill
- Continue regrading of waste fill material
- Decon the metal debris and haul off-site as scrap
- Mobilize a tub grinder for the stumps if necessary
- Finish waste profiling of large nonmetal debris
- Remove large debris from the site which will not be incorporated into the fill
- Coordinate removal of debris with Indian Head Safety

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
Transportation and Disposal	Upon receipt of waste analysis

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
	None	

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
01575N	Riprap	10-9-02
01575N	Erosion Control Mat	10-9-02

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c. Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02315	Topsoil and Select Fill Chemical and Geotechnical Test Results	10-11-00		GVMT

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
02315	Topsoil and Select Fill Chemical	9-30-02
02315	Composition and Geotechnical Testing	10-2-02
02223	Waste Profiling Analysis	10-7-02

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
	Waste profiling of drums found	10-15-02

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
02315	Topsoil and Select Fill Chemical, Composition and Geotechnical Testing	Pending
02223	Waste Profiling Analysis	Pending

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	10-14-02

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

No changes this period

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- Weather delays on the following days: 9/26 – ½ day, 9/27 – 1 day

Total days of weather delays to date	Days of delay this period
1.5 Days	1.5 Days

10. OTHER ITEMS DISCUSSED:

- Tim Smith of Tetra Tech NUS joined in the QC Meeting by phone along with George Latulippe. Tim will be more involved with the Project and may be on-site for specific concerns.
- Waste material found in the southern channel was overexcavated as discussed at the last QC Meeting. All waste was removed to leaving clean material in the base and on the east side of the channel.
- A suggestion was made during the last meeting to possibly place some of the stumps into the ponds for wildlife habitat. Cathy Gardner, ROICC contacted Jeff Bossart, IH Environmental. Jeff came to the site and stated that a limited number of stumps pushed down into the sediments, so that they do not float, would be acceptable.
- Surface debris was removed from the edge of Atkins Road south of the site. When removing the debris from the triangle area buried waste was found. An RFI was submitted via e-mail for direction concerning this area.
- A Variance Request has been submitted via e-mail for the riprap channel. A plunge pool was proposed to dissipate the energy yet allow placement of the riprap under the invert of the culvert. This should be acceptable provided the level of the water in the plunge pool is below the invert of the culvert.
- The slope of the cut next to Atkins Road for the riprap channel is too steep to be left as a permanent structure. An RFI will be submitted with photos to show the current condition. A suggestion discussed is to extend the culvert and buttress the slope with riprap.
- Discussed dewatering of the soils along the edge of the ponds. As provided in the Work Plan dewatering will be conducted by allowing the site water to infiltrate down through the site soils.
- Jeff Bossart reviewed the wetland plants and upland seed mix. Jeff stated that some of the species would need to be planted where their roots are in the water, but the list is acceptable. Jeff will provide guidance when the plants are to be planted. Jeff will review the upland seed mix and make suggestions if determined necessary for the site. Any changes will need to be made as early as possible to prevent delays.
- Dan Pringle distributed a revised Project Schedule for review. The end date for the project is scheduled for November 21, 2002.
- Site 41: There is a significant number of EOD at the site, which will need to be demilitarized, some with specialized techniques and equipment. The UXO Plan and Safety Plan will need to be resubmitted to address some of the demilitarizing activities. EOD activities should be started as soon as possible to prevent any delays to the remedial activities at the site.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Submit an RFI with photos for the stabilization of the riprap channel at the culvert.
- Jeff Bossart to review the Uplands Seed Mix and make suggestions if determined necessary for the site.
- The UXO Plan and Safety Plan to be revised and resubmitted for Site 41.

12. DATE OF NEXT SCHEDULED QC MEETING:

Thursday, October 24, 2002 at 1030.

**QC Meeting Minutes
Bi-Weekly QC Meeting
September 26, 2002
Work performed from 9-9 to 9-25-2002
Contract #N62470-97-D-5000, D.O. 0062
Indian Head Division – Site 12
Naval Surface Warfare Center
Indian Head, Md.**

Meeting to be conducted by:
Ernie Duke (Shaw E&I)

Attendees:

Cathy Gardner	ROICC, IH	Bob Mertz	Tetra Tech NUS
Greg Klaas	ROICC, IH	Dan Pringle	Shaw E&I
Jeff Morris	EFA Ches.	Steve Carriere	Shaw E&I
Shawn Jorgensen	IHDiv-NSWC Env	Joe Walker	Shaw E&I
Steve Hiortdahl	USGS EFA Ches	Randy Johnson	Shaw E&I
George Latulippe	Tetra Tech NUS		

1. COMMENTS FROM THE PREVIOUS MUTUAL UNDERSTANDING MEETING

Discussed format of Mutual Understanding Meeting and QC Meetings.

2. VARIANCE REQUEST/REQUEST FOR INFORMATION/WORK DIRECTIVES STATUS:

2a. Variance Request and Request for Information Approved Since Last Meeting/Pending Approval

VR/RFI	DATE INITIATED	DESCRIPTION	STATUS
		None	

2b. Work Directives Approved since Last Meeting/Pending Approval

WD No.	DATE INITIATED	DESCRIPTION	STATUS
		None	

3. SCHEDULE AND STATUS OF WORK:

3a. Work accomplished since last meeting

DEFINABLE FEATURE	ACTIVITY	PREPARATORY PHASE DATE	INITIAL PHASE DATE	FOLLOW-UP STATUS	ACTIVITY SCHEDULED COMPLETION
01115 Site Preparation	*Installation of site trailer and utilities	9-9-02	9-11-02	Completed	9-16-02
	*Cut the weir and lowered the water level of the ponds for removal of the debris			Completed	9-17-02
	*Conducted utility search using a subcontractor, Dave Roberts	9-13-02		Conducted	9-13-02
01575N Erosion and Sediment Controls	*Began installation of erosion and sediment controls	9-9-02	9-18-02	Ongoing	9-25-00
	*Completed installation of the perimeter silt fence and super silt fence			Completed	
	*Began construction of the material handling pad			Ongoing	
	*Began construction of the southern channel			Ongoing	

02315 Clearing and Grubbing	*Completed clearing of trees within the Limits of Disturbance. Smaller trees and limbs were chipped; larger trees were cut into manageable lengths and sorted by type. Hardwoods were staged along Atkins road for Base use following instructions of Jeff Bossart, IH Envir.	9-9-02	09-10-02	Completed	9-24-02
02525 Monitoring Well Abandonment	*Completed abandonment of the existing monitoring wells within the Limits of Disturbance. *Abandonment reports to be submitted to the regulatory agency and to the ROICC. Copies to also be included in the Final Report.	9-24-02	9-24-02	Completed	9-24-02

3b. Work to be accomplished before the next scheduled meeting (includes both on-site and off-site work and testing).

- Test off-site material for clean fill parameters
- Test off-site material for geotechnical parameters
- Test off-site topsoil for composition
- Complete construction of the materials handling pad
- Complete construction of the southern channel
- Construct the decon pad
- Begin excavation and segregation of the debris and material along the shorelines of the ponds and stage in the material handling pads
- Conduct visual screening of the removed debris for UXO items by a UXO Specialist
- Remove large debris from the site which will not be incorporated into the fill

SCHEDULED PREPARATORY PHASES PRIOR TO NEXT MEETING	SCHEDULED DATE
Excavation and Fill	9-30-02 @ 0730

Note: Frank James IH Safety notified of the meeting and of the excavation work starting.

4. REWORK STATUS

4a. Rework items identified and pending correction

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	ESTIMATED COMPLETION DATE
	None	

4b. Rework items completed since last meeting

DATE IDENTIFIED	DESCRIPTION OF REWORK REQUIRED	DATE COMPLETED
9-9-02	Incorrect geotextile material delivered	9-10-02

5. STATUS OF SUBMITTALS:

5a. Submittals reviewed and approved since last meeting

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE APPROVED
01575N	Silt Fence, Super Silt Fence and Geotextile	9-9-02
01575N	#1 Crushed Aggregate	9-9-02

5b. Submittals pending approval

SPEC. SECTION	TRANSMITTAL # AND SUBMITTAL DESCRIPTION	DATE SUBMITTED	DATE APPROVAL REQUIRED	REQUIRED BY GVMT OR CONTR
	None			

5c. Submittals required in the near future

SPEC. SECTION	SUBMITTAL DESCRIPTION	ANTICIPATED DATE TO BE SUBMITTED	ESTIMATED DATE REQUIRED	GVMT OR CONTR APPROVAL
02315	Topsoil and Select Fill Chemical, Composition and Geotechnical Test Results	10-11-00		GVMT

6. TESTING:

6a. Testing performed since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	DATE COMPLETED
	None	8-25-00

6b. Testing scheduled prior to next meeting

SPEC. SECTION	DESCRIPTION OF TEST	SCHEDULED DATE
02315	Topsoil and Select Fill Chemical, Composition and Geotechnical Testing	9-30-02

6c. Testing results pending/received since last meeting

SPEC. SECTION	DESCRIPTION OF TEST	STATUS
	None	

7. DOCUMENTATION:

Documentation required prior to next meeting

DOCUMENTATION DESCRIPTION	DATE REQUIRED
Daily Reports	Daily
QC Meeting Minutes	9-30-02
Rework Items List	10-1-02
Test Plan and Log	10-1-02

8. STATUS OF AS-BUILTS: (Define changes made since last meeting and provide an explanation for as-built drawings that are not up-to-date).

- Location of Limits of Disturbance in the water (See Discussion Item below)

9. QC AND PRODUCTION ISSUES DISCUSSED AND RELATED RESOLUTIONS:

- Debris outside the Limits of Disturbance along the edge of the pond.
- Waste encountered in the southern channel.

Total days of weather delays to date	Days of delay this period
0 Days	0 Days

10. OTHER ITEMS DISCUSSED:

- Several points along the Limits of Disturbance (LOD) currently fall within the water of the pond even after the water level has been lowered. According to Bob Mertz of Tetra Tech NUS the LOD was determined following the wetlands delineation. The work is not intended to be within the water but was estimated to be the location after the water level was lowered. The location of the LOD can be adjusted to the current edge of the water.
- Overexcavation of channels: The remedy for the site requires 2-foot of clean cover material over the waste. When waste is encountered in the channels it should be overexcavated by 2-feet and backfilled with clean material; 18" select fill and 6" of topsoil or 6" of select fill and 18" of riprap for the appropriate channel.

Where waste exists outside the Limits of Disturbance it should be removed if feasible and documented. If the extent or quantity prevents removal it should be reported to the ROICC and Tetra Tech NUS to determine what is the best solution. The east side of the riprap channel is to be photo documented to show that no waste exists east of the channel.

- Concrete debris encountered during the grading and excavation process will be broken up with a hoe-ram into small manageable pieces and graded into the landfill below the landfill cover. Large metal pieces and wood debris such as telephone poles, railroad ties and roots will be hauled to an off-site disposal facility. Material hauled off site will need to be approved by IH Safety to verify no UXO is within the load. A suggestion was made to possibly place some of the stumps into the ponds for wildlife habitat. Cathy Gardner, ROICC stated that she would check to see if that would be acceptable.
- Suitable Topsoil and Select Fill materials for Site 12 are being investigated for best project needs. Samples for testing will then be submitted for clean fill and geotechnical parameters as well as topsoil composition once the most suitable material is determined. Some activities at Site 12, such as construction of channels may require importing of materials prior to receiving sample results. To prevent any impacts to the schedule at Site 12 the materials that have been approved at Dahlgren NSWC may be proposed for use at Indian Head. Copies of the analysis and summary sheets will be submitted for these materials prior to importing.
- Topsoil composition requirements: The specification of 5 – 8% organic matter has been difficult to achieve with the topsoil from the southern Maryland area as experienced on other projects. Previously, our hydroseeding subcontractor has warranted the vegetation with lesser concentrations of organic matter and has had successful results. A Variance Request may be considered to change the specification, if necessary.
- Compaction requirements in wetland areas: The soils along the edge of the ponds in the wetland areas are soft and unstable. Compaction in these areas may be difficult to achieve and not necessarily desirable for wetland plants. A Variance may be considered in these areas. However, according to George Latulippe of Tetra Tech NUS, common fill with a gravel base may be used for backfilling in wet areas.
- Utility Plan requirements: The Utility Plan is to correlate our work on the site with the GIS System. Changes to the site including changes to the surface elevations needs to be included in the GIS survey.
- Site 41 status: If work can start on Site 41 prior to demobilizing from Site 12 there can be a savings of time and money for both projects. Resources can be used on both sites as needed. According to Jeff Morris, RPM and Shawn Jorgensen, IH Environmental Site 41 should be able to be started prior to Site 12 finishing.

11. ACTION ITEMS:

(Include items that may require revising the QC plan or changes in procedure)

- Cathy Gardner, ROICC to check on placement of the stumps into the ponds.
- The channel is to be over-cut so that a minimum of 2-feet of clean material covers the waste.
- Loose waste outside the LOD to be removed, if feasible.

- The LOD to be established based on the edge of the water instead of working in the ponds.
- Dan Pringle to update the project schedule periodically.

12. DATE OF NEXT SCHEDULED QC MEETING:

Thursday, October 10, 2002 @ 1030

N62470-97-D-5000
Ser: 09C1CG
4 September 2002

Shaw Environmental Inc.
2790 Mosside Blvd
Monroeville, PA 151476-2792

Subj: CONTRACT N62470-97-D-5000 – REMEDIAL ACTION SITE 12- TOWN GUT LANDFILL, INDIAN HEAD DIVISION, NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Gentlemen:

Following are the minutes of a pre-construction conference held in the office of the Officer in Charge of Construction (OICC) on 4 September 2002 . Nothing printed in these minutes or discussed at the conference shall change the provisions of this contract. Those present were:

See attached

The completion date is 15 November 2003.

1. The Contractor's primary contact with the Navy shall be with the Contract Management Team assigned to this project. This team is comprised of the following individuals:

Project Engineer - CATHY B. GARDNER

Quality Assurance Representative – GREG KLAAS

The OICC organization management consists of the following individuals: *{for MILCON projects, substitute ROICC for OICC throughout this document. Also indicate the PCO (EFA Ches 1102) and the ACO (our 1102)}*

OICC- Chris Kinsey, CDR, CEC, USN

ROICC - Russell Hime , LT, CEC, USN

Head, Contracts Management - Felicia Haynie

Head, Construction Management - Carl Jarvis

The OICC's office telephone number is 301-744-4113, (see attached list for individual extensions.) The fax number is 301-744-4465.

The official mailing address for the OICC is:

OFFICER IN CHARGE OF CONSTRUCTION
BUILDING 503, INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND 20640-5035

2. The Contractor provided the following information:

- a. The Contractor's superintendent (on-site representative) is **Steve Carriere**
Telephone number **240-882-1480**.
- b. The Contractor's Quality Control Manager is **Ernie Duke**.
Telephone number **412-372-7701**.
- c. The Contractor's Project Manager is **Dan Pringle**.
Telephone number **412-380-6248**.
- d. The Contractor advised he planned to start working **September 9, 2002**.
- e. The Contractor advised correspondence is to be addressed to:

f. The Contractor advised the following subcontractors will be working on the project:

SUBCONTRACTOR

TYPE OF WORK

3. The following items were reviewed:

a. Correspondence - All correspondence is to be addressed to the Officer in Charge of Construction, not to individuals.

b. Police and Security -

1) Badges and vehicle passes - shall be obtained from Security. It is the Contractor's responsibility to provide all required information. No one under the age of 18 is permitted on the restricted side of the base.

c. Safety Office and Fire Department -

1) A general Work Permit is required prior to beginning any work on the restricted side of the base.

2) Special Permits are required prior to performing the following activities:

- Hot Work (burning, cutting, welding, etc.)
- Asbestos and Lead abatement

The Construction Representative will arrange for all permits on request, as required.

3) Vehicle Inspection requirements.

4) Explosive area safety and restrictions.

- Cell phones
- Pagers

5) Maintenance of fire lanes.

6) Maintaining fire extinguishers is mandatory.

7) First Aid and Ambulance response.

8) **Other issues** –

- A. May have confined space
- B. Temporary block of Atkins Road
- C. Need to provide Traffic Control Plan
- D. Need to provide updated Construction Schedule
- E. Provide info on phones to obtain HERO sticker.

d. Work Hours - Regular work hours shall be between the hours of 0700 and 1730. Overtime is permitted, if not contrary to specifications, pending prior Government approval. If desired, notify Construction Representative by Thursday preceding Saturday/Sunday work to arrange badging as necessary and scheduling of Government surveillance.

e. Outages - All disruptions of utilities, traffic, parking, access, or use of facilities require written approval from the base authorities. Contractor must contact the Construction Representative in sufficient time to allow for the paper work to be processed. Two weeks advance notice is required.

4. The following paragraphs/clauses of the contract were discussed:

a. Superintendence - Superintendent must have authority to act for the contractor and be assigned to the job on a full time basis

b. Insurance - Work will not be started until a certificate of liability and workmen's compensation insurance is provided to the OICC. This requirement applies to the prime and all his subcontractors. Note that in the case of cancellation of insurance, the Contracting Officer must be given 30 days notice in writing.

c. Schedule of Prices - Basis for progress payments. Submit to OICC as specified.

d. Progress Chart and Material Delivery Schedule - A CPM or a feasible construction schedule in accordance with the specification is required. Updated chart is required with every invoice. The CPM, when required, will be used to determine justification for all time extensions.

e. Progress Payments - Will be made on a monthly basis when submitted on forms provided for this contract. Review of completion percentages by Government and Contractor is recommended prior to submission of invoice. Amount retained will be explained in letter. Note that retainage of up to 25% of the cost of complex systems may be withheld pending successful performance verification testing and receipt of Operation and Maintenance Manuals. (Complex systems include HVAC, fire protection, and controls systems.)

f. Contractor's Daily Reporting - The Contractor Production Report and the Quality Control Report will be completed daily and delivered to the OICC Quality Assurance Representative as required. Forms shall be completely filled out. Incomplete forms will be returned for correction .

g. Shop Drawings, Submittals and Samples - The Contractor shall maintain an updated submittal register at an accessible location for review by the Government. Material submittals, shop drawings, samples of materials or special drawings required by the specifications shall be submitted to the OICC for approval at the earliest possible date (excepting items to be approved by CQC). This is essential to eliminate delays and to

expedite procurement of materials that have a long lead-time. Hand carrying of this material is recommended (may save 5 to 10 days in approval time).

- Shop drawings, brochures, catalog information, certificates of compliance, and samples shall be submitted directly to the OICC for approval.
- Submittals shall have proper identification, i.e., Specification Section Number, Specification Paragraph Number, and Specific Item Description.

h. As-Built Drawings and Record of Material - Shall be located on site and kept current during life of contract. Submit to OICC as specified *prior* to acceptance of contract. Funds will be withheld pending receipt. Two copies required unless specified otherwise.

i. Oral Modification - No oral modifications will change the contract.

j. Construction Safety - An Accident Prevention Plan (Safety Plan) in accordance with Corps of Engineers Safety and Health Requirements Manual (EM-385-1-1) is required. Refer to EM-385-1-1 for further information on what is required in the Plan. The Internet Web Site for the EM-385-1-1 can be found at:

<http://www.usace.army.mil/inet/usace-docs/eng-manuals/em385-1-1/toc.htm>

NOTICE: *Work will not be permitted to begin until the Accident Prevention Plan is approved.*

Activity Hazard Analysis' (AHA's) are to be prepared for each defineable feature of work (DFOW), and shall be submitted to the ROICC prior to the DFOW preparatory meeting. AHA's are to be site specific -- generic AHA's will be disapproved.

You are required to report all lost time accidents/illnesses to the ROICC as required by the "Accident Prevention" clause (FAR 52.236-13). This office will provide forms for reporting.

k. Environmental Protection Plan - Required before starting work. Full compliance with the environmental part of the specifications is required.

l. Trash Removal and Site Cleanup - Required to be performed DAILY. Remove all waste from the NSWC unless directed otherwise.

m. Labor Standards Compliance – *Contractor shall review all payrolls and ensure they are in compliance prior to submission.* Progress payments will be returned without payment if payroll violations are observed.-

n. Geographic Information System (GIS) – Where required by specification, a GIS survey shall be submitted upon completion of work. The GIS survey data includes underground utility locations, both horizontal and vertical, so data must be gathered during construction.

Also note the requirement for a "buried utility location plan" to be approved prior to start of any construction.

5. Other issues discussed include:

a. PERFORMANCE EVALUATIONS: An evaluation of the Contractor's performance is completed on each project administered by the OICC. The rating is based on the following general categories:

Quality Control, Timely Performance, Effectiveness of Management, Compliance with Labor Standards, and Compliance with Safety Standards.

Note that an unsatisfactory overall rating may be issued for a project where only one of the above elements is unsatisfactory. A rating of less than satisfactory can be considered in the award of future projects throughout the Department of Defense.

b. QUALITY CONTROL PROGRAM: The specification section entitled Contractor Quality Control will be strictly enforced. The Contractor shall conduct Quality Control Meetings and perform the three phases of inspection as required. Training for Contractor's QC managers is available through the Army Corps of Engineers (Baltimore, MD office can be reached at 410-962-2323). *Note – the Contractor will not be permitted to begin work until the Quality Control Plan is approved.*

c. FIELD OFFICE OVERHEAD: In the event that the field office overhead rate was not established under the solicitation process, it will be established during processing of the first modification to the contract/delivery order. The Contractor shall select a method of application for the compensation of field office overhead. Careful consideration should be given to the selection of a method since the selected application will apply for the life of the contract/delivery order.

The Network Analysis System (CPM schedule), where required by contract, will be utilized to determine time extensions. The Contractor will be required to justify all time extensions through CPM schedule analysis.

Sincerely,



CATHY B. GARDNER
Project Engineer

List of Enclosures

CONTRACT N62470-97-D-5000
REMEDIAL ACTION SITE 12

The following enclosures were discussed and provided to the Contractor during the Pre-Construction Meeting via a CD (except for the ones that have an *). (Also see attached commentary on each enclosure.)

- (1) Individual Telephone Numbers of ROICC employees.
- (2) List of Employees (to be submitted for all subcontractors also).
- (3) Statement & Acknowledgment (SF 1413) (to be submitted with list of employees for subcontractor
- (4) Schedule of prices (NAVFAC 4330/4 (Rev. 10-77)).
- (5) Invoice Forms NAVFAC 7300/30 (Rev 10/89) (12 copies)
- (6) Contract Performance Statement (LANTDIV NORV 4-7300/18 (Rev. 12/95)
- (7) Contractor's Certification
- (8) Contractor's Release (NAVFAC 4330/7 (6-72)) (to be submitted with last invoice.)
- (9) Contractor Production and Quality Control Report (Form 01400-1 6/91)
- (10) Rework Items List (to be updated and submitted monthly)
- (11) Testing Plan & Log (to be updated and submitted monthly)
- (12) Statement of Compliance DD Form 879
- (13) Request for Authorization of Additional Classification and Rate (SF 1444)
- (14) Information for Contractors on Labor Standards Provisions & Prevailing Wage Requirements Applicable to Construction Contracts.
- (15) The Law – Equal Employment Opportunity in English (poster)*
- (16) The Law – Equal Employment Opportunity in Spanish (poster)*
- (17) Federal Minimum Wage (poster)*
- (18) Apprentices Poster*
- (19) IHDIV NAVSURFWARCEN Instruction 5100.5K – Regulations Governing Smoking & Use of Open Flame Devices in the Restricted Area.
- (20) Atlantic Div NAVFACENGCOM Instruction 4858.5 – Value Engineering Change Proposals with brochure. *Brochure
- (21) Storage Area Regulations letter
- (22) Preparatory and Initial Phase of Inspection Checklists

Commentary on Enclosures

CONTRACT N62470-97-d-5000

PHONE LISTING

List of individual phone extensions in the ROICC office, **Enclosure (1)**. Dial (301) 744-4113 and listen to the instructions to reach the individual's extension.

LIST OF EMPLOYEES

A list of employees is required in quadruplicate to the ROICC giving the **names** of all employees, **addresses, social security numbers, and duration of time** on site -- **enclosure (2)**. Contractors shall submit on **each** employee a Special Access Determination, Employment Information Form (NAVSEA 5510/15 (4/90) at least two (2) working days before an employee reports to work. **These forms go directly to Security, Bldg D-339. Badges will not be issued without the completed personal information form.**

Also submit a list of subcontractors NO LATER THAN SEVEN (7) DAYS after award to the Contracting Officer. (See clause "Information Required of the Contractor"). Use same form as Contractor's employee list (**enclosure (2)**)

SUBCONTRACTORS

Enclosure (3), Form SF 1413, "Statement and Acknowledgment" shall be submitted for each subcontractor, at any tier, as required by the clause (FAR 52.222-11) of the Labor Standard Provisions. NOTICE -- Invoices shall be returned if SF 1413 or SF 1566 are not submitted for all subcontractors at any tier.

SCHEDULE OF PRICES

Schedule of prices shall be submitted in accordance with the "Schedule of Prices" clause and the "Payments Under Fixed-Price Construction Contracts" clause (FAR 52.232-5). **Original and two copies** are to be forwarded for approval prior to certification of any payments, **enclosure (4)**.

PROGRESS PAYMENTS

Form NAVFAC 7300/30, "Contractor Invoice", **enclosure (5)**, and Form LANTDIV NORVA 4-7300/18, "Contract Performance Statement", **enclosure (6)**, shall be submitted in triplicate, when requesting payments under this contract, in accordance with the "Contractor's Invoice and Contract Performance Statement" clause. A Payment Certification is to be included with each invoice, **enclosure (7)**.

CONTRACTOR'S RELEASE

Enclosure (8), NAVFAC 4330/7, "Contractor's Release", must be executed and forwarded at the same time of submission of final invoice for payment under this contract. This requirement is in compliance with the "Payment Under Fixed-Price Construction Contract" clause (FAR 52.232-5).

CONTRACTOR DOCUMENTATION

Enclosure (9), FORM 01400-1, “Contractor Production Report” (front) and “Contractor Quality Report” (back) shall be submitted daily as required by the contract specifications.

“TESTING PLAN AND LOG” and “REWORK ITEMS LIST”, **enclosures (10) and (11)**, shall be submitted as required by the contract specification section entitled “Contractor Quality Control”.

DAVIS - BACON ACT - NOT APPLICABLE

Form DD 879, **enclosure (12)**, “Statement of Compliance”, with the “Weekly Payroll Statement with Fringe Benefits Program”, is to be submitted in accordance with the clause (FAR 52.222-8) of the Labor Standards Provisions.

Enclosure (13), Form SF 1444, “Request for Authorization of Additional Classification and Rate”, is to be submitted, in triplicate, when any class of mechanics or laborers will be employed on site that are not listed in the wage determination applicable to this contract, as required by clause 52.222-6 of the Labor Standards Provisions.

Enclosure (14), “Information for Contractors on Labor Standard Provisions and Prevailing Wage Requirements Applicable to Construction Contracts”, provide authoritative guidelines and interpretations of contract labor standard requirements.

Enclosures (15) and (16), “Equal Employment Opportunity” posters shall be posted in a conspicuous place available to employees and applicants for employment, in compliance with the “Equal Opportunity” clause (FAR 52.222-26) of the contract clauses.

Enclosure (17) is the Department of Labor Poster “Federal Minimum Wage” that is to be posted at the construction site.

Enclosure (18), WH Publication 1321, “Department of Labor Poster” shall be displayed in a conspicuous place available to all employees in compliance with the “Davis Bacon Act” clause (FAR 52.222-6) of the Labor Standards Provisions. All posters enclosed are to be displayed.

SMOKING AND USE OF OPEN FLAME DEVICES

Enclosure (19), NAVORDSTA INSTRUCTION 5100 5K 04, is provided for your information as to Regulations Governing Smoking and open flame devices. Read this instruction carefully. SPECIAL PERMITS are required for smoking privileges and use of open flame devices.

VALUE ENGINEERING CHANGE PROPOSALS (LANT INST 4858.5)

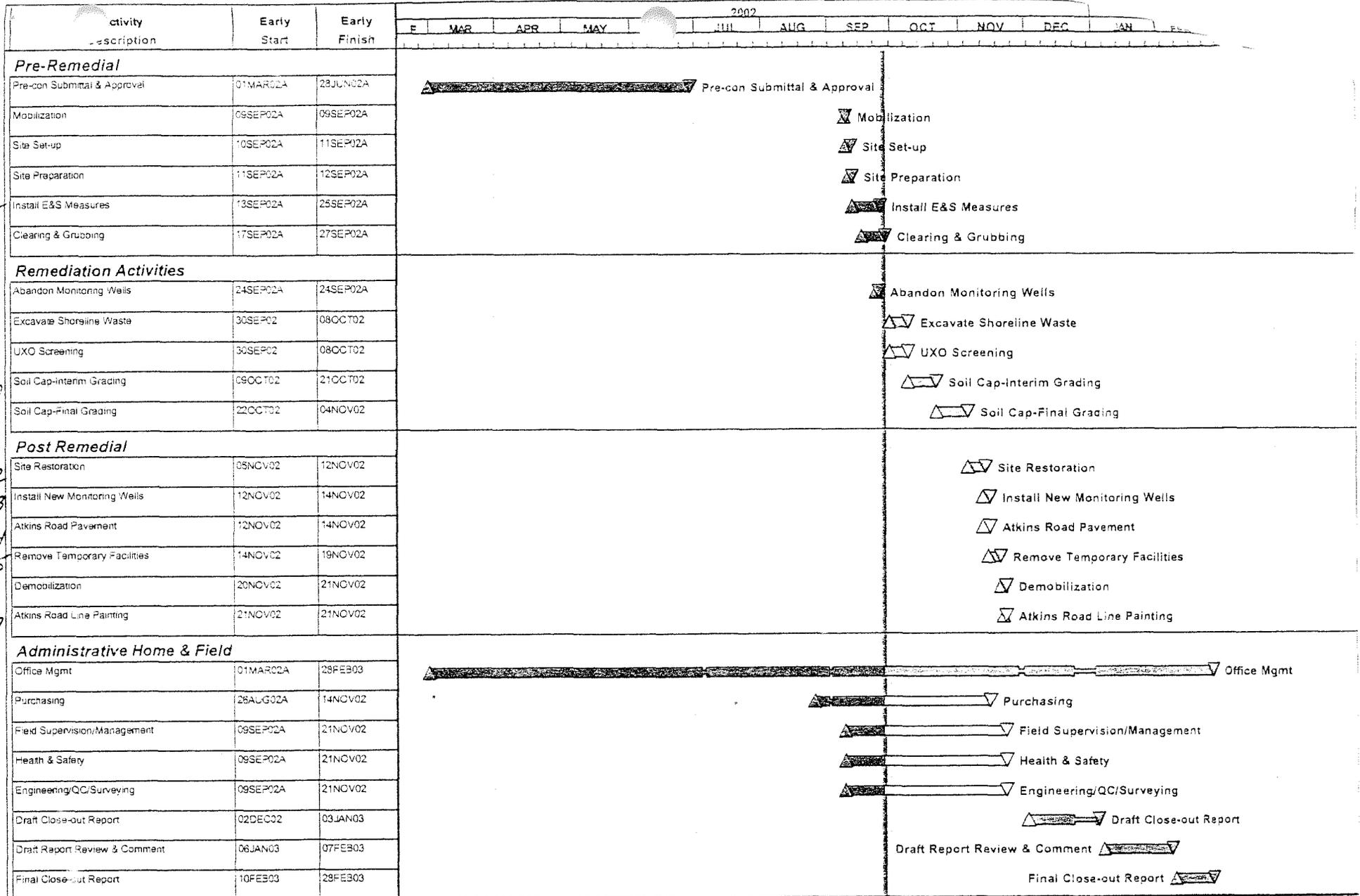
Information and instructions for review and processing Value Engineering Change Proposals (VECPs) submitted by construction contractors, **enclosure (20)**.

REGULATIONS CONCERNING STORAGE AREA FOR TRAILERS

See **enclosure (21)** for details concerning office trailer and lay down areas on site.

PREPARATORY AND INITIAL PHASE OF INSPECTION CHECKLISTS

These optional forms are recommended for documenting the preparatory meeting and initial inspection. See **enclosure (22)**.



Start Date 15FEB02 Early Bar
 Finish Date 28FEB03
 Data Date 27SEP02 Progress Bar
 Run Date 06OCT02 20:00 Critical Activity

Site 12-Town Gut Landfill
 NSWC-Indian Head, Maryland
 September 27, 2002 Schedule



CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 100
Date 5-Feb-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02951 Continued site restoration activities Preparing equipment for demobilization Inspected sediment and erosion controls Cleaned out the weir Began preparing for digging test pits at Site 42	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

QC Manager is off site. No construction work ongoing.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

2-6-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 099
Date 4-Feb-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
TESTING PERFORMED & WHO PERFORMED TEST				
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#02951 Continued site restoration activities Preparing equipment for demobilization Inspected sediment and erosion controls Cleaned out the weir			
TESTING PERFORMED & WHO PERFORMED TEST				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:
QC Manager is off site. No new construction work ongoing.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

2-5-03
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 098
Date 3-Feb-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02951 Continued site restoration activities Preparing equipment for demobilization Inspected sediment and erosion controls Cleaned out the weir	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

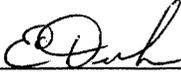
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

QC Manager is off site. No new construction work ongoing

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

2-4-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 097
Date 31-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATION	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02951 Continued site restoration activities Preparing equipment for demobilization	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Steady rain through out the day.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

2-3-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 096
Date 30-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02951 Continued site restoration activities Preparing equipment for demobilization Policing the area picking up any trash, loose debris and grade stakes Removed the orange barrier fence and hand raked the topsoil at the edge of the roads	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:
QC Meeting conducted at the site office trailer.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

1-31-03
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER	DATE
--------------------------------------	------

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 095
Date 29-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#02951 Continued site restoration activities Reattached the silt fence fabric to the posts on the slope of Area 1 Reinstalled the signs that had to be moved during construction Finished keying in the ECM and applying more pins to the ECM Preparing equipment for demobilization			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

1-30-03
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. **094**
Date **28-Jan-03**

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315D Finished placing and grading topsoil along the edge of Atkins Road Extension Topsoil was delivered and final graded to tie into surrounding landfill grades #02951 Prepared surface of remaining area to be hydroseeded Tracked the surfaces perpendicular to the slope where needed Lowered the fabric on one row of the silt fence on the slope of Area 1 so that the hydroseeder could access the slope #02951 Completed hydroseeding the site Hydroseeded the northern half of Area 1 and the edge of Atkins Road Extension Applied the seed mix and the necessary nutrients based on the soil test Then applied the Hydro-Blanket over the area Applied (75) 40 lb bags per acre with multiple sprayings to build up the blanket</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

1-29-03
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. **093**
Date **27-Jan-03**

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div style="text-align: right; font-size: small;">TESTING PERFORMED & WHO PERFORMED TEST</div> Compaction testing of the Fill and Aggregate ASTM D 698 ASTM D 1557
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#02742 Placed, graded and compacted aggregate subbase for Atkins Rd Extension RC-6 material was delivered and spread following survey control Surveyed edge of road and crown along centerline of road Second lift of RC-6 was completed to survey grades and compacted with atleast 12 passes with the vibratory smooth drum roller Placed and compacted a layer of RC-6 for the shoulder of the road #02315D Began placing and grading topsoil along the edge of Atkins Road Extension			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:

Compaction testing using the modified proctor provided by the vendor acheives 95%+ after multiple compaction efforts.
Will rerun the modified proctor with the material delivered.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

1-28-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
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QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER	DATE
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CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 092
Date 24-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
TESTING PERFORMED & WHO PERFORMED TEST				
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST Compaction testing of the Fill and Aggregate ASTM D 698 ASTM D 1557
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#02742 Completed placement, compaction and testing of the common fill subgrade for Atkins Road Material was placed in thin 6" lifts and compacted with the smooth drum roller Placed the woven geotextile over the subgrade layer after compaction was achieved Began delivery and placement of the aggregate subbase for the road The material was delivered from the approved source and spread in a thin lift As the material was placed it was compacted with the vibratory smooth drum roller with multiple passes			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Aggregate subbase material was variable to the point where compaction of 97% of modified density could not be achieved.
 Contacted George Latulippe of Tt NUS and informed him that after multiple attempts to achieve 97% some areas would only achieve 96%.
 He stated that it will have time to settle before it is paved and that it would probably need regraded and rerolled again at that time.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 091
Date 23-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>#02742 Imported fill material to fill and grade the edge of the roadway between the road and the landfill Used select fill as the common fill since it met the requirements of the common fill Material was delivered from the approved source</p> <p>#02951 Continued installation of the permanent erosion control mat in the channels Installed the mat in Area 2 and in the additional channel adjacent to Area 1 where it was installed as per the MDE Specifications Overlapped the matting approximately 12" where it fell in the base of the channel Used steel spikes and flat washers because the staples would not penetrate the frozen ground Will complete the installation with staples when they can be driven in</p>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Frozen ground made installation of the erosion control mat difficult.
Picked up the nuclear density gauge at the end of the day at the Rockville distribution center for Airborne Express.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

1-24-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 090
Date 22-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: right;">TESTING PERFORMED & WHO PERFORMED TEST</p>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	<p>#02742 Began placement of the common fill for the subgrade of the road modification Used select fill as the common fill since it met the requirements of the common fill Graded fill material which was stockpiled adjacent to the road onto the road bed Compacted the fill with the smooth drum roller #02951 Continued installation of the permanent erosion control mat in the channels Finished in Area 3 where it was installed as per the MDE Specifications Overlapped the matting approximately 12" where it fell in the base of the channel</p>					

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Frozen ground made installation of the erosion control mat difficult.
Nuclear density gauge was not received. It had been shipped via Airborne Express on Monday for overnight delivery.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

1-23-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 089
Date 21-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>#02742 Pulled back asphalt approximately 10 feet from each cut to allow for smooth tie-in of new asphalt Tracked over the asphalt to break it up into small granular material Placed the ground asphalt in an area of the road where at least 2 feet of cover would be placed over it Graded the material smooth and rolled it in-place #02951 Began installation of the permanent erosion control mat in the channels Started in Area 3 where it was installed as per the MDE Specifications Overlaped the matting approximately 12" where it fell in the base of the channel Keyed in the leading edge</p>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

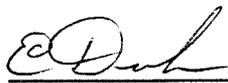
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Frozen ground made installation of the erosion control mat difficult.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.



Ernie Duke - QC Manager

1-22-03

DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 088
Date 20-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Atkins Road Extension Modification Activity # 02742 Checklist attached
	THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Inspected the site erosion controls and conditions of the Hydro-Blanket - No problems Cleaned out the weir Began installation of the erosion control mat in Area 3 Used the MDE Guideline for installation requirements Keyed in the leading edge of the matting
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

TESTING PERFORMED & WHO PERFORMED TEST

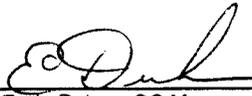
TESTING PERFORMED & WHO PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

1-21-03
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 1/20/2003

Contract No. N624790-97-D-5000

Index No. 088-P11

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Atkins Road Extension Activity Number 02742</p> <p>Attendees: Site Crew Randy Johnson, Supr - Shaw</p> <p>Plans and Specifications: Section 02742 - Pavement with a Bituminous Concrete Surface Drawing - C-7 and C-9</p> <p>Submittals VR-004 to use Crushed Concrete RC-6 as Subbase Aggregate - Approved 02742-01 Woven Geotextile - Approved 02742-02 Certificate for Subbase Material - Approved Bituminous Concrete to be submitted</p> <p>Materials RC-6 to be used as Subbase Aggregate Woven geotextile on-site Select Fill meets the requirements of common fill and will be used for the subgrade Bituminous concrete to be reviewed prior to use</p> <p>Preliminary Work Subgrade marked out</p> <p>Testing Plan Common fill subgrade to be tested for in-place compaction to 95% of ASTM D 698 Aggregate subbase to be tested for in-place compaction to 97% of ASTM D 1557 Bituminous concrete to be tested for placement compaction at 96% of ASTM D 1188</p> <p>Work Method and Schedule Set survey control for edge of road and elevations for subgrade and subbase Use a concrete saw to cut existing roadway to make a smooth tie-in with the new pavement Place and compact common fill subgrade Place woven geotextile over the subgrade Place and compact the aggregate subbase Complete the bituminous concrete surface in the spring</p> <p>Activity Hazard Analysis Reviewed the AHA with the Site Crew Copy attached</p>
	THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

CO Durb 1-21-03

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR ATKINS ROAD EXTENSION MODIFICATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Atkins Road Extension Modification	Struck By/Against Heavy Equipment, Protruding Objects	<ul style="list-style-type: none"> Wear reflective warning vests when exposed to vehicular traffic Isolate equipment swing areas Make eye contact with operators before approaching equipment Understand and review hand signals Step away from equipment when bucket adjustments are made Do not attempt verbal communication in high noise backgrounds Park equipment in areas where operator can see clearly to dismount equipment 	Hard hat, goggles and face shield or safety glasses, steel toe work boots	
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. Maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads 		
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear walkways, work areas of equipment, tools, debris, and other materials Mark, identify, or barricade other obstructions Use three point contact when ascending/ descending heavy equipment Park heavy equipment on level ground to avoid potential sprains/strains when ascending/ descending 		
	Inhalation and Contact with Dusts	<ul style="list-style-type: none"> Apply water spray to road surfaces to minimize/eliminate fugitive dust 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 Provide fluids to prevent worker dehydration 	Insulated Clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Dozer PID, LEL/O₂ and vinyl chloride detector tubes, as necessary 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers' requirements Excavation inspection/permit Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP Review operations/safety manuals for all equipment utilized 	

CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE **20-Jan-03**

Index No. **088-111**

Activity No. **02742**

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	TESTING PERFORMED & WHO PERFORMED TEST
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Atkins Road Extension	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	<p>Began road modification by saw cutting the existing road Marked out the road elevations and determined where to cut the road beyond the changed contours Used a walked behind concrete saw to cut the asphalt All safety measures were taken</p>				
				<p>1-21-03</p>	

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 087
Date 17-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No scheduled work due to the snow cover. Cleared the weir Checked the erosion controls	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

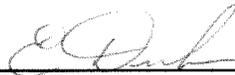
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Received approximatley 2" of snow overnight.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

1-20-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 086
Date 16-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315D Finished final grading of the topsoil in the southern half of Area 1 Survey support was used to verify material was on grade and that the proper cover was in-place After final grading tracked the surface of the topsoil perpendicular to the slope in preparation for seeding #02951 After topsoil seed bed was prepared the southern half of Area 1 was hydroseeded Seed mix and fertilizer at the correct rates were mixed into clean water from the hydrant and applied to the southern half (1 acre) of Area 1 After the area was hydroseeded the Hydro-Blanket was applied in multiple sprayings to Area 1 #02315D Continued to receive, spread and grade the topsoil on the northern half of Area 1 Survey support was used to verify material was on grade and that the proper cover was in-place After final grading tracked the surface of the topsoil perpendicular to the slope in preparation for seeding Measured out the wetland areas and applied the leaf-grow in the northern half of Area 1 A thin layer approximately 2" thick was applied with the excavator and then mixed in with the teeth of the bucket #01575N Reinstalled two additional rows of silt fence on the unseeded slope of Area 1</p>			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
REMARKS: Prepared the site for the forecasted snow to start over night.				
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				
 Ernie Duke - QC Manager				1-17-03 DATE
GOVERNMENT QUALITY ASSURANCE REPORT			DATE	
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 085
Date 15-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>#02315D Finished final grading of the topsoil in Area 2 Survey support was used to verify material was on grade and that the proper cover was in-place After final grading tracked the surface of the topsoil perpendicular to the slope in preparation for seeding #02951 After topsoil seed bed was prepared Area 2 was hydroseeded Seed mix and fertilizer at the correct rates were mixed into clean water from the hydrant and applied to Area 2 After the area was hydroseeded the Hydro-Blanket was applied in multiple sprayings to complete Area 3 and then Area 2 #02315D Continued to receive, spread and grade the topsoil on the southern half of Area 1 Survey support was used to verify material was on grade and that the proper cover was in-place After final grading tracked the surface of the topsoil perpendicular to the slope in preparation for seeding Measured out the wetland areas and applied the leaf-grow in the southern half of Area 1 A thin layer approximately 2" thick was applied with the excavator and then mixed in with the teeth of the bucket</p>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Checked the weights of the topsoil trucks
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS: QC Meeting conducted at the site office trailer.					
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				 Ernie Duke - QC Manager	
				1-16-03 DATE	
GOVERNMENT QUALITY ASSURANCE REPORT			DATE		
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT					
				_____ GOVERNMENT QUALITY ASSURANCE MANAGER	
				_____ DATE	

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 084
Date 14-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Restoration Activity # 02951 Checklist attached	
	THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02315D Finished final grading of the topsoil layer in Area 3 Survey support was used to verify material was on grade and that the proper cover was in-place After final grading tracked the surface of the topsoil perpendicular to the slope in preparation for seeding in Areas 3 and 2 #02315D Continued to receive, spread and grade the topsoil in Area 2 Measured out the wetland areas and applied the leaf-grow in Area 2 A thin layer approximately 2" thick was applied with the excavator and then mixed in with the teeth of the bucket Applied a 6' layer of topsoil to the southern channel working around the stone checkdams Either tracked the slopes of the channels or used a hand rake to scarify the topsoil	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		Checked the weights of the topsoil trucks

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

1-15-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 1/14/2003

Contract No. N624790-97-D-5000

Index No. 084-P10

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Site Restoration Activity Number 02951</p> <p>Attendees:</p> <p>MET Limited, (Hydroseeding Subcontractor)</p> <p>Mike Turley, Supr. - MET</p> <p>Brian Foster, Driver - MET</p> <p>Reviewed with Site Crew following morning</p> <p>Randy Johnson, Supr - Shaw</p> <p>Plans and Specifications:</p> <p>Section 02951 for Seeding and Wetland Plants</p> <p>Drawing - C-7 and C-4</p> <p>Submittals</p> <p>Topsoil test analytical and composition test results with nutrient recommendations</p> <p>VR-003 to modify the planting schedule and seed mixture</p> <p>TD-005 for the application of the Hydro-blanket</p> <p>Materials</p> <p>Seed mix seed tags/ certification reviewed to confirm to the appropriate seed</p> <p>Fertilizer bags checked, Time release 18-24-12 to be used at proper application rate for soil test</p> <p>No lime is required per the soil test</p> <p>Pounds per acre to be applied: 78lbs of seed mix, 350 lbs of rime release fertilizer</p> <p>3000 lbs per acre of the Hydro-Blanket to be applied</p> <p>Preliminary Work</p> <p>Topsoil placed and graded as a 6" layer tracked perpendicular to the slope to minimize runoff</p> <p>Testing Plan</p> <p>Test results previously submitted</p> <p>Work Method and Schedule</p> <p>Seed mix, fertilizer and clean water from the hydrant to be mixed and applied with the hydroseeder</p> <p>After application of the seed and fertilizer the Hydro-Blanket to be applied in multiple layers</p> <p>Will mow and refertilize the areas in the spring</p> <p>Activity Hazard Analysis</p> <p>QC Mgr reviewed the AHA with MET Limited</p> <p>Copy attached</p> <p>AHA reviewed with Site Crew the following morning</p>
	THE SUBMITTALS HAVE BEEN APPROVED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E. Dub

1-15-03

CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE **14-Jan-03**

Index No. **084-110**

Activity No. **02951**

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<table border="1"> <thead> <tr> <th>TESTING PERFORMED & WHO PERFORMED TEST</th> </tr> </thead> <tbody> <tr> <td>NA</td> </tr> </tbody> </table>	TESTING PERFORMED & WHO PERFORMED TEST	NA
TESTING PERFORMED & WHO PERFORMED TEST						
NA						
	SAMPLE HAS BEEN PREPARED/APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	TEST RESULTS ARE ACCEPTABLE.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
INITIAL	<p>Seed mix, fertilizer and clean water mixed at the appropriate rates Mixture applied to Area 3 as an even spray covering all areas including the channels Began applying Hydro-Blanket to the seeded area Photos taken of the application</p>					
				<p>1-15-03</p>		

Attachment B
Activity Hazard Analyses

ACTIVITY HAZARD ANALYSIS FOR SITE RESTORATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Site Restoration	Struck By/Against Heavy Equipment, Protruding Objects	<ul style="list-style-type: none"> Wear reflective warning vests when exposed to vehicular traffic Avoid equipment swing areas Make eye contact with operators before approaching equipment Wear hard hats, safety glasses with side shields, or splash/face shields and goggles, and steel-toe safety boots at all times Understand and review hand signals 	Warning vests, hard hat, safety glasses, steel toe work boots	
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear, walkways of equipment, tools, debris, other materials Mark, identify, or barricade other obstructions 		
	High Noise Levels	<ul style="list-style-type: none"> Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. maximum per person for manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Provide fluids to prevent worker dehydration Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements		Training Requirements
<ul style="list-style-type: none"> Bobcat or forklift for moving bulky loads Grass seed 		<ul style="list-style-type: none"> Equipment inspections Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 		<ul style="list-style-type: none"> Review SSHASP Review site-specific AHA with all task personnel Review operation manuals for the pumps and related equipment

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR INSTALLATION OF EROSION CONTROL MATTING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Installation of Erosion Control Matting	Sharp Objects	<ul style="list-style-type: none"> Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Use shears, opposed to knives, to cut the matting (if possible) 	Leather gloves	
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear walkways, work areas of equipment, tools, vegetation and debris Mark, identify, or barricade other obstructions 		
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. Maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads Warm up muscles before engaging in manual lifting activities Avoid actions/activities that contribute to over exertion Review lifting posture/techniques regularly at safety meetings 		
Installation of Erosion Control Matting (continued)	Overexertion	<ul style="list-style-type: none"> Use the right tool for the task at hand Avoid actions/activities that produce overexertion 		
	Allergic Reaction	<ul style="list-style-type: none"> Review allergy hazards with work crew Identify workers with allergies Review work assignments PPE upgrades 	Tyvek coveralls, duct tape bottom of coveralls to boots; latex gloves, if required	
	Insect Stings	<ul style="list-style-type: none"> Avoid hand mowing/clearing in dense brush areas, suspected Areas of stinging insects 	Leather gloves	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR INSTALLATION OF EROSION CONTROL MATTING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
	Contact with Poison Ivy	<ul style="list-style-type: none"> Identify workers who are known to contract poison ivy Wear PPE and tape joints to keep poison ivy irritants/ plant matter away from skin Use protective creams and wash with poison ivy preventing soaps when working in suspected exposure area 	Long sleeve shirts, Tyvek coveralls, Leather gloves	
Installation of Erosion Control Matting (continued)	High Ambient Temperature	<ul style="list-style-type: none"> Monitor for heat stress in accordance with Health and Safety Procedure # HS400 Provide fluids to prevent worker dehydration 		Meteorological Equipment
EQUIPMENT REQUIRED		INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	
<ul style="list-style-type: none"> Matting 		<ul style="list-style-type: none"> Inspection of all emergency equipment (i.e.: first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review Site Specific Health and Safety Plan 	

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 083
Date 13-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Checked the weights of the topsoil trucks</p> <p>#02315D Continued to receive, spread and grade the topsoil in Area 3 and in Area 2 Survey support was used to verify material was on grade and that the proper cover was in-place After final grading tracked the surface of the topsoil perpendicular to the slope in preparation for seeding Measured out the wetland areas and applied the leaf-grow A thin layer approximately 2" thick was applied with the excavator and then mixed in with the teeth of the bucket</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Due to the wet soils in the wetland areas from the ongoing rain and high pond level the leafgrow was applied and mixed with the excavator.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

1-14-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 082
Date 12-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PERFORMED & WHO PERFORMED TEST			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST Topsoil Thickness dug test holes E Duke
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#02315D Continued to spread and grade the topsoil which had been delivered and staged in Area 3 Survey support was used to verify material was on grade and that the proper cover was in-place Tracked the surface of the topsoil perpendicular to the slope in preparation for seeding Continued to grade the select fill in Area following survey support. #01575N Continued repairing and stabilizing super silt fence Repaired the super silt fence by adding an additional layer of silt fence over the existing			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

1-13-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 081
Date 11-Jan-03

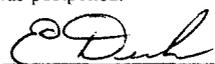
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p> <p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p> <p>Topsoil Thickness dug test holes E Duke</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315D Graded the select fill layer with new material after erosion had been repaired</p> <p>#02315D After receiving clearance to work in Area 3 continued to spread and grade the topsoil which had been delivered and staged</p> <p>Continually tracked the surface of the select fill to provide a good contact surface for the topsoil</p> <p>Survey support was used to verify material was on grade and that the proper cover was in-place</p> <p>#01575N Continued repairing and stabilizing super silt fence</p> <p>Repaired the super silt fence by adding an additional layer of silt fence over the existing</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Notified that Bldg 706 was to be thermally treated Saturday morning
 Work activities were changed to work in Area 1 until all clear could be given to work in Area 3.
 Contacted Base Security at noon and was informed that the treatment was postponed.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

1-12-03
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 080
Date 10-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP		WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>#01575N Continued repairing and stabilizing super silt fence Repaired the super silt fence by adding an additional layer of silt fence over the existing #02315D Began delivery and placement of topsoil in Area 3 As the material was delivered it was spread as a 6" layer Continually tracked the surface of the select fill to provide a good contact surface for the topsoil Tracked Area 1 to promote drying Placed clean aggregate in the low area of Atkins Road Extension to eliminate the ponded water and mud</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
REMARKS:					
Several test holes were dug in a small area east of the channel in area 3 to confirm no waste was in that area.					
<small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small>				 Ernie Duke - QC Manager	
				1-10-03 DATE	
GOVERNMENT QUALITY ASSURANCE REPORT				DATE	
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT					
				GOVERNMENT QUALITY ASSURANCE MANAGER DATE	

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 079
Date 9-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	<p>#01575N Continued repairing and stabilizing super silt fence Used an excavator to straighten and set the steel poles of the super silt fence Galvanized steel poles 12" long were then set to better hold the fence in the soft sediments Tracked the surface of Areas 1 to promote drying Cleaned out the weir #02315D Resumed delivery of select fill Completed a small area adjacent to the road in Area 3 and stockpiled for Area 1 All eroded surfaces were repaired with select fill delivered and regraded following survey control As fill was placed it was compacted with the smooth drum roller All areas were then tracked perpendicular to the slope to make a good contact surface for the topsoil</p>					
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)			
REMARKS:						
Super silt fence stabilized with 12' galvanized steel poles.						
<small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small>				 Ernie Duke - QC Manager		
				1-10-03 DATE		
GOVERNMENT QUALITY ASSURANCE REPORT				DATE		
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT						
				DATE		
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE		

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 078

Date 8-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PERFORMED & WHO PERFORMED TEST			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Continued repairing and stabilizing super silt fence</p> <p>Used an excavator to continue removing sediment away from the super silt fence</p> <p>Once sediment was removed the super silt fence was straightened and repaired if necessary</p> <p>Galvanized steel poles 12" long were then set to better hold the fence in the soft sediments</p> <p>Tracked the surface of Areas 1 and 3 to promote drying</p> <p>Cleaned out the weir</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PERFORMED & WHO PERFORMED TEST			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Super silt fence stabilized with 12' galvanized steel poles.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

1-9-02

DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 077
Date 7-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Continued repairing silt fence</p> <p>Mobilized an excavator to remove sediment from the silt fence and to set longer poles</p> <p>Sediment that topped over the super silt fence was carefully removed with the excavator</p>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Super silt fence stabilized with 12' galvanized steel poles.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

1-8-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 076
Date 6-Jan-03

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Rain and wet site conditions prevented site work Weir was cleaned out to remove tree debris placed by the beaver Began repairing silt fence	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
 Heavy rain over the past weekend caused significant erosion.
 Silt fence and super silt fence held back a large quantity of silt.
 Super silt fence was topped at several locations where the weight pushed over the 6' poles.
 Fence will be stabilized using 12' poles pushed down into more stable soil.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

DATE

GOVERNMENT QUALITY ASSURANCE REPORT

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 075
Date 20-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Rain and wet site conditions prevented site work Cleared weir prior to break After hard rain hand shoveled sediment away from supersilt fence and silt fence upslope Stabilized supersilt fence with 10' steel poles where soft soil at the edge of the pond is too unstable for the 6' poles</p>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
 Received 0.2" of rain by 0700 hrs and 0.5" in approximately 20 minutes at 0900 hrs.
 Demobilized personnel for holiday break.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager 1-06-03
DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
_____ GOVERNMENT QUALITY ASSURANCE MANAGER	_____ DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 074
Date 19-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST In-place Compaction Testing Methods ASTM D 2922 and 3017 E Duke Areas 3, 2 and 1	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	02315 D Fine grading third lift in Areas 3, 2 and 1 Continued delivery and placement of select fill in Area 2 Finished placement of select fill along the edge of Atkins Road Ext Placed and compacted select fill in Area 3 where the waste debris was staged Material was placed and rolled in 6" compacted lifts Each lift was tested with the nuclear density gauge Finished testing the third lift in Area 2 Retested the slopes in Area 1 which had been repaired and regraded				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

12-20-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 073
Date 18-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
TESTING PERFORMED & WHO PERFORMED TEST						
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST In-place Compaction Testing Methods ASTM D 2922 and 3017 E Duke Areas 2 and 3		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	Wet site conditions limited scheduled cover soil placement 02315 D Resumed delivery and placement of select fill in Area 2 Placed all three lifts in the small area south of the drainage channels Material was placed and rolled in 6" compacted lifts Each lift was tested with the nuclear density gauge Tested the third lift over most of Areas 2 and 3					
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS:						
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.						
 Ernie Duke - QC Manager				12-19-02 DATE		
GOVERNMENT QUALITY ASSURANCE REPORT				DATE		
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT						
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE		

Compaction Testing

Methods ASTM D 2922 and ASTM D 3017

Date 12-18-02		Proctor 112.7		Density Standard 2394		Moisture Standard 651	
Number	Location 2	Lift	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
208	STK 377	1st 6"	97.9	110.4	127.5	17.4	15.8
209	404	3rd 6"	100.4	113.2	131.5	18.6	16.5
210	392	3rd 6"	99.2	111.8	130.3	18.5	16.6
211	361	3rd 6"	99.7	112.4	129.2	16.9	15.0
212	F 348 50'S	3rd 6"	82.2	92.6	112.7	20.0	21.6
213	345 50'S	3rd 6"	99.9	112.6	131.1	18.5	16.5
214	416	3rd 6"	95.0	107.1	126.9	19.9	18.5
215	408	3rd 6"	98.8	111.3	129.8	18.5	16.6
216	377	2nd 6"	99.5	112.1	129.0	16.9	15.0
	Area 3						
217	248	3rd 6"	100.2	113.0	130.8	17.8	15.8
218	246	" "	96.4	107.6	127.5	19.2	17.7
219	244	" "	96.5	106.9	108.7	18.2	16.7
220	264	" "	95.2	107.3	128.4	21.2	19.7
221	264 50'S	" "	96.4	108.6	127.6	19.0	17.5
222	268	" "	96.2	108.4	127.1	18.7	17.3
223	285	" "	98.9	111.5	129.2	17.7	15.9
224	283	" "	92.8	104.6	124.0	19.4	18.5
225	282	" "	95.1	107.2	121.3	14.1	13.1
226	299	" "	100.4	113.1	130.0	16.9	13.8
227	302	" "	96.9	109.2	127.8	18.6	17.1
228	303	" "	94.6	106.6	126.6	19.9	18.7
229	304	" "	101.4	114.3	128.9	14.5	12.7
230	310	" "	90.0	101.1	117.3	15.9	15.7
231	325	" "	90.3	101.7	115.6	13.9	13.7
232	324	" "	95.9	108.1	122.8	14.7	13.6
233	323	" "	97.4	109.8	125.4	15.6	14.2
234	322	" "	97.0	109.3	126.6	17.2	15.8
235	321	" "	93.8	105.7	122.6	16.9	16.0
236	377	3rd 6"	97.5	109.9	129.4	19.6	17.8
237	P 348 50'S	3rd 6"	98.8	111.4	131.7	20.3	18.2
238	386 50'S	" "	98.0	110.4	130.3	19.9	18.4

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 072
Date 17-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Rain and wet site conditions prevented scheduled cover soil placement 01575N Maintained erosion controls Used an excavator to carefully track down the wet slope of Area 1 and pull the sediment back from the super silt fence Repaired both the super silt fence and the silt fence where the sediment had damaged it Cleared the debris from the weir Continued to track the surface soils to promote drying 02315 D Began grading the select fill layer in Area 2 following survey control	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

12-18-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 071
Date 16-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p> <p>TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Rain and wet site conditions prevented site work Inspected and maintained erosion controls Cleared the debris from the weir Began to track the surface soils to promote drying			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Received 0.7" of rain over the weekend.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

12-17-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
GOVERNMENT QUALITY ASSURANCE MANAGER DATE	

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 070
Date 13-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>01575N B Finished loadout of non-hazardous waste debris for off site disposal Each load was accompanied by a non-hazardous waste manifest signed by Base personnel The debris was broken up to be able to place more material into truck Cleared out weir as part of daily maintenance 02223 Loaded out 5 overpack drums for hazardous disposal Debra Bolen signed the manifests for the Base Confirmed drums and truck was labeled and placarded prior to leaving the site 01575N Installed a third row of silt fence on the west slope of area 1 because unable to remove all of the silt due to wet slope conditions</p>			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
REMARKS: Rain began early afternoon, but able to continue loadout since working from stabilized construction entrance. Unable to conduct scheduled cover placement due to wet site conditions.				
<small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small>				
 Ernie Duke - QC Manager				12-16-02 DATE
GOVERNMENT QUALITY ASSURANCE REPORT				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 069
Date 12-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	*Began loadout of non-hazardous waste debris for off site disposal Each load was accompanied by a non-hazardous waste manifest signed by Base personnel Cleared out weir			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Received 1.0" of rain overnight.
No scheduled site work due to remaining snow cover and wet site conditions.
QC Meeting conducted at the

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

12-13-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 068
Date 11-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT				
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA				
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>					
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>					
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>					
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>					
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>					
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>					
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>					
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>			<input type="checkbox"/>	NA	
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>			<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>					
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>					
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>					
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>					
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST				
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	No schedule site work performed due to snow cover and rain Cleared the debris from the weir.							

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
No scheduled site work due to snow cover and freezing rain.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

12-12-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
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QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 067
Date 10-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	No schedule site work performed due to snow cover Cleared the debris from the weir.		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS: No scheduled site work due to snow cover Removed equipment from Site 41.						
<small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small>				 Ernie Duke - QC Manager		
				12-11-02 DATE		
GOVERNMENT QUALITY ASSURANCE REPORT				DATE		
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT						
				GOVERNMENT QUALITY ASSURANCE MANAGER DATE		

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 066
Date 9-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>No schedule site work performed due to snow cover Cleared the debris from the weir. Worked on equipment maintenance</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

No scheduled site work due to snow cover

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

12-10-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 065
Date 06-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	No site work performed due to snow accumulation. Cleared snow from Atkins Road Extension. Cleared the debris from the weir.				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Site shut down at 0900 due to snow on site.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Janna Stanzel for
 Ernie Duke - QC Manager

12-6-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 064
Date 05-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	No work performed due to snow.				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Received 6 inches of snow overnight and through the morning.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Janna Glaszof for
Eddie Duke - QC Manager

12-6-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

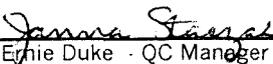
GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 063
Date 04-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	Job Safety Analysis for Cold Stress addressed by Site Safety Officer.	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Cleared the debris from the weir. Continued to receive select fill. Spread select fill in Area 2 as the third lift. Spread select fill in the triangular area of Area 1. Compacted Areas 1 and 2 with a smooth drum roller. Prepared the site for the upcoming snow.</p>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>In-place Compaction Testing Methods ASTM D 2922 and 3017 J. Staszak Lifts 1 and 2 in Area 1 triangle.</p>
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)	
REMARKS: Dan Pringle on site.					
<p>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</p>					
				 Ernie Duke - QC Manager	12-6-02 DATE
GOVERNMENT QUALITY ASSURANCE REPORT					DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT					
GOVERNMENT QUALITY ASSURANCE MANAGER					DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 062
Date 03-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p> <p>In-place Compaction Testing Methods ASTM D 2922 and 3017 J. Staszak Second lift in Area 2 Third lift in Area 3</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>Cleared the debris from the weir. Continued delivery of select fill to Area 2. Spread second lift of select fill in Area 2. Continued to grade Area 3 to meet the grade stakes for the top of select fill. Compacted Areas 2 and 3 with a smooth drum roller.</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Shawn Jorgensen and Heidi Morgan were on site.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Janna Staszak FOR
Ernie Duke - QC Manager

12-4-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

Compaction Testing

AREA 3 - LIFT 2

Methods ASTM D 2922 and ASTM D 3017

Date 12-3-02		Proctor		Density Standard 2369		Moisture Standard 643	
Number	Location *	Lift	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
182	STAKE 242	2 ND -6"	90.1	101.6	115.6	14.0	13.8
183	STAKE 262	2 ND -6"	91.9	103.5	114.5	11.0	10.6
AREA 2 - LIFT 2							
184	BETWEEN 428:432	2 ND -6"	89.1	100.4		18.4	18.4
185	STAKE 433		95.6	107.7	122.1	14.4	13.3
186	STAKE 403		94.6	106.6	120.6	14.0	13.1
187	STAKE 405		98.9	111.4	129.7	18.3	16.4
188	STAKE 435		96.5	108.8	124.5	15.7	14.4
189	STAKE 381		87.7	98.8	110.4	11.6	11.8
190	STAKE 362		97.2	109.6	124.3	14.7	13.5
191	STAKE 383		101.7	114.6	130.3	15.7	13.7
192	STAKE 407		98.8	111.3	128.6	17.3	15.5
193	STAKE 437		91.8	103.5	116.4	13.0	12.5
194	STAKE 439		94.5	106.4	121.7	15.2	14.3
195	STAKE 409		94.9	107.0	121.8	14.8	13.9
196	STAKE 385		96.0	108.2	119.9	11.7	10.8
197	STAKE 364		91.9	103.5	117.3	13.8	13.3
198	STAKE 366		94.5	106.5	121.5	14.9	14.0
199	STAKE 350		92.2	103.9	121.4	17.5	16.8
200	STAKE 387		87.7	98.8	112.3	13.4	13.6
201	STAKE 411		88.3	99.6	109.7	10.1	10.2
202	STAKE 441		95.1	107.1	125.0	17.9	16.7
203	STAKE 443		92.6	104.4	121.3	16.9	16.2
204	BETWEEN 413:417	↓	86.3	97.3	111.2	13.9	14.3
* LOCATIONS ARE APPROXIMATE							

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 061
Date 2-Dec-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT				
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA				
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>					
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>					
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>					
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>					
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>					
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>					
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>					
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>			<input type="checkbox"/>	NA	
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>			<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>					
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>					
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>					
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>					
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST TESTING PERFORMED & WHO PERFORMED TEST In-place Compaction Testing Methods ASTM D 2922 and 3017 J. Staszak First lift in Area 2				
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	Cleared the debris from the weir. Spread the stockpiled select fill in Area 2 as the first lift. Continued to grade the select fill in Area 3 to meet the grade stakes. Compacted select fill in Areas 2 and 3 with the smooth drum roller.							

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:
Mobed to the site from holiday weekend.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Jamna Staszak FOR
 Ethie Duke - QC Manager

12-3-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 060
Date 27-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p> <p>TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Wet site conditions prevented earthwork. Performed equipment inspections and shut down site for long holiday weekend.			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Trace of rain overnight.
Demobed for Thanksgiving holiday at 0900.

On behalf of this contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Janna Staszal FOR
Trinie Duke - QC Manager

11-27-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 059
Date 26-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	Continued delivery of select fill to the site. Stockpiled select fill in Area 2 and compacted to minimize infiltration during upcoming precipitation. Placed grade stakes to aid in final grading of the Area 3 select fill layer.			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
REMARKS:				
<p style="font-size: small;">On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</p>				
<i>Janna Staszak</i> FOR Ernie Duke - QC Manager				11-26-02 DATE
GOVERNMENT QUALITY ASSURANCE REPORT				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

Compaction Testing

AREA 3 - 2ND LIFT

Methods ASTM D 2922 and ASTM D 3017

Date 11-26-02		Proctor 112.7		Density Standard 2369		Moisture Standard 640	
Number	Location	Lift	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
128	Stake 242	1 ST -6"	96.3	108.5	127.2	18.7	17.2
129	244	2 ND -6"	91.5	103.1	118.3	15.2	14.7
130	264	2 ND -6"	95.9	108.6	122.0	14.0	12.9
131	284	2 ND -6"	91.3	102.9	116.6	13.7	13.3
132	286	2 ND -6"	93.5	105.3	119.5	14.2	13.4
133	248	2 ND -6"	91.4	103.0	122.8	19.8	19.3
134	310	2 ND -6"	92.5	104.3	120.0	15.8	15.1
135	324	2 ND -6"	92.2	103.9	117.6	13.7	13.2
136	322	2 ND -6"	91.2	102.8	116.8	14.0	13.6
137	315	2 ND -6"	86.6	97.6	110.6	13.0	13.3
138	302	2 ND -6"	96.1	108.3	122.2	14.0	12.9
139	304	2 ND -6"	97.1	109.4	123.8	14.3	13.1
140	286	2 ND -6"	93.0	104.8	118.4	13.6	13.0
141	284	2 ND -6"	92.8	104.5	117.7	13.1	12.5
142	296	2 ND -6"	92.3	104.8	116.4	12.4	11.9
143	Between 300;294	2 ND -6"	91.8	103.4	117.3	13.9	13.4
NEW STANDARD COUNT : DS = 2387 MS = 644							
(TROXLER OFF/ON DUE TO PROBLEM WITH DEPTH)							
144	STAKE 277	2 ND -6"	89.3	100.7	110.8	10.1	10.0
145	265	2 ND -6"	90.7	102.2	114.8	12.6	12.3
146	267	2 ND -6"	92.9	104.7	122.3	17.5	16.7
147	272	2 ND -6"	91.2	102.8	121.8	18.2	17.7
148	BETWEEN 248;249	2 ND -6"	91.3	102.9	122.1	19.9	18.6
149	247	2 ND -6"	97.5	109.9	126.4	16.5	15.0
150	245	2 ND -6"	90.9	102.5	114.6	12.2	11.9
151	237	2 ND -6"	94.1	106.1	127.8	21.8	20.5
152	258	2 ND -6"	93.4	105.3	126.3	21.0	20.0
153	222	2 ND -6"	95.0	107.1	128.6	21.5	20.1
154	224	2 ND -6"	91.9	103.6	125.7	22.2	21.4

CONTRACTOR QUALITY CONTROL REPORT					Report No. 058
Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062					Date 25-Nov-02
IASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	Resumed delivery of select fill to the site. Continued placement of select fill in Area 3. Compacted the select fill lift in Area 3 with a smooth drum roller.				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS:					
<small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small>					
				<i>Jenna Staszal for</i> Ethie Duke - QC Manager	11-25-02 DATE
GOVERNMENT QUALITY ASSURANCE REPORT					DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT					
GOVERNMENT QUALITY ASSURANCE MANAGER					DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 057
Date 22-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	One load of No. 1 aggregate was delivered to the site. No. 1 aggregate was used to upgrade the Area 3 SCE. Cleared the debris from the weir.			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:
Wet site conditions prevented the placement of select fill.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Janne Kaszal FOR
 Ernie Duke - QC Manager

11-25-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 056
Date 21-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
				Resumed delivery of select fill to the site Attempted to complete placement of the second lift but material was still too soft Stockpiled trucks in area 3 and compacted to minimize infiltration

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:
 Accident at Site 41 at approximately 1400 hrs.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager 11-22-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT

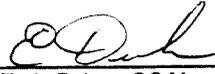
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 055
Date 20-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transportation and Disposal - Hazardous Activity # '02223 Checklist attached
	THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST ayer PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Wet site conditions prevented scheduled site work As the slope dries was able to access and pull back more wet select fill away from the super silt fence for maintenance Cleared the debris from the weir Tracked the surface of Area 3 to promote drying TD-003 Began construction of the riprap slope protection at the 78" culvert Regraded the slope to interim grade leaving 6" of Select Fill as part of the 2' cover Placed a layer of geotextile as specified Began placing the 18" thick layer of D50 6" riprap Will tie in the road drainage from the road south of the channel			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
REMARKS: Received approval via e-mail for TD-003 to construct the riprap slope protection at the 78" culvert.				
<small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small>				 Ernie Duke - QC Manager
				11-21-02 DATE
GOVERNMENT QUALITY ASSURANCE REPORT				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 11/20/2002

Contract No. N624790-97-D-5000

Index No. 055-P09

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Transportation and Disposal, Haz Activity Number 02223</p> <p>Attendees: Site Crew Randy Johnson, Shaw Joe Walker, Shaw</p> <p>Plans and Specifications: Section 02223 for Transportation and Disposal of Contaminated Waste Drawing - NA</p> <p>Submittals Analytical test results demonstrating the waste is hazardous</p> <p>Materials Material/waste drums to be overpacked for disposal</p> <p>Preliminary Work Waste drums have been staged in a drum containment area awaiting analysis</p> <p>Testing Plan Waste has been tested in accordance with the State and Local Regulations</p> <p>Work Method and Schedule Waste drums to be overpacked for shipment to an approved facility Waste profile has been signed by generator Upon approval manifest will be reviewed and signed by Joe Minter for the Base</p> <p>Activity Hazard Analysis Site Safety Officer reviewed the job hazards with the site personnel Copy attached</p>	
	THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	 11-21-02				

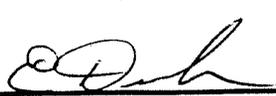
CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE **20-Nov-02**

Index No. **055-109**

Activity No. **02223**

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT				
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%; text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</td> </tr> <tr> <td></td> <td style="text-align: center;">NA</td> </tr> </table>		TESTING PERFORMED & WHO PERFORMED TEST		NA
	TESTING PERFORMED & WHO PERFORMED TEST							
	NA							
	SAMPLE HAS BEEN PREPARED/APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	TEST RESULTS ARE ACCEPTABLE.	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>					
INITIAL	<p>Drums had been sampled and determined to be hazardous Overpacked drums which had been sampled All drums were placed into 5 overpacks for shipment</p>							
				 11-21-02				

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

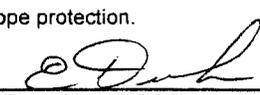
Report No. 054
Date 19-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Wet site conditions prevented any site work Began pulling wet select fill back from the super silt fence for maintenance Cleared the debris from the weir</p>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS:						
<p>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</p>						
 Ernie Duke - QC Manager				11-20-02 DATE		
GOVERNMENT QUALITY ASSURANCE REPORT				DATE		
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT						
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE		

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 053
Date 18-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	<p>Wet site conditions prevented any site work Inspected E&S controls, Significant erosion of the slope within the site E&S controls functioned properly, some overtopping of the supersilt fence on the west side of Area 1 Too wet to access the slopes to make repairs. Repairs will be made prior to the next forecasted rain event.</p>					
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS: Received 2.1" of rain over the weekend. Significant erosion of the select fill layer on the west side of Area 1. Contacted the ROICC and submitted RFI-006 for direction on slope protection.						
On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.				 Ernie Duke - QC Manager		
				11-19-02 DATE		
GOVERNMENT QUALITY ASSURANCE REPORT				DATE		
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT						
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE		

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 052
Date 15-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315D Resumed delivery and placement of Select Fill Material conforms to source and quality inspected and sampled Fill is spread in 8" lifts following survey control for grades As the lift is placed and graded it is compacted with the smooth drum roller Worked on second lift in Area 3 #01575N Removed additional sediment from behind the super silt fence in Area 1 Cleared debris from the weir</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

11-18-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 051
Date 14-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div style="text-align: right; margin-bottom: 5px;">ayer PERFORMED TEST</div> <hr/> <div style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</div>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	Wet site conditions prevented scheduled site work Tracked area 3 to promote drying Cleared debris from the weir				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS:					
<div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="font-size: small;"> On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report. </div> <div style="text-align: center;">  Ernie Duke - QC Manager </div> <div style="text-align: right;"> 11-15-02 DATE </div> </div>					
GOVERNMENT QUALITY ASSURANCE REPORT				DATE	
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT					
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE	

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 050
Date 13-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Steady rain prevented scheduled site work Inspected and maintained sediment and erosion controls Cleared debris from the weir
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

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PERFORMED TEST

TESTING PERFORMED & WHO
PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:
Received 0.8" of rain since 0700 hrs on Tuesday.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

11-13-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 049
Date 12-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Steady rain prevented scheduled site work Inspected and maintained sediment and erosion controls Cleared debris from the weir
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

ayer
PERFORMED TEST

TESTING PERFORMED & WHO
PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Received 0.5" of rain since 0700 hrs on Monday.
Precon Meeting for Site 41 at the ROICC Office.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

11-13-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 048
Date 11-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Rain prevented scheduled site work Inspected and maintained sediment and erosion controls Installed an additional line of silt fence along Atkins Road to reduce erosion Cleared debris from the weir			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Rain began prior to work, received 0.1" by 0700.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

11-12-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 047
Date 10-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p> <p>In-place Compaction Testing Methods ASTM D 2922 and 3017 E Duke First lift in Area 3 and the 3rd lift in Area 1</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315D Continued grading the Select Fill Completed final grading the third lift in Area 1 Select Fill which had been stockpiled was spread where necessary to meet final grade Grades were confirmed by inspecting the grade stakes for interim grade Surface rolled with the smooth drum roller as grading was complete Continued placing fill and grading the first lift in Area 3 Finished grading the edge of Area 3 pumping water as necessary Water along the edge, which was flowing in from the pond was blocked off and pumped through the portable sediment tank The sediment tank was set up at the top end of the riprap in Area 3 to prevent any erosion from the discharge TD-002 Finished pulling back any waste from below the channel south of the site Began installing the riprap apron starting at the endwall of the existing culvert Geotextile was installed under the riprap</p>			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
REMARKS:				
<p><small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small></p>				
				 Ernie Duke - QC Manager
				11-11-02 DATE
GOVERNMENT QUALITY ASSURANCE REPORT				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
				GOVERNMENT QUALITY ASSURANCE MANAGER DATE

Compaction Testing

Area 1 3rd Lift

Methods ASTM D 2922 and ASTM D 3017

Date 11-10-02		Proctor 112.7		Density Standard 2372		Moisture Standard 638	
Number	Location	Lift	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
097	55K 613	3rd 6"	96.4	108.6	126.3	17.7	16.3
098	622	" "	96.1	108.4	126.5	18.1	16.7
099	611	" "	98.5	110.0	128.9	17.8	16.0
100	591		96.2	108.5	127.0	18.6	17.1
101	609		97.1	109.4	126.5	17.1	15.6
102	607		93.8	105.7	123.5	17.7	16.8
103	583		97.0	109.3	125.9	16.6	15.2
104	555		95.1	107.2	122.3	15.1	14.0
105	626		91.6	103.2	122.7	19.5	18.9
106	596		96.6	108.9	125.8	17.0	15.6
107	579		96.2	108.4	124.6	16.2	14.9
108	550		95.6	107.8	124.4	16.6	15.4
109	516		96.0	108.2	122.7	14.5	13.4
110	477		94.9	107.0	125.9	18.9	17.6
111	475		98.8	111.3	130.3	19.0	17.0
112	514		95.4	107.5	119.7	12.2	11.4
113	548		96.6	108.9	127.3	18.4	16.9
114	576		93.1	104.9	123.9	19.1	18.2
115	574		94.5	106.5	123.3	16.9	15.7
116	546		92.0	103.6	126.7	23.0	22.2
117	512		93.9	105.9	126.8	21.0	19.8
118	672		93.8	105.7	126.1	20.4	19.3
119	470		93.5	105.4	127.3	21.9	20.8
120	510		94.8	106.9	127.8	21.0	19.6
121	571		95.1	107.2	125.9	18.8	17.5
122	541		91.9	103.6	123.3	19.7	19.0
123	508		92.9	104.7	125.8	21.1	20.2
124	468		91.5	103.1	125.0	21.9	21.2
125	466		90.7	102.2	126.5	24.3	23.8
126	506		96.3	108.5	128.0	19.4	17.9
127	499		94.8	106.9	126.0	19.1	17.9

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 046
Date 9-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	#02315D Continued grading the Select Fill Worked on final grading the third lift in Area 1 Select Fill which had been stockpiled was spread where necessary to meet final grade Grade stakes were reset to check grade and confirm 18" of Select Fill Surface rolled with the smooth drum roller as grading was complete Placed fill and graded the first lift in Area 3 Water along the edge, which was flowing in from the pond was blocked off and pumped through the portable sediment tank The sediment tank was set up at the top end of the riprap in Area 3 to prevent any erosion from the discharge TD-001 Installed the 18" culvert extension as approved placing the riprap buttress against the bank				
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)			REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS:					
<p style="font-size: small;">On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</p> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;">  Ernie Duke - QC Manager </div> <div style="text-align: right;"> 11-10-02 DATE </div> </div>					

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 045
Date 8-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP		WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	#02315D Resumed delivery and placement of Select Fill Material conforms to source and quality inspected and sampled Fill is spread in 8" lifts following survey control for grades As the lift is placed and graded it is compacted with a min 10 ton smooth drum roller Worked on third lift in Area 1 and the first lift in Area 3 #02315C Excavating and grading waste in the triangle south of the site Graded down the hump along the edge of the old Limit of Disturbance Waste was graded to a maximum slope of 4H:1V and compacted in thin lifts Pulled back all waste from the base of the channel and excavated the area for the riprap apron below the culvert					

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Shawn Jorgensen, IH Env and Curtis DeTore, MDE were onsite.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

11-9-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 044
Date 7-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#1575N Permanent repaire of super silt fence adjacent to the 78" culvert at Atkins Road Ext. Hand dug the remainder of the accumulated sediment away from the supersilt fence Realigned and reset the fence poles to reinstall the damaged fence #02315B Cut the trees and removed the stumps from the triangle area south of the site where additional waste was found Excavated the additional waste downslope of the riprap in Area 2 All waste was removed to original soil east of the channel. Waste was ovexcavated 2-feet downslope of the channel The excavated soil/waste was spread in a low area of Area 2 as a thin lift The excavated area was backfilled with select fill in lifts and compacted before the water could infiltrate into the depression Tracked the surface of the site to promote drying</p>			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
REMARKS: Submitted RFI-005 for the Slope Erosion. QC Meeting conducted at site office.				
<small>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</small>				 Emie Duke - QC Manager
				11-8-02 DATE
GOVERNMENT QUALITY ASSURANCE REPORT				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 043
Date 6-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>Rain and wet site conditions prevented any earthwork Inspected and maintained E&S controls Sediment accumulated behind the super silt fence adjacent to the 78" culvert removed Super silt fence temporarily repaired</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:

Received 1.0" of rain overnight.
Meeting and Site Inspection for Site 41, Scrap Yard.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 042
Date 5-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p> <p>In-place Compaction Testing Methods ASTM D 2922 and 3017 E Duke</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315 D Continued delivery and placement of Select Fill Material conforms to source and quality inspected and sampled Fill is spread in 8" lifts+B40 following survey control for grades As the lift is placed and graded it is compacted with a min 10 ton smooth drum roller Worked on second and third lifts in Area 1 Sealed surface of all loose material to prepare for forecasted rain</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

11-6-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

Compaction Testing

Area 1

Methods ASTM D 2922 and ASTM D 3017

Date 11-5-02		Proctor 112.7		Density Standard 2384		Moisture Standard 1.45	
Number	Location	Lift 6"	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
029	584	1st	85.6	96.4	123.3	26.8	27.8
030	588	"	86.2	97.1	122.0	24.8	25.6
031	592	"	93.8	105.7	127.9	22.1	20.9
032	609	"	93.9	105.8	127.1	2.3	20.1
033	617	"	95.0	107.1	127.2	20.1	18.7
034	611	"	87.8	99.0	121.5	22.5	22.7
035	615	"	86.1	97.1	122.1	25.0	25.8
036							
036	615	2nd	94.0	105.9	128.0	22.0	20.8
037	611	"	96.6	108.9	128.0	19.1	17.6
038	600	"	92.5	104.3	125.6	21.3	20.4
039	592	"	94.8	106.8	127.1	20.2	18.9
040	584	"	91.0	102.6	125.2	22.6	22.0
041	463 near	"	91.5	103.1	116.1	13.0	12.6
042	463 + 50's	"	96.3	108.5	123.5	15.1	13.9
043	503	"	90.4	101.9	114.0	12.1	11.8
044	506	"	98.2	110.7	124.2	13.6	12.3
045	466	"	96.9	109.3	123.8	14.5	13.3
046	466 - 50's	"	96.9	109.2	121.6	12.4	11.4
047	506 - 50's	"	96.8	109.0	122.2	13.2	12.1
048	541	"	90.4	101.9	112.9	10.9	10.7
049	510	"	92.8	104.6	118.6	14.0	13.4
050	544	"	91.1	102.6	121.8	19.2	18.7
051	574	"	89.6	101.0	114.5	13.6	13.4
052	546	"	93.5	105.4	119.2	13.8	13.1
053	510 - 50's	"	96.8	109.1	122.1	13.0	11.9
054	510 - 100's	"	98.2	110.6	125.6	15.0	13.5
055	546 - 50's	"	92.7	104.4	120.3	15.9	15.2
056	577	"	92.7	104.4	120.3	15.9	15.2
057	597	"	91.6	103.3	115.3	12.1	11.7
058	563	"	87.8	99.0	117.0	18.1	18.3

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 041
Date 4-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	PERFORMED TEST	
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>			
	TEST RESULTS ARE ACCEPTABLE	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK IS IN COMPLIANCE WITH THE CONTRACT	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02315 D Resumed delivery and placement of Select Fill Material conforms to source and quality inspected and sampled Fill is spread in an 8" lift following survey control for grades As the lift is placed and graded it is compacted with a min 10 ton smooth drum roller	TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			In-place Compaction Testing Methods ASTM D 2922 and 3017 E Duke

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Crew returned from rotation.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

11-5-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 040
Date 1-Nov-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>			
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">PERFORMED TEST</td> </tr> <tr> <td style="height: 40px;"> </td> </tr> </table>	PERFORMED TEST	
	PERFORMED TEST					
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</td> </tr> <tr> <td style="height: 40px;"> </td> </tr> </table>	TESTING PERFORMED & WHO PERFORMED TEST		
TESTING PERFORMED & WHO PERFORMED TEST						
Site too wet to conduct any earthwork						

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

11-4-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 039
Date 31-Oct-02

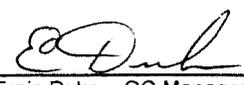
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Site too wet to conduct any earthwork Inspected erosion and sediment controls			

PERFORMED TEST
TESTING PERFORMED & WHO PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

11-1-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 038
Date 30-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST TESTING PERFORMED & WHO PERFORMED TEST
	Site too wet to conduct any earthwork Inspected erosion and sediment controls			

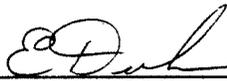
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Received 0.7" of rain since yesterday at 0700.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

11-1-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 037
Date 29-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PERFORMED & WHO PERFORMED TEST			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Site too wet to conduct any earthwork Inspected erosion and sediment controls Reinstalled the bird houses which had been removed for site work			

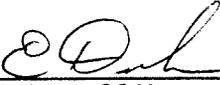
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Received 0.75" of rain overnight.
Rain began again late morning

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

11-1-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 036
Date 28-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#02315D Continued to receive Select Fill from approved source Material placed and spread in an 8" lift in Area 1 Graded material was then compacted with a smooth drum roller Began checking weights of the trucks with portable scales			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Rain began at 1100 hrs, work stopped at 1200.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

11-1-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 035
Date 25-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02315D Continued to receive Select Fill from approved source Material placed and spread in an 8" lift Graded material was then compacted with a smooth drum roller Rolled areas 2 and 3 to seal the surface
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

PERFORMED TEST
TESTING PERFORMED & WHO PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:


 Ernie Duke - QC Manager

11-1-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 034
Date 24-Oct-02

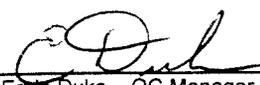
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315D Continued to receive Select Fill from approved source Material inspected upon receipt as being in conformance with submittal Material placed and spread in an 8" lift Graded material was then compacted with a smooth drum roller Continued to loosen the surface of Area 3 promote drying</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:

QC Meeting at the Site office.
Inspected the areas of additional waste.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

11-1-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

 GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 033
Date 23-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Cover Soil Placement Activity # 02315D Checklist Attached	
	THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>		<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED		<input checked="" type="checkbox"/>	<input type="checkbox"/>	PERFORMED TEST	
WORKMANSHIP IS SATISFACTORY		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	#02315C Tracked surface soils in Areas 2 and 3 to promote drying Area 1 which had been tracked in several areas was rolled with the smooth drum roller in preparation for Select Fill Water which had accumulated along the edge of the pond was pumped to a holding cell where it infiltrated into the landfill as approved				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Received approval from the ROICC that the analytical test results submitted for the Select Fill and Topsoil were acceptable

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-24-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL COVER SYSTEM INSTALLATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Soil Cover Installation	Inhalation and Contact with Hazardous Substances (first layer only)	<ul style="list-style-type: none"> • Provide workers proper skin, eye and respiratory protection based on the exposure hazards present • Review hazardous properties of site contaminants with workers before operations begin • Wear hard hats, safety glasses with side shields, or goggles with splash shields and steel-toe safety boots • Apply water spray to road surfaces to minimize/eliminate fugitive dust 	Tyvek coveralls, latex or rubber overboots, inner cotton glove liners (based on weather) or inner sample gloves and outer nitrile gloves	PID, LEL/O ₂ , and vinyl chloride detector tubes, as necessary
	Struck By/Against Heavy Equipment	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Isolate equipment swing areas • Make eye contact with operators before approaching equipment • Understand and review hand signals • Step away from equipment when bucket adjustments are made • Do not attempt verbal communication in high noise backgrounds • Park equipment in areas where operator can see clearly to dismount equipment 		
	High Noise Levels	<ul style="list-style-type: none"> • Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways of equipment, vegetation, tools, and debris • Mark, identify, or barricade other obstructions • Exit equipment slowly and maintain three point contact • Clean boot soles before climbing on equipment • Watch footing on the side of the embankment • Exit equipment slowly and maintain three point contact 		

**Appendix B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL COVER SYSTEM INSTALLATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Soil Cover Installation (Cont.)	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. Maximum per person manual lifting) Avoid carrying heavy objects above shoulder level Warm up muscles before engaging in manual lifting 	Warning vests, hard hat, safety glasses, steel toe work boots	
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Provide fluids to prevent worker dehydration Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements		Training Requirements
<ul style="list-style-type: none"> Dozer PID, LEL/O₂ and vinyl chloride detector tubes, as necessary 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers' requirements Excavation inspection/permit Inspect all safety equipment (fire extinguishers, first aid kits and eye washes) 		<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP Review operations/safety manuals for all equipment utilized

CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE 23-Oct-02

Index No. 033-108

Activity No. 02315D

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
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PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEST RESULTS ARE ACCEPTABLE.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

TESTING PERFORMED & WHO PERFORMED TEST
Compaction Testing E Duke

Cover Soil Placement
 #2315D Began delivery of Select Fill upon approval of analytical testing by ROICC
 Material was inspected and conformed to material sampled at the source
 Material was spread and compacted in an 8" loose lift
 Material was then compacted with a smooth drum roller
 Testing conformed to required compaction of 85% of maximum dry density.

INITIAL

E Duke 10-24-02

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 032
Date 22-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transportation and Disposal, Non-Hazardous Activity # 01575NB Checklist Attached
	THE SUBMITTALS HAVE BEEN APPROVED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Transportation and Disposal, Non-Hazardous Checklist Attached
	SAMPLE HAS BEEN PREPARED/APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02315C Continued grading waste material in areas 2 and 3 Spreading waste/soil in a thin 8" lift and compacting each lift with the smooth drum roller Moist soils spread to promote drying Grading followed survey control set per the interim grades Surveyor continued to set grade stakes
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

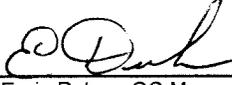
PERFORMED TEST
TESTING PERFORMED & WHO PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-23-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 10/22/2002

Contract No. N624790-97-D-5000

Index No. 032-P07

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Regrading of Waste Activity Number 01575NB</p> <p>Attendees: Site Crew Randy Johnson, Shaw Joe Walker, Shaw Steve Carrier, Shaw</p> <p>Plans and Specifications: Sections 01575N for Non-Hazardous Waste Drawing - NA</p> <p>Submittals Analytical test results demonstrating the waste is non-hazardous Waste Disposal Permit for Solid Waste Facility</p> <p>Materials No materials are necessary for T&D</p> <p>Preliminary Work Waste has been segregated as acceptable to landfill facilities Tires have been dry deconned removing soil from inside and outside Stumps have been prepared by removing excess soil</p> <p>Testing Plan Waste has been tested in accordance with the State and Local Regulations</p> <p>Work Method and Schedule Tires have been accepted at the BFI Old Dominion Landfill in VA Pursuing acceptance of waste debris and stumps at the King and Queen Landfill in VA. Tires to be loaded out on 10-22-02 and delivered directly to Old Dominion where they will be shredded Driver to return a copy of the weight ticket Waste debris and stumps to be loaded out upon final acceptance at King and Queen Landfill Waste debris and stumps to be accompanied by a Non-hazardous Waste Manifest Manifest to be signed by the Generator</p> <p>Activity Hazard Analysis Site Safety Officer reviewed the job hazards with the site personnel Copy attached</p>
	THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

E. Duh

10-23-02

CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE **22-Oct-02**

Index No. **032-107**

Activity No. **01575NB**

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
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PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEST RESULTS ARE ACCEPTABLE.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

TESTING PERFORMED & WHO PERFORMED TEST
NA

Loaded out tires for delivery to Old Dominion Landfill
 All tires fit into one truck
 Tires had been prepared by removing soil from within the tires and scraped from the surface

INITIAL

E. Paul 10-23-02



JOB SAFETY ANALYSIS FOR:

**TRANSPORTATION
AND DISPOSAL**

TASK

DATE: 10-22-02 _____

PAGE 1 _____ **OF**

NEW X _____

REVISED _____

PROJECT: INDIAN HEAD LANDFILL TOWN GUT LANDFILL

REVIEWED BY:

Joe Walker

ANALYSIS BY: JOE WALKER

Supervisor

Safety Officer

**BREAKDOWN OF
BASIC JOB STEPS**

POTENTIAL HAZARDS

CRITICAL SAFETY PRACTICES*

Backing up trucks

Hitting other equipment or personnel

use spotter when backing of trucks, use hand signals to stop etc..
use of mirrors. Wear orange vest.

Material Handling

improper lifting by workers or equip.

Bend knees when lifting, use leg muscle not back muscle
if over 60lbs. Get helper

Debri Loadout

Dropping of debri, improper hookup or
loading of material.

Wear proper PPE for Loadout, don't stand to close to debri or
equipment during lifting to truck bed.

Safe Load

unsecure Load
Uneven ground

Make sure that debri is inside truck bed , and tarped before leaving
site. Locate truck in flat safe spot. If possible

Slip, trip, fall Hazards

Check your work area, make sure it is safe to work in.

Pinch Hazards

Wear proper gloves for job being done.

Falling debri

Stand away from loadout of material
tarp truck before leaving site and drive speed limit at all times

Depending on loadout size and shape use of tagline mandatory

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 031
Date 21-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE		<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	#02315C Resumed grading waste material in areas 2 and 3 Spreading waste/soil in a thin 8" lift and compacting each lift with the smooth drum roller Areas which were moist were not covered or compacted until dry Grading followed survey control set per the interim grades #02315B Dry deconned the tires removing soil from both the inside and outside of the tires			TESTING PERFORMED & WHO PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Trace of rain over the weekend.
 Site soils which were all sealed prior to the rain were stable and suitable for grading.
 Several areas which were moist were allowed to dry prior to grading or placing additional material.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-22-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 030
Date 18-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
TESTING PERFORMED				
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	NA
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Wet site conditions prevented any site work Inspected the erosion controls, no problems Restaking the Interim grades in areas 2 and 3			
TESTING PERFORMED & WHO PERFORMED TEST				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

10-21-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 029
Date 17-Oct-02

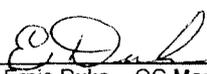
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Wet site conditions prevented any site work Inspected the erosion controls, no problems Attempted to loosen the surface with the tracks of the dozer to promote drying, but too wet Loaded out a roll off container of scrap metal for recycling			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Steady rain overnight.
 Received 0.5" of rain since 0700 the previous day.
 Submitted RFI-004 for the area downslope of the riprap channel.
 Jeff Morris, RPM and Tim Smith of Tetra Tech NUS on-site to inspect the area below the riprap channel.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-18-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
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QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER	DATE
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CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 028
Date 16-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Steady rain and wet site conditions prevented any site work Inspected the erosion controls, no problems Removed debris from the weir			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Steady rain overnight and throughout the day.
Received 1.0" of rain since 0700 the previous day.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-17-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/QR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 027
Date 15-Oct-02

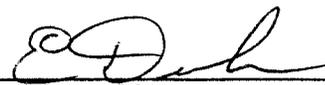
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
TESTING PERFORMED & WHO PERFORMED TEST				
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#02315C Graded most of area 1 to the Interim Grading Plan following survey control Graded adjacent to the pond edge to assure that it is graded to the Grading Plan Cut back the waste material next to the 78" culvert to provide for 2-feet of clean material Grading Area 3 to the lines and grades as surveyed per the Interim Plan Rolled all areas with the smooth drum roller to seal the surface for the forecasted rain #01115 Inspected the erosion and sediment controls prior to the forecasted rain Installed an additional section of silt fence below the riprap channel			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Encountered more waste material downslope of the riprap channel in area 2.
An RFI will be prepared and submitted to the ROICC.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-16-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

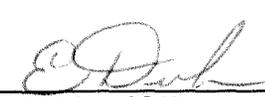
Report No. 026
Date 14-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p>
	<p>#01575N Inspected erosion controls; no problems #02315 Moved the scrap metal and drum storage area to Area 3 to allow interim grading of area 1 Set up a lined, bermed area to stage the drums #02315C Continued to grade waste/soil to the lines and grades of the interim grade of area 1 Wet material was first cut out and spread to promote drying Soil from the stockpile which was dry was then spread in 8" lifts and compacted with a smooth drum roller Began grading of area 3 in 8" lifts</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:
 Received 0.4" of rain over the weekend since 0700 on Friday.


 Ernie Duke - QC Manager 10-15-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 025
Date 11-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Steady rain prevented any earth work or surveying Inspected erosion controls. Stopped leakage between 78" culvert and supersilt fence #02315 Continued deconning scrap metal debris using a pressure washer in the decon area Continued breaking up concrete pieces into smaller pieces using the concrete pulverizer			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Steady rain overnight and throughout the day, 0.7" by 0700.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

10-14-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 024
Date 10-Oct-02

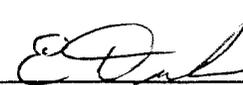
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: center;">TESTING PERFORMED & WHO PERFORMED TEST</p>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	Light rain limited site work Inspected erosion controls Gathered debris from the area surrounding the site including 5 drum carcasses Constructed a temporary drum storage area bermed up and underlain with two layers of poly sheeting Drums containing waste were staged in the storage area #02315B breaking the concrete with both the hoeram and the concrete pulverizer Began deconning the scrap metal with a pressure washer in the decon area					

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Trace of rain by 0700.
 QC Meeting at Site Office.
 Jeff Morris, Shawn Jorgensen, Jeff Bossart, Steve Hiordthal, Greg Klaas and Dan Pringle on-site.
 Site inspection to observe the culvert outlet into the riprap channel, triangle containing waste and drums containing waste.
 Determined drums should be sampled for waste profiling.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-11-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

DATE

CONTRACTOR PRODUCTION REPORT

DATE: 10-Oct-02

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

Project # 809401

REPORT NO. 24

CONTRACT NO. **N62470-97-D-5000** TITLE & LOCATION **TOWNGUT LANDFILL, INDIAN HEAD NSWC, MARYLAND**

CONTRACTOR **SHAW E & I** SITE MANAGER **STEVE CARRIERE**

WEATHER/ WEATHER EFFECTS **Light Rain** MAX TEMP. **67** MIN TEMP. **50**

WORK PERFORMED TODAY

WORK LOCATION AND DESCRIPTION	NAME	NUMBER	TRADE	HOURS	TRAVEL HRS	EMPLOYER
Management and oversight of project.	S. CARRIERE	957826	Site Manager	0	0	SHAW E & I
Site Eng/ QC	E. DUKE	12898	ENG/QC	10	0	SHAW E & I
Project accountant.	J. GUZZARDO	957881	PBA	10	0	SHAW E & I
Health and Safety Officer.	J. WALKER	70583	SSO	0	0	SHAW E & I
Oversees all field activities, and assist as needed	R. JOHNSON	810728	SUPV	9	0	SHAW E & I
Operating pulverizer to crush concrete	G. COKER	957180	OP	9	0	SHAW E & I
Moving metal scrap for deconning	K. SKIPPER	1244040	OP	9	0	SHAW E & I
Off site	M. HAWES	956838	RT	0	0	SHAW E & I
Off site	M. REAVES	1305665	RT	0	0	SHAW E & I
Operating hoeram and survey support	D. GARDNER	1252903	SURVEYOR	9	0	SHAW E & I
Pressure washing scrap metal	M. LINDSAY	1258883	RT	9	0	SHAW E & I
Rodman for surveyor, debris cleanup	M. CABELL	957096	RT	9	0	SHAW E & I
Travel hours					0	
Total travel hrs to date					132.5	

JOB SAFETY	JOB SAFETY MEETING HELD THIS DATE?	YES	WORK HOURS ON THIS DATE	74	
	ANY LOST TIME ACCIDENTS THIS DATE?	NO	CUMULATIVE TOTAL OF WORK HRS FROM PREVIOUS REPORT	2151	
	TRENCHING/SCAFFOLDING/HV ELECTRICAL/HIGH WORK DONE?	NO	TOTAL WORK HOURS FROM SITE MANAGER	2225	
	WERE THERE ANY NEAR MISS ACCIDENTS ON THIS DATE?	NO			

(ATTACH REPORTS OR PROPOSED ACTIONS AS NECESSARY)

LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED

Daily Safety Meeting, and safety observer program in affect.

EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB

<p><u>Brandywine</u> Excavator PC 200 Concrete Pulverizer</p>	<p><u>Aggregate Industries</u> 18.9 ton Riprap</p>
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EQUIPMENT ON SITE

<u>SHAW EQUIPMENT</u>	<u>HERTZ</u>	<u>GL CAPITAL</u>	<u>AMERICAN SANTA</u>	<u>SMO</u>	<u>ALBAN CAT</u>	<u>Brandywine</u>
2-COMPUTERS	1-JD 790 EXCAVATOR	1-OFFICE TRAILER	3-PORT-O-JOHNS	1-300 G Tank	D-5M DOZER	ExcavatorPC 200
2-PICKUP	2- PICK UP TRUCKS	2- SET OF STAIRS			12 TON ROLLER	Concrete Pulverizer
1-TOTAL STATION	1-KOBELCO 220 EXC					
1-VOLVO 150 LOADER	1-3" TRASH PUMP	<u>ALLIED TRAILER</u>	<u>WOODFIELD ICE</u>	<u>WASTE MAN</u>		
	1-JD 550 DOZER	1-20' CONEX BOX	1-ICE MACHINE	1-6CY DUMP		
	1-HOERAM	<u>K & R COPYSER</u>	<u>B. H. RUNYON</u>			
		2-COPIERS	1-PORT SEDIMENT TANK			

REMARKS

Rain limited work activities
 Gathered scrap metal and drums from the areas surrounding the project site
 Used both the hoeram and the concrete pulverizer to breakup the concrete
 Began incorporating the small concrete pieces into the waste grade in area 2
 Staged drums containing waste onto a temporary staging area

CONTRACTORS SITE MANAGER  STEVE CARRIERE

GOVERNMENT INSPECTOR _____ DATE _____

CONTRACTOR PRODUCTION REPORT

DATE: 08-Oct-02

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

Project # 809401

REPORT NO. 022

CONTRACT NO. **N62470-97-D-5000** TITLE & LOCATION **TOWNGUT LANDFILL., INDIAN HEAD NSWC, MARYLAND**

CONTRACTOR **SHAW E & I** SITE MANAGER **STEVE CARRIERE**

WEATHER/ WEATHER EFFECTS **mostly sunny** MAX TEMP: **74** MIN TEMP: **51**

WORK PERFORMED TODAY

WORK LOCATION AND DESCRIPTION	NAME	NUMBER	TRADE	HOURS	TRAVEL HRS	EMPLOYER
Management and oversight of project.	S. CARRIERE	957826	Site Manager	7	0	SHAW E & I
Site Eng/ QC	E. DUKE	12898	ENG/QC	10	0	SHAW E & I
Project accountant.	J. GUZZARDO	957881	PBA	10	0	SHAW E & I
Health and Safety Officer,	J. WALKER	70583	SSO	10	0	SHAW E & I
Oversees all field activities, and assist as needed	R. JOHNSON	810728	SUPV	10	0	SHAW E & I
Hoeram breaking up concrete	G. COKER	957180	OP	10	0	SHAW E & I
Grading interim grade in area 1	K. SKIPPER	1244040	OP	10	0	SHAW E & I
Off site	M. HAWES	956838	RT	0	0	SHAW E & I
Off site	M.REAVES	1305665	RT	0	0	SHAW E & I
Surveyor laying out interim grade for restake.	D. GARDNER	1252903	SURVEYOR	10	0	SHAW E & I
On roller compacting subgrade.	M. LINDSAY	1258883	RT	10	0	SHAW E & I
Rodman for surveyor	M. CABELL	957096	RT	10	0	SHAW E & I
Travel hours					0	
Total travel hrs to date					132.5	

JOB SAFETY	JOB SAFETY MEETING HELD THIS DATE?	YES	WORK HOURS ON THIS DATE	97	
	ANY LOST TIME ACCIDENTS THIS DATE?	NO	CUMULATIVE TOTAL OF WORK HRS FROM PREVIOUS REPORT	1944	
	TRENCHING/SCAFFOLDING/HV ELECTRICAL/HIGH WORK DONE?	NO	TOTAL WORK HOURS FROM SITE MANAGER	2051	
	WERE THERE ANY NEAR MISS ACCIDENTS ON THIS DATE?	NO			

(ATTACH REPORTS OR PROPOSED ACTIONS AS NECESSARY)

LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED

Daily Safety Meeting, and safety observer program in affect.

EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB

HERTZ
 Kobelco 200
 HOERAM
 OFF RENT

CONTRACTOR PRODUCTION REPORT

DATE: 09-Oct-02

(ATTACH ADDITIONAL SHEETS IF NECESSARY)

Project # 809401

REPORT NO 023

CONTRACT NO **N62470-97-D-5000** TITLE & LOCATION **TOWNGUT LANDFILL.. INDIAN HEAD NSWC, MARYLAND**

CONTRACTOR **SHAW E & I** SITE MANAGER **STEVE CARRIERE**

WEATHER/ WEATHER EFFECTS **Cloudy** MAX TEMP: **71** MIN TEMP: **52**

WORK PERFORMED TODAY

WORK LOCATION AND DESCRIPTION	NAME	NUMBER	TRADE	HOURS	TRAVEL HRS	EMPLOYER
Management and oversight of project.	S. CARRIERE	957826	Site Manager	8	0	SHAW E & I
Site Eng/ QC	E. DUKE	12898	ENG/QC	12	0	SHAW E & I
Project accountant.	J. GUZZARDO	957881	PBA	10	0	SHAW E & I
Health and Safety Officer,	J. WALKER	70583	SSO	8	0	SHAW E & I
Oversees all field activities, and assist as needed	R. JOHNSON	810728	SUPV	12	0	SHAW E & I
Grading area 1	G. COKER	957180	OP	10	0	SHAW E & I
Grading interim grade in area 1	K. SKIPPER	1244040	OP	10	0	SHAW E & I
Off site	M. HAWES	956838	RT	0	0	SHAW E & I
Off site	M.REAVES	1305665	RT	0	0	SHAW E & I
Survey support in Area 1	D. GARDNER	1252903	SURVEYOR	10	0	SHAW E & I
Compacting Area 1 with roller	M. LINDSAY	1258883	RT	10	0	SHAW E & I
Rodman for surveyor, hoeram breaking concrete	M. CABELL	957096	RT	10	0	SHAW E & I
Travel hours					0	
Total travel hrs to date					132.5	

JOB SAFETY	JOB SAFETY MEETING HELD THIS DATE?	YES	WORK HOURS ON THIS DATE	100	
	ANY LOST TIME ACCIDENTS THIS DATE?	NO	CUMULATIVE TOTAL OF WORK HRS FROM PREVIOUS REPORT	2051	
	TRENCHING/SCAFFOLDING/HV ELECTRICAL/HIGH WORK DONE?	NO	TOTAL WORK HOURS FROM SITE MANAGER	2151	
	WERE THERE ANY NEAR MISS ACCIDENTS ON THIS DATE?	NO			

(ATTACH REPORTS OR PROPOSED ACTIONS AS NECESSARY)

LIST SAFETY ACTIONS TAKEN TODAY/SAFETY INSPECTIONS CONDUCTED

Daily Safety Meeting, and safety observer program in affect.

EQUIPMENT/MATERIAL RECEIVED TODAY TO BE INCORPORATED IN JOB

62.26 Tons of riprap

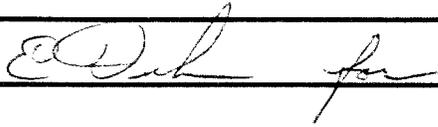
EQUIPMENT ON SITE

<u>SHAW EQUIPMENT</u>	<u>HERTZ</u>	<u>GE CAPITAL</u>	<u>AMERICAN SANITA</u>	<u>SMO</u>	<u>ALBAN CAT</u>
2-COMPUTERS	1-JD 790 EXCAVATOR	1-OFFICE TRAILER	3-PORT-O-JOHNS	1-300 G Tank	D-5M DOZER
2-PICKUP	2- PICK UP TRUCKS	2- SET OF STAIRS			12 TON ROLLER
1-TOTAL STATION	1-KOBELCO 220 EXC				
1-VOLVO 150 LOADER	1-3" TRASH PUMP	<u>ALLIED TRAILER</u>	<u>WOODFIELD ICE</u>	<u>WASTE MAN</u>	
	1-JD 550 DOZER	1-20' CONEX BOX	1-ICE MACHINE	1-6CY DUMP	
	1-HOERAM	<u>K & R COPY SER</u>	<u>B. H. RUNYON</u>		
		2-COPIERS	1-PORT SEDIMENT TANK		

REMARKS

Continued grading the waste subgrade in Area 1
Survey support for Interim Grades
Placing riprap and geotextile in the Southern Channel
Continued breaking the concrete

CONTRACTORS SITE MANAGER



STEVE CARRIERE

GOVERNMENT INSPECTOR

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 023
Date 9-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p> <p>#02315C Continued grading the waste material in Area 1 to the lines and grades of the Iterim Grading Plan Waste soil/sediments are graded in maximum 8" lifts and compacted with a smooth drum roller Survey support provided grade staking As grading was completed an as-built topo of the elevations was shot and grades were set for select fill #02315B Continued to break up concrete debris into small pieces for placement under the cover system #01575N Continued to grade the northern channel</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Mobilized a concrete pulverizer on an excavator to break up the concrete more effciently.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

10-10-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
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QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 022
Date 8-Oct-02

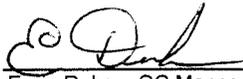
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315C Continued grading the waste material to the lines and grades of the Iterim Grading Plan Waste soil/sediments are graded in maximum 8" lifts and compacted with a smooth drum roller Survey support provided grade staking As grading was completed an as-built topo of the elevations was shot and grades were set for select fill #02315B Continued to break up concrete debris into small pieces for placement under the cover system #01575N Continued to grade the northern channel</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-9-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 021
Date 7-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>		
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>		
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>		
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	#02315 Excavating the sediment/soils along the toe of Area 2 next to the pond Large debris was segregated by type Materials were staged as segregated EOD Specialist was on-site for inspection of suspect items Excavating northern channel to the lines and grades provided on the site drawings Grading Area 1 per the interim grade plan placing the material in maximum 8' lifts Using a smooth drum roller to compact the graded waste Continued to break up concrete debris into small pieces for placement under the cover system				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Sample of the waste debris collected and sent off site for analysis.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

10-8-02

DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
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QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

UXO SUPPORT - INDIANHEAD, MD

10/7/02

700 - MORNING MEETING. REVIEWED THE DAY'S WORK PLANS, SAFETY AND JOB ASSIGNMENTS.

0715 - CONTINUED UXO SUPPORT AT SITE 12 FOR DIGGING AND GRADING. UNCOVERED FOUR ALUMINUM SHIPPING CONTAINERS SIMILAR TO PREVIOUS WEEK, ONE ITEM DETERMINED TO BE A METAL PIPE ABOUT 7 FOOT IN LENGTH, AND ONE ITEM DECLARED TO BE A MK 2 MOD 0 SHIPPING CONTAINER. CONTAINER HAD BEEN EMPTIED, OPENED/VENTED AND COMPRESSED. NO OTHER ITEMS UNCOVERED.

1730 - COMPLETED UXO SUPPORT FOR SITE 12.

Valerie H. Langstaff

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 020
Date 4-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	<p>#02315 Excavating the sediment/soils along the toe of Area 3 next to the pond Large debris was segregated by type Materials were staged as segregated EOD Specialist was on-site for inspection of suspect items Removed debris from the area along Atkins Road south of Area 1 The debris was segregated and staged on-site with like materials Continued to break up concrete debris into small pieces for placement under the cover system</p>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Shawn Jorgensen and Heidi Morgan both of IH Environmental on-site to discuss several project items.

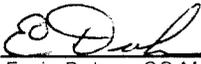
*The triangle next to Atkins Road on the southeast edge of Area 1 is filled with trash after removal of surface items.

*The invert of the culvert under Atkins Road is at the same elevation as the subgrade of the channel. It has been dug out to allow placement of the riprap below the culvert invert.

It is recommended to construct a plunge pool just below the culvert to disappate the energy from the culvert rather than redigging the chaqnnel.

A Variance Request will be submitted for the plunge pool.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-7-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	DATE
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

EOD SUPPORT- INDIANHEAD, MD.

10/4/02

0700 - MORNING MEETING. SAFETY, JOB ASSIGNMENTS, REVIEW OF DAY'S WORK PLANS AND TIME SHEETS.

0730 - CONTINUED DIGGING, HAULING AND GRADING. NO SUSPECT OR UNKNOWN ITEMS UNCOVERED.

1730 - COMPLETED UXO SUPPORT OPS FOR THE DAY.

Valerie H. Sampson

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 019
Date 3-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>TESTING PERFORMED & WHO PERFORMED TEST</p>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	<p>#02315 Finished grading of the southern channel to the grades shown on the Project Drawings Culvert under Atkins Road was uncovered at the subgrade level of the channel Channel was excavated to allow invert of culvert to discharge at the top of the riprap Continued to excavate sediments/soils around the southern side of Area 1 to the lines and grades of the Interim Plan Large debris was segregated by type Materials were staged as segregated Soil material was placed and spread as part of regrading Continued to break up concrete debris into small pieces for placement under the cover system</p>				<p>TESTING PERFORMED & WHO PERFORMED TEST</p>	
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)				REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
<p>REMARKS:</p> <p>RAB site visit by RAB Members and Navy Personnel including CO Seidband Tour of the site as well as an explanation of the Project was conducted Valerie Langstaff, Shaw UXO Specialist onsite to monitor the excavation activities.</p>						
<p>On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</p>				<p> Ernie Duke - QC Manager</p>		
GOVERNMENT QUALITY ASSURANCE REPORT				DATE		
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT						
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE		

EOD SUPPORT - INDIANHEAD, MD

10/3/02

0700 - MORNING MEETING. REVIEWED WORK PLANS, SAFETY, JOB ASSIGNMENTS AND THE EVENTS FOR BASE DOB-N-PONY THIS DAY.

0715 - CONTINUED ^{WFO} SUPPORT TO CONSTRUCTION CREW DURING DIGGING AND GRADING OPERATIONS. TWO SIMILAR ITEMS OF UNKNOWN NATURE UNCOVERED. DETERMINED THAT BOTH ITEMS WERE ALUMINUM SHIPPING CONTAINERS. THE REMAINDER OF ITEMS UNCOVERED WERE DEBRIS SIMILAR TO THE REST OF THE WEEK.

^{WFO}
1930 - COMPLETED EOD SUPPORT OPERATIONS FOR THE DAY.

Valerie Langstaff

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 018
Date 2-Oct-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
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PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Waste Regrading Activity Number 02315 C Checklist attached
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Waste Regrading Checklist attached		TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>			
	WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02315 Continued grading of the southern channel to the grades shown on the Project Drawings Removed waste along the channel as encountered No waste remaining on the east side of the channel Continued to excavate sediments/soils around the western and southern side of Area 1 Large debris was segregated by type Materials were staged as segregated Soil material was placed and spread as part of regrading		TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Valerie Langstaff, Shaw UXO Specialist onsite to monitor the excavation activities.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke · QC Manager

10-3-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
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QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

 GOVERNMENT QUALITY ASSURANCE MANAGER

 DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 10/2/02

Contract No. N624790-97-D-5000

Index No. 018-P06

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Regrading of Waste Activity Number 02315C</p> <p>Attendees: Site Crew Randy Johnson, Shaw Joe Walker, Shaw Steve Carrier, Shaw</p> <p>Plans and Specifications: Sections 02315 Drawing C-6 for Interim Grades</p> <p>Submittals No submittals are required for grading of waste</p> <p>Materials No materials are necessary for waste regrading</p> <p>Preliminary Work Interim survey staking completed along the west side where work will begin Waste material is excavated and segregated Waste material is dry and ready for placement and compaction</p> <p>Testing Plan No testing is necessary for waste regrading</p> <p>Work Method and Schedule Dry sediments/soils and small debris to be graded to the lines and grades of the Interim Plan Material to be graded in thin 8" lifts and compacted Compaction to be achieved by tracking with a minimum 40,000 lb track type machine To be tracked with 4 passes Concrete debris to be broken into small pieces with a hoe-ram and spread within the fill areas Concrete and small debris to be spread in a thin layer intermixed with soil/sediments</p> <p>Activity Hazard Analysis Site Safety Officer reviewed the job hazards with the site personnel and UXO Specialist</p>	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	 10-3-02				

CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE **2-Oct-02**

Index No. **018-106**

Activity No. **02315C**

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
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PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>
WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>
WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

TESTING PERFORMED & WHO PERFORMED TEST
NA

Waste Regrading

Checked Interim grade stakes with operator to develop a plan for grading
 Used a dozer to spread the waste material in thin lifts
 Only small debris was incorporated into the waste soil/sediments
 The excavator which exceeds 40,000 lbs was used to track the material

INITIAL

E. D. ... 10-3-02

700 - MORNING MEETING. REVIEWED WORK PLANS, JOB ASSIGNMENTS AND SAFETY.

0700 - SUPPLIED UXO SUPPORT TO CREW DIGGING AND GRADING. TWO DIFFERENT UNKNOWN ITEMS UNCOVERED. UPON INSPECTION ONE WAS A PIPE, THE OTHER WAS A SECTION OF A HYDRAULIC SYSTEM. DEBRIS UNCOVERED CONSISTED MAINLY OF GLASS, WOOD, CONCRETE, STEEL PIPES AND BARS, TRASH, CLOTHING, TOYS AND FORM PADDING.

1770 - COMPLETED EOD SUPPORT OPERATIONS FOR THE DAY.

Valerie Sangstaff

EOD SUPPORT - INDIANHEAD, MD

10/1/02

10 - MORNING MEETING. REVIEWED WORK PLANS, JOB ASSIGNMENTS AND SAFETY.

0715 - CONTINUED DIGGING AND GRADING. UNCOVERED TWO SUSPICIOUS ITEMS. BOTH WERE SCRAP METAL. MAJORITY OF ITEMS WERE TRASH, WOOD, LOGS, BRICK, CONCRETE, STEEL PIPES, RE-BAR AND ROCK.

1730 - COMPLETED EOD SUPPORT OPERATIONS FOR THE DAY.

Valerie Sampstaff

9/30/02

Provided UXO Escort support for construction crew at site 12, Indianhead, Maryland. Attended morning meeting. Discussed plans for the day, job assignments and safety.

Observed two backhoes and bulldozer clearing areas at site 12. Items uncovered and removed included fence posts and fencing, steel pipes, steel diamond plating, paper track, glass, logs, tree stumps, brick and concrete. No ordnance items were uncovered.

Valerie H. Langstaff

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 016
Date 30-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Waste Removal Activity Number 02315 B Checklist attached
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input checked="" type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#02315 Resumed grading of the southern channel to the grades shown on the Project Drawings Started at the edge of Atkins Road working downslope
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	

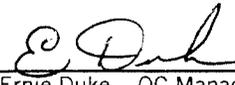
TESTING PERFORMED & WHO PERFORMED TEST
TESTING PERFORMED & WHO PERFORMED TEST

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:
 Received 0.2 inches of rain over the weekend.
 Valerie Langstaff, Shaw UXO Specialist onsite to monitor the excavation activities.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

10-1-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER _____ DATE _____

CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE 30-Sep-02

Index No. 016-105

Activity No. 02315B

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
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PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>
WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>
WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

TESTING PERFORMED & WHO PERFORMED TEST
NA

Waste Removal

Checked interim grade stakes with operator to develop a plan for grading
 Removed large debris as work progressed
 Pulled back sediments/soils to the interim grade
 UXO Specialist checked debris and sediment/soils for potential UXO
 Segregated large debris from the sediments/soils as it was removed
 No wet sediments were encountered which would require drying

INITIAL

EDub

10-1-02

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL EXCAVATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Excavation of Soil	Underground/ Overhead Utilities	<ul style="list-style-type: none"> Identify all utilities around the site before work commences Cease work immediately if unknown utility markers are uncovered Use manual excavation within 3 feet of known utilities Utility clearance shall conform with 29 CFR 1926.955 (high voltage >700 kV) 15 feet phase to ground clearance; 31 feet phase to phase clearance 		
	Inhalation and Contact with Hazardous Substances	<ul style="list-style-type: none"> Provide workers proper skin, eye and respiratory protection based on the exposure hazards present Review hazardous properties of site contaminants with workers before operations begin Wear hard hats, safety glasses with side shields, or goggles with splash shields and steel-toe safety boots Apply water spray to road surfaces to minimize/eliminate fugitive dust 	Tyvek coveralls, latex or rubber overboots, inner cotton glove liners (based on weather) or inner sample gloves and outer nitrile gloves	PID, LEL/O ₂ , and vinyl chloride detector tubes, as necessary
	Struck By/Against Heavy Equipment	<ul style="list-style-type: none"> Wear reflective warning vests when exposed to vehicular traffic Isolate equipment swing areas Make eye contact with operators before approaching equipment Understand and review hand signals Step away from equipment when bucket adjustments are made Do not attempt verbal communication in high noise backgrounds Park equipment in areas where operator can see clearly to dismount equipment 		
	High Noise Levels	<ul style="list-style-type: none"> Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL EXCAVATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Excavation of Soil (Cont.)	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of equipment, vegetation, tools, and debris • Mark, identify, or barricade other obstructions • Exit equipment slowly and maintain three point contact • Clean boot soles before climbing on equipment • Watch footing on the side of the embankment • Exit equipment slowly and maintain three point contact 		
	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Avoid carrying heavy objects above shoulder level • Warm up muscles before engaging in manual lifting 	Warning vests, hard hat, safety glasses, steel toe work boots	
	UXO	<ul style="list-style-type: none"> • UXO avoidance monitoring will be conducted by a UXO specialist prior to beginning activities • If UXO is encountered, cease all activities, mark the location, and notify the SS 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> • Provide fluids to prevent worker dehydration • Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated Clothing (subject to ambient temperature)	Meteorological Equipment
	Struck/Struck By	<ul style="list-style-type: none"> • Use the right tool for the task at hand • Maintain personal balance when performing manual excavation • Concentrate on the work task being performed 		

Attachment B
Activity Hazard Analyses

ACTIVITY HAZARD ANALYSIS FOR SOIL EXCAVATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Excavation of Soil (Cont.)	Overexertion	<ul style="list-style-type: none"> Use the right tool for the task at hand Avoid actions/activities that produce overexertion 		
	Horseplay	<ul style="list-style-type: none"> Prohibit horseplay on all project sites Review rules about horseplay with subcontract supervisors and workers Remind workers not to respond/participate in horseplay started by others 		
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Excavator Shovels, probes Dump trucks PID LEL/O₂ and vinyl chloride detector tubes, as necessary 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers' requirements Excavation inspection/permit Inspect all safety equipment (fire extinguishers, first aid kits and eye washes) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP Review operations/safety manuals for all equipment utilized Review site-specific chemical hazards 	

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 015
Date 27-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>	
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div style="text-align: right;">TESTING PERFORMED & WHO PERFORMED TEST</div>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	Rain and wet site conditions prevented site work Inspected erosion and sediment controls			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Received 0.6 inches of rain since Thursday @ 0700 hrs.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

9-30-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 014
Date 26-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT		
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA		
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>			
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>			
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>			
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>			
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>			
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>		<input type="checkbox"/>	NA
		SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>		<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>			
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>			
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>			
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p style="text-align: right;">TESTING PERFORMED & WHO PERFORMED TEST</p>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>			
	<p>#01575N Continued constructed the materials handling pad and decon area for area 1 Placed and graded a 6" layer of #1 aggregate across the base of the areas. Inspected erosion controls to assure functioning correctly.</p>				<p style="text-align: right;">TESTING PERFORMED & WHO PERFORMED TEST</p>	

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

QC Meeting at site office trailer. Site Inspection followed.

Cathy Gardner, ROICC; Greg Klaas, ROICC; Jeff Morris, RPM; Shawn Jorgensen, IH Environmental; Steve Hiordthal, USGS and Dan Pringle Shaw on site.

Steady rain throughout day, work stopped at 1330 hrs.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


Ernie Duke - QC Manager

9-30-02
DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 013
Date 25-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<div style="text-align: right;">TESTING PERFORMED & WHO PERFORMED TEST</div>
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#01575N Constructed the materials handling pad and decon area for area 1 Graded the surface and built up the berms to surround the areas Began grading the southern channel following the survey stakes #01575N Survey staking the initial grades for area 1			

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:

Encountered some debris in the southern channel and held up excavating in that area.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.

Ernie Duke - QC Manager

9-26-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 012
Date 24-Sep-02

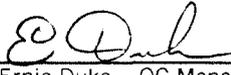
PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	Monitoring Well Abandonment Activity Number 02525 Checklist attached	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	Monitoring Well Abandonment Checklist attached	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#01575N Installed the supersilt fence at the Limit of Disturbance in Area 3 Removed surface debris from the alignment of the silt fence and outside as discussed with the ROICC Used 10' poles to support the supersilt fence where installed in loose silt The supersilt fence was placed adjacent to the LOD unless the alignment was in the water of the pond Where the LOD was in the water of the pond after lowering the supersilt fence was placed as close as possible	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:

Discussed the location of the LOD where it was out in the water of the pond with Cathy Gardner.
 Acceptable to move the line back some from the survey point and not fill in the pond.
 Discussed the same concern with Bob Mertz of Tetra Tech NUS.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

9-25-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

 GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 9/24/02

Contract No. N624790-97-D-5000

Index No. 012-P04

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Monitoring Well Abandonment Activity Number 02525</p> <p>Attendees: Aaron Eichelberger, Chesapeake Geosystems Randy Johnson, Shaw Joe Walker, Shaw Steve Carrier, Shaw</p> <p>Plans and Specifications: Sections 02525 Drawing C-2 for Well locations</p> <p>Submittals Monitoring well abandonment reports to be submitted to state agency and to Shaw upon completion Reports to be submitted to the ROICC upon receipt by Shaw</p> <p>Materials Wells to be sealed with granular bentonite</p> <p>Preliminary Work Location of wells accessible</p> <p>Testing Plan No testing is necessary</p> <p>Work Method and Schedule Steel protective casing to be lifted using equipment and chain Inner pipe and screen to be removed if possible Bentonite to be used to seal the wells</p> <p>Activity Hazard Analysis Site Safety Officer reviewed the job hazards with the subcontractor and site personnel</p>
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
 9-25-02				

CONTRACTOR QUALITY CONTROL INITIAL INSPECTION CHECKLIST

Contract No. N624790-97-D-5000

DATE **24-Sep-02**

Index No. **012-104**

Activity No. **02525**

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
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PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>
WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>
WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

TESTING PERFORMED & WHO PERFORMED TEST
NA

Monitoring Well Abandonment

Reviewed scope of work with the subcontractor
 Location and construction logs of the monitoring wells reviewed
 Copies of the well logs provided to the subcontractor
 Outer steel casing removed using a chain and front end loader
 Inner pipe and screen removed in most wells, WM 1 & 2 the inner pipe broke off
 The boring was then filled with granular bentonite

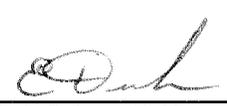
INITIAL

9-25-02

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 010
Date 20-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
TESTING PERFORMED & WHO PERFORMED TEST				
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>	
	#1575N Continued to install the supersilt fence along the edge of the Limits of Disturbance Installing the supersilt fence along the LOD for Area 2 Removing visable debris from outside the LOD as discussed with the ROICC Installed the super silt fence per the specification, except used 10' poles where the base was in loose silt #01115 Finished conducting the pre-existing conditions survey #02315 Resumed cutting the trees into 8' sections to be staged for Base use			
REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)		REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)		
REMARKS:				
<p style="font-size: small;">On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.</p> <div style="display: flex; justify-content: space-between; align-items: flex-end;"> <div style="text-align: center;">  Ernie Duke - QC Manager </div> <div style="text-align: right;"> 9-23-02 DATE </div> </div>				
GOVERNMENT QUALITY ASSURANCE REPORT				DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT				
GOVERNMENT QUALITY ASSURANCE MANAGER				DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

Contract No. N624790-97-D-5000

DATE 18-Sep-02

Index No. 008-102

Activity No. 01575N

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
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PRELIMINARY WORK WAS DONE CORRECTLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>
WORKMANSHIP IS SATISFACTORY	<input checked="" type="checkbox"/>	<input type="checkbox"/>
TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>
WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>

TESTING PERFORMED & WHO PERFORMED TEST
NA

Erosion and Sediment Control

Reviewed scope of work with the site crew

Location of E&S controls reviewed on the drawings and in the field

Silt fence was installed just inside the surveyed Limit of Disturbance (LOD) line

The water level had been dropped approximately 24" exposing the LOD line and surface debris along the edge of the water

Debris was carefully removed/lifted to from the alignment of the silt fence prior to installation

Debris that could be reached by the excavator was removed/lifted from outside the LOD prior to installation*

Installation of the supersilt fence began along the western side starting at the road culvert

Chest waders were necessary to access the alignment of the supersilt fence where the silt was deep

Supersilt fence installed per the specifications

*Discussed removal of the debris outside the LOD on-site with Cathy Gardner and Ray Marcum both of the ROICC Office.

Cathy stated the intention of the Project is to remove the debris and felt it should be removed

She agreed with our method of lifting the debris using an excavator bucket with securing brace to hold and lift the debris.

INITIAL

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

Report No. 007
Date 17-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#01575N Continued to clear trees within the construction area Trees and limbs smaller than 4" are chipped Working on the eastern side of the site #01115 Continued to survey and stake the Limits of Disturbance. #01115 Inspected the flow through the weir and removed debris to allow the water in the pond to drain Cut the weir approximately 18" wide to a depth 20" below the top of the weir to allow the water to drain better Sandbags were used to dam the water during cutting procedure, then removed slowly to allow the water to decant	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Shawn Jorgensen and Heidi Morgan were on-site.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

9-18-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	DATE
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT:N62470-97-D-5000 D.O. #0062

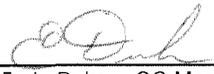
Report No. 005
Date 13-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Site Preparations Activity Number 01115 - P02 Met with Dave Roberts, subcontractor for utility search Reviewed site boundaries and Limits of Disturbance of area to be checked Equipment to be used has been checked by the Base Safety and has been HERO approved The location of the burried water line along Atkins road was verified. The utility search found no other underground utilities within the site boundaries. Health and Safety Officer reviewed AHA with subcontractor	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	#01575N Continued to clear trees within the construction area Trees and limbs smaller than 4" were chipped Trees and limbs larger than 4" are cut into 8' sections to be left for Navy use. #01115 Continued to survey and stake the Limits of Disturbance. #01115 Cleared additional debris from the weir to allow the excess water in the pond to drain Cleaned debris from the 8" valve just below the V-notch weir to help lower the water level	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
--	---

REMARKS:

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

9-16-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

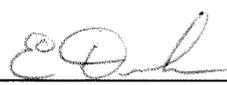
Report No. 004
Date 12-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>		
INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	TESTING PERFORMED & WHO PERFORMED TEST
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>	WORK COMPLIES WITH SAFETY REQUIREMENTS #01575N Continued to clear trees within the construction area Trees and limbs smaller than 4" are chipped Trees and limbs larger than 4" are cut into 8' sections to be left for Navy use. #01115 Continued to survey and stake the Limits of Disturbance. All safety equipment and precautions are followed to prevent any accidents #01115 Removed additional debris from the weir to allow the excess water in the pond to drain Opened the 8" valve just below the V-notch weir to help lower the water level	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Electrician on-site setting the weatherhead and outside panel for the electrical connection at the site trailer.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

9-13-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT	DATE
QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT	
GOVERNMENT QUALITY ASSURANCE MANAGER	DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 003
Date 11-Sep-02

PHASE (BLANK - NOT APPLICABLE) YES NO IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT

PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	NA
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED.	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	

INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input type="checkbox"/>	NA	
	SAMPLE HAS BEEN PREPARED/APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORKMANSHIP IS SATISFACTORY	<input type="checkbox"/>	<input type="checkbox"/>		
	TEST RESULTS ARE ACCEPTABLE.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK IS IN COMPLIANCE WITH THE CONTRACT.	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>		

FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input checked="" type="checkbox"/>	<input type="checkbox"/>		TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	<p>#01575N Continued to clear trees within the construction area Trees and limbs smaller than 4" are chipped Trees and limbs larger than 4" are cut into 8' sections to be left for Navy use. #01115 Continued to locate survey control and lay out the Limits of Disturbance. All safety equipment and precautions are followed to prevent any accidents #01115 Removed debris from the weir to allow the excess water in the pond to drain</p>				

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)	REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)
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REMARKS:
Received key for the gate to access the weir to be cut out to lower the water level of the pond.
Notified by ROICC that the roadway could be blocked-off today.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

9-12-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER DATE

CONTRACTOR QUALITY CONTROL REPORT

Shaw E & I, Inc. CONTRACT: N62470-97-D-5000 D.O. #0062

Report No. 001

Date 9-Sep-02

PHASE	(BLANK - NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	Preparatory Meeting Conducted for: Site Preparation - Checklist attached Erosion and Sediment Control - Checklist attached Clearing and Grubbing - Checklist attached
	THE SUBMITTALS HAVE BEEN APPROVED.	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	
	PRELIMINARY WORK WAS DONE CORRECTLY.	<input type="checkbox"/>	<input type="checkbox"/>	
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	
	WORK METHOD AND SCHEDULE DISCUSSED.	<input type="checkbox"/>	<input type="checkbox"/>	
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input type="checkbox"/>	<input type="checkbox"/>	
	INITIAL	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	
SAMPLE HAS BEEN PREPARED/APPROVED		<input type="checkbox"/>	<input type="checkbox"/>	
WORKMANSHIP IS SATISFACTORY		<input type="checkbox"/>	<input type="checkbox"/>	
TEST RESULTS ARE ACCEPTABLE.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK IS IN COMPLIANCE WITH THE CONTRACT.		<input type="checkbox"/>	<input type="checkbox"/>	
WORK COMPLIES WITH SAFETY REQUIREMENTS		<input type="checkbox"/>	<input type="checkbox"/>	
FOLLOW-UP	WORK COMPLIES WITH CONTRACT AS APPROVED INITIAL PHASE	<input type="checkbox"/>	<input type="checkbox"/>	TESTING PERFORMED & WHO PERFORMED TEST
	WORK COMPLIES WITH SAFETY REQUIREMENTS	<input type="checkbox"/>	<input type="checkbox"/>	

REWORK ITEMS IDENTIFIED TODAY (NOT CORRECTED BY CLOSE OF BUSINESS)

R-01 Incorrect geotextile material delivered.

REWORK ITEMS CORRECTED TODAY (FROM REWORK ITEMS LIST)

REMARKS:

Coordination and Mutual Understanding Meeting conducted at the ROICC office.

On behalf of the contractor, I certify that this report is completed and correct and equipment and material used and work performed during this reporting period is in compliance with the contract drawings and specifications to the best of my knowledge except as noted in this report.


 Ernie Duke - QC Manager

9-10-02
 DATE

GOVERNMENT QUALITY ASSURANCE REPORT

DATE

QUALITY ASSURANCE REPRESENTATIVE'S REMARKS AND/OR EXCEPTIONS TO THE REPORT

GOVERNMENT QUALITY ASSURANCE MANAGER

DATE

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 9/9/2002

Contract No. N624790-97-D-5000

Index No. 001-P01

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT	
PREPARATORY	PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<p>Site Preparation Activity Number 01115</p> <p>Attendees:</p> <p>Cathy Gardner, ROICC Gregory Klaas, ROICC Octavia Thornton, ROICC IHD Steve Carrier, Shaw Joe Walker, Shaw Randy Johnson, Shaw Joey Guzzardo, Shaw Dan Pringle by phone, Shaw</p> <p>Plans and Specifications: Sections 01115 and 02224 Drawing C-2 Defines Limits of Disturbance and site Work Zones</p> <p>Submittals Utility Survey upon completion As-Built Site Survey upon completion</p> <p>Materials No materials are necessary</p> <p>Preliminary Work The location of the site office trailer has been established The location of the second office trailer having additional phone lines has not been determined Site survey controls will be established following GIS Limits of Disturbance to be marked</p> <p>Testing Plan No testing is necessary</p> <p>Work Method and Schedule Will begin installation of site facilities and work zones upon receipt of Work Permit Work Permit dated 9-9-02 issued by Base Safety Officer - Frank James Nextel phones to be used for communication on site after approval of frequency and tagging Road block to be set up to stop traffic through the work area One lane to remain open for emergency vehicles Greg Klass to notify Fire Dept and Safety of the road restriction Water level will be lowered by pumping and with the use of sand bags to limit flow Precautions will be taken to prevent sediment from discharging from the site</p> <p>Activity Hazard Analysis Site Safety Officer reviewed the job hazards with the field crew after the Prep meeting</p>	
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>		
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>		
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>		
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
					
	9-10-02				

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 9/9/2002

Contract No. N624790-97-D-5000

Index No. 001-P02

PHASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
PLANS AND SPECS HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		<p>Erosion and Sediment Controls Activity Number 01575N</p> <p>Attendees: Cathy Gardner, ROICC Gregory Klaas, ROICC Octavia Thornton, ROICC IHD Steve Carrier, Shaw Joe Walker, Shaw Randy Johnson, Shaw Joey Guzzardo, Shaw Dan Pringle by phone, Shaw</p> <p>Plans and Specifications: Sections 01575N Drawings C-2 through C-5</p> <p>Submittals Sediment and Erosion Control Plan - Approved Silt Fence, Super Silt Fence and Geotextile - CQC Approved Crushed stone for Stabilized Construction Entrances - CQC Approved Other submittals to be reviewed as necessary Erosion and Sediment Control inspection Reports - Every 7 calendar days or after 0.5" storm.</p> <p>Materials Silt Fence, Super Silt Fence and Geotextile delivered (Geotextile incorrect - to be replaced by vendor) Other materials to be delivered and inspected as needed</p> <p>Preliminary Work Site survey to be completed for Limits of Disturbance where needed Pond to be lowered so that debris is accessible prior to installing super silt fence</p> <p>Testing Plan No testing is necessary</p> <p>Work Method and Schedule (Initial Work) Will begin installation of sediment and erosion controls upon receipt of Work Permit Work Permit dated 9-9-02 issued by Base Safety Officer - Frank James Silt Fence will be installed at the locations and as shown on the Drawings Super silt fence to be installed along the edge of the water after the water level is lowered Stabilized construction entrances to be installed as shown Material handling pads, decontamination pad and sediment tanks to be installed per spec as needed</p> <p>Activity Hazard Analysis Site Safety Officer will review the job hazards with the field crew prior to the start of work</p>
THE SUBMITTALS HAVE BEEN APPROVED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
MATERIALS STORED PROPERLY	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input checked="" type="checkbox"/>		
TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>		
WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		
JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>		

PREPARATORY



9-10-02

CONTRACTOR QUALITY CONTROL PREPARATORY PHASE CHECKLIST

DATE 9/9/2002

Contract No. N624790-97-D-5000

Index No. 001-P03

BASE (BLANK NOT APPLICABLE) YES NO IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT

BASE	(BLANK NOT APPLICABLE)	YES	NO	IDENTIFY SPECIFICATION SECTION, DEFINABLE FEATURE OF WORK, LOCATION AND LIST PERSONNEL PRESENT
		<input checked="" type="checkbox"/>	<input type="checkbox"/>	Clearing and Grubbing Activity Number 02315
	HAVE BEEN REVIEWED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Attendees:
	THE SUBMITTALS HAVE BEEN APPROVED	<input type="checkbox"/>	<input type="checkbox"/>	Cathy Gardner, ROICC Gregory Klaas, ROICC
	MATERIALS COMPLY WITH APPROVED SUBMITTALS	<input type="checkbox"/>	<input type="checkbox"/>	Octavia Thornton, ROICC IHD Steve Carrier, Shaw
	MATERIALS STORED PROPERLY	<input type="checkbox"/>	<input type="checkbox"/>	Joe Walker, Shaw Randy Johnson, Shaw
	PRELIMINARY WORK WAS DONE CORRECTLY	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Joey Guzzardo, Shaw Dan Pringle by phone, Shaw
	TESTING PLAN HAS BEEN REVIEWED	<input type="checkbox"/>	<input type="checkbox"/>	Plans and Specifications:
	WORK METHOD AND SCHEDULE DISCUSSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Sections 02315 Drawing C-2 for Limits of Disturbance
	JOB SAFETY / HAZARD ANALYSIS ADDRESSED	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Submittals

No submittals required

Materials

No materials required

Other materials to be delivered and inspected as needed

Preliminary Work

Site survey to be completed for Limits of Disturbance where needed

Testing Plan

No testing is necessary

Work Method and Schedule

Will begin clearing of trees and shrubs within areas known to be within the Limits of Disturbance

Will continue to clear trees and shrubs along the edge of the Limits once established by survey

To minimize disturbances within the landfill area trees will be cut close to the ground surface and the roots left in-place.

In areas where the roots will prevent proper construction, the roots will be removed.

No earth disturbances are to take place until the perimeter E & S controls are in-place downslope.

Activity Hazard Analysis

Site Safety Officer will review the job hazards with the field crew prior to the start of work

PREPARATORY

Ed Duh 9-10-02

TESTING INDIAN HEAD Site 12.
TOWN GUT LANDFILL

- IH-SF-001 9-30-02 Select Fill - Chemical.
Laplata SXG (TPH, TCLP, RCI, BTEX)
- IH-TS-002 9-30-02 Topsoil. - Chemical
Laplata SXG (TPH, TCLP, RCI, BTEX)
- IH-TS-003 10-2-02 Topsoil - Composition.
Laplata SXG (Org. Mat, Nutrients, Sol/Salts)
- IH-SF-004 10-2-02 Select Fill - GEOTECHNICAL
Laplata SXG (Grad, Proctor, Class, ATTERB)
- IH-WD-005 10-7-02 Waste Debris - Chemical
Telephone poles, RR ties, etc. (TCLP, RCI, PCBs)
- IH-DM-006 10-15-02 Waste Drums - Chemical
Solids DM1,2,3,5,6,7. (TCLP, RCI, PCBs)
- IH-DM-007 10-15-02 Waste Drum
Liquid/grease (TCLP, RCI, PCBs)
- IH-DM-008 7-30-03 RC-6 modified Proctor.



FERTILIZER RECOMMENDATIONS

County: CHARLES

Date: 10/ 02

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

FAXED OCT 15 2002

MONROEVILLE PA 15146

MONROEVILLE PA 15146

Lab #	Sample ID	Crop codes & name	Y. goal (bu/A or T/A)	Lime T/A (% oxides)	Past legume N credit (lbs/A)	Nutrient Recommendation											
						Method	N lbs/A	P2O5 lbs/A	K2O lbs/A	Mg lbs/A	Mn lbs/A	Zn lbs/A	SO4 lbs/A	B lbs/A	Cu lbs/A	Notes	
20012	IH-TS-003-LSG	65 Est. cool season perennial grasses		0.0 (50%)	0	Total	60	30	40	15							3,4,7,49
						broadcast & disk in	60	30	40	15							

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland at College Park, and local governments. Thomas A. Fretz, Director of Cooperative Extension, University of Maryland at College Park.

The University of Maryland is equal opportunity. The University's policies, programs, and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, sex, and disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990; or related legal requirements should be directed to the Director of Personnel/Human Relations, Office of the Dean, College of Agriculture, Symons Hall, College Park, MD 20742.



SOIL TEST REPORT

County: CHARLES
 Date: 10/15/2002
 Receipt: 37.

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

2002 OCT 15 2002
 FAXED

MONROEVILLE PA 15146

MONROEVILLE PA 15146

Lab #	Sample ID	*Texture	pH	Mg index	P index	K index	Ca index	O.M. %	Zn ppm	B ppm	Mn ppm	Cu ppm	SO4-S ppm	NO3-N ppm	Soil.Salt ppm	Sand %	Silt %	Clay %	CEC MEQ	Ash %	Moisture %
20012	IH-TS-003-LSG	SL	7.2	20 (L)	78 (O)	54 (O)	6 (L)	1.4							85.08	63	17	20			

* F - Fine, S - Sand or Sandy, L - Loam, Si - Silt or Silty, C - Clay

(L) - Low: 0-25
 (M) - Medium: 26-50
 (O) - Optimum: 51-100
 (E) - Excessive: 100+

To receive further recommendation, please contact your county agent at 301-934-5283



Fertilizer Recommendation Notes

SHAW E & I

ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

MONROEVILLE

PA 15146

FOR CROP # 65 EST. COOL SEASON PERENNIAL GRASSES

3. For conventional tillage, ag-lime recommendations are based upon the amount of oxides required for the surface 8" of soil. Lime should be thoroughly mixed with the soil by plowing and disking. If recommended amount of oxides exceeds 1.5 tons of lime per acre (assuming 50% total oxides), ½ should be plowed down and the remainder applied after plowing and disking in thoroughly.
4. If topdressing ag-lime without tillage, reduce the total amount of oxides recommended by 50 percent. When topdressing ag-lime, and soil mixing is not possible, do not apply more than 1500 lbs per acre of oxides in any one application. The balance can be applied the next year. It would be best to do a soil test before making the second application.
7. Magnesium will be recommended when the soil test indicates a low or very low level. Use dolomitic lime as a liming material when magnesium is recommended AND when lime is needed to correct soil acidity. The magnesium recommendation is expressed as elemental Mg when lime is not required.
49. For the establishment of cool-season grasses (such as orchardgrass, timothy, bromegrass, tall fescue, reed canarygrass and perennial ryegrass), the TOTAL N recommendation ranges from 40-60 lbs per acre broadcast and disking in before planting.



Soil Testing Information for Field Recommendations

Bill

Send report to Shaw E & I ATTN: DAN PRINGLE
 If commercial co., charge to _____
 Address 2790 Mosside Blvd
Monroeville, Pa 15146 Phone 412-380-6248

Date 10-2-02 County Charles
 Consultant _____
 Tract No./Farm Name INDIAN HEAD NSWC
 Watershed Code _____

Field Information Please fax results to 412-858-3979

Sample number	Field I.D. or sample I.D.	Acres	Crop to be grown (see reverse)	Yield goal	Previous legume N credit (lbs/A)	Tillage method	Soil type
1	<u>003-LSG</u>	<u>8</u>	Code: <u>65</u> Name: <u>Perennial Grass</u>	<u>/</u>	<u>/</u>	No-till <u>Disk</u> Chisel	Coastal plain
2			Code: _____ Name: _____	_____	_____	Ridge Moldboard	Piedmont/Mountain
3			Code: _____ Name: _____	_____	_____	No-till Disk Chisel	Coastal plain
4			Code: _____ Name: <u>20012</u>	_____	_____	Ridge Moldboard	Piedmont/Mountain
5			Code: _____ Name: _____	_____	_____	No-till Disk Chisel	Coastal plain
6			Code: _____ Name: _____	_____	_____	Ridge Moldboard	Piedmont/Mountain

FOR UNIVERSITY OF MARYLAND USE

\$15.00

10/7/02 37336

Instructions

- For sampling, divide fields into areas of 5 to 10 acres each. For each area, take 15 to 20 small samples, mix together well, and fill sample bag to the line indicated.
- Sample to plow depth except for permanent pastures and no-tillage fields where sampling should be at the upper 2 inches.
- Fill out information sheet indicating tests to be run.
- Total all charges and make check payable to The University of Maryland.
- Mail soil samples, information sheets, and check to **Soil Testing Laboratory, The University of Maryland, College Park, MD 20742.**

Test	Charges	1	2	3	4	5	6
*Regular soil test	\$6	\$6	\$6	\$6	\$6	\$6	\$6
Manganese, zinc, and copper	5	---	---	---	---	---	---
Manganese, zinc, copper, and sulfate	7	---	---	---	---	---	---
Boron	5	---	---	---	---	---	---
Nitrate	3	---	---	---	---	---	---
Sulfate	4	---	---	---	---	---	---
Soluble salts	1	<u>1</u>	---	---	---	---	---
Cation exchange capacity	12	---	---	---	---	---	---
Mechanical analysis (% sand, silt, & clay)	8	<u>8</u>	---	---	---	---	---
Total Charges:		\$15	---	---	---	---	---

* Regular test includes pH, texture, Mg, P₂O₅, K₂O, Ca, and percentage of organic matter.

Please Provide Recommendations.

TESTING PLAN AND LOG
Town Gut Landfill – October 2002

CONTRACT NUMBER		PROJECT TITLE AND LOCATION						CONTRACTOR			
CONTRACT #N62470-97-D-5000		Site 12 – Town Gut Landfill						Shaw Environmental & Infrastructure			
SPECIFICATION SECTION AND PARAGRAPH NUMBER	ITEM OF WORK	TEST REQUIRED	ACCREDITED/ APPROVED LAB		SAMPLED BY	TESTED BY	LOCATION OF TEST		DATE COMPLETED	DATE FORWARDED TO CONTR. OFF.	REMARKS
			YES	NO			ON SITE	OFF SITE			
02315 - 1.6	Select Fill and Topsoil	Full TCLP USEPA SW 846 Ignitability, Corrosivity Reactivity TPH DRO/GRO USEPA SW 846 8015M BTEX USAEPA SW 846 8260B	X		E Duke 9-30-02	Accutest		X	10-11-02	10-14-02	Methods used as recommended by the Lab to be the most current and more accurate method.
02951 – 2.2	Topsoil	DOA Classification Organic Content PH Soluble Salts Nitrogen Phosphorus Potassium	X		E Duke 10-2-02	University of Maryland		X	10-18-02	10-22-02	
02315 – 3.11.2.2	Select Fill	ASTM C 136 for conformance to ASTM D 2487 ASTM D 1140 ASTM D 4318	X		E Duke 10-2-02	Hillis-Carnes		X	10-9-02	10-14-02	
01575N - 1.3	Waste Debris	Full TCLP USEPA SW 846 Ignitability, Corrosivity Reactivity PCBs Method 8082	X		E Duke 10-7-02	Accutest		X	10-15-02	10-22-02	Testing demonstrated that the waste debris was non-hazardous
02223 - 3.2.1	Waste Drums	Full TCLP USEPA SW 846 Ignitability, Corrosivity Reactivity PCBs Method 8020	X		E Duke 10-15-02	Accutest		X	10-25-02	11-7-02	Testing demonstrated that 6 drums are hazardous and 1 drum is non-hazardous
02315 – 3.11.23	Select Fill	ASTM D 2922 ASTM D 3017	X		E Duke 10-23-02	Shaw	X		10-23-02	10-24-02	1 st Lift Area 1

EXHIBIT VIII-1

TESTING PLAN AND LOG

Page 1 of 3

CONTRACT NUMBER N62470-97-D-5000		PROJECT TITLE AND LOCATION Site 12, Town Gut Landfill, Naval Surface Warfare Center, Indian Head, Maryland						CONTRACTOR Shaw Environmental, Inc.				
SPECIFICATION SECTION AND PARAGRAPH NUMBER	ITEM OF WORK	TEST REQUIRED	ACCREDITED/ APPROVED LAB		SAMPLED BY	TESTED BY	LOCATION OF TEST		FREQUENCY	DATE COMPLETE	DATE FORWARDED TO CONTRACTING OFFICER	REMARKS
			YES	NO			ON SITE	OFF SITE				
02223 3.2.1		Waste material: Analyses shall conform to local, state, and federal criteria as well as to the requirements of the disposal facility							As required by disposal facility			
02223 3.2.2		Waste liquid: Analyses shall conform to local, state, and federal criteria as well as to the requirements of the disposal facility							As required by disposal facility			
02315 1.6		Off-site borrow soil and aggregate materials: - Full TCLP, USEPA SW-846, Method 1311 - TPH, USEPA 600/4-79-020 Method 418.1 - BTEX, USEPA SW-846, Method 5030/8020							One composite per borrow site			
02315 2.1.1		Common fill material: - ASTM D 2487 - ASTM D 4318 - ASTM D 1140										
02315 2.1.3		Select fill material: - ASTM D 2487										
02315 3.11.2.1		Common fill material: - ASTM D 698							One per source			
02315 3.11.2.2		Select fill material: - ASTM C 136 for conformance to ASTM D 2487 - ASTM D 1140 - ASTM D 4318							One per source			

EXHIBIT VIII-1

TESTING PLAN AND LOG

Page 2 of 3

CONTRACT NUMBER N62470-97-D-5000		PROJECT TITLE AND LOCATION Site 12, Town Gut Landfill, Naval Surface Warfare Center, Indian Head, Maryland						CONTRACTOR Shaw Environmental, Inc.				
SPECIFICATION SECTION AND PARAGRAPH NUMBER	ITEM OF WORK	TEST REQUIRED	ACCREDITED/ APPROVED LAB		SAMPLED BY	TESTED BY	LOCATION OF TEST		FREQUENCY	DATE COMPLETE	DATE FORWARDED TO CONTRACTING OFFICER	REMARKS
			YES	NO			ON SITE	OFF SITE				
02315 3.11.2.3		Subgrade density: - ASTM D 1556 or - ASTM D 2922 and ASTM D 3017 <i>NA.</i> <i>WPlan 3.8.1</i> <i>Int grade</i> <i>Survey 3.8.1</i>							Each lift at randomly selected locations every 2,500 square feet			When ASTM D 2922 and ASTM D 3017 are used, verify density test results by performing an ASTM D 1556 density test at a location already ASTM D 2922 and ASTM D 3017. Perform an ASTM D 1556 at the start of the job, and for every 10 ASTM D 2922 and ASTM D 3017 density tests thereafter.
02315 3.11.2.3		Common fill density: - ASTM D 1556 or - ASTM D 2922 and ASTM D 3017							Each lift at randomly selected locations every 2,500 square feet and a minimum of 3 tests per lift			When ASTM D 2922 and ASTM D 3017 are used, verify density test results by performing an ASTM D 1556 density test at a location already ASTM D 2922 and ASTM D 3017. Perform an ASTM D 1556 at the start of the job, and for every 10 ASTM D 2922 and ASTM D 3017 density tests thereafter.
02742 3.2		Subbase course: - ASTM D 1557 or - ASTM D 4253 and ASTM D 4254										
02742 3.6		Shoulder material: - ASTM D 1557										
02742 3.8.1.1		Subbase course: - Smoothness Tests							As work progresses			

EXHIBIT VIII-1

TESTING PLAN AND LOG

Page 3 of 3

CONTRACT NUMBER N62470-97-D-5000		PROJECT TITLE AND LOCATION Site 12, Town Gut Landfill, Naval Surface Warfare Center, Indian Head, Maryland						CONTRACTOR Shaw Environmental, Inc.				
SPECIFICATION SECTION AND PARAGRAPH NUMBER	ITEM OF WORK	TEST REQUIRED	ACCREDITED/ APPROVED LAB		SAMPLED BY	TESTED BY	LOCATION OF TEST		FREQUENCY	DATE COMPLETE	DATE FORWARDED TO CONTRACTING OFFICER	REMARKS
			YES	NO			ON SITE	OFF SITE				
02742 3.8.1.2		Subbase course: - Density Test ASTM D 2950							One test per 100 square yards of binder and wearing, with a minimum of three tests each course			Thin layer nuclear density gauge readings shall be taken on a control strip to determine the number of coverages to obtain optimum density. Optimum density is defined when the average density does not change by more than 1.0 percent between successive coverages.
02742 3.8.1.3		Subbase course: - Thickness Tests							One test per 100 square yards, minimum of 3 tests			
02742 3.8.2.1		Bituminous: - Concrete Course Smoothness Tests							As work progresses			
02742 3.8.2.2		Bituminous: - Concrete Course Density Test ASTM D 1188 ASTM D 2950							One ASTM D 1188 per project One ASTM D 2950 per 100 square yards of bituminous concrete binder and wearing courses, with a minimum of three tests			
02742 3.8.2.3		Bituminous: - Concrete Course Thickness Tests										
02951 2.2		Topsoil: - DOA classification - Organic content - pH - Soluble salts - Nitrogen - Phosphorus - Potassium										



Soil Testing Information for Field Recommendations

Send report to Shaw E & I ATTN: DAN PRINGLE
 If commercial co., charge to _____
 Address 2790 Mossie Blvd
Monroeville, Pa 15146 Phone 412-380-6248

Date 10-2-02 County Charles
 Consultant _____
 Tract No./Farm Name INDIANHEAD NSWC
 Watershed Code _____

Field Information Please fax results to 412-858-3979

Sample number	Field I.D. or sample I.D.	Acres	Crop to be grown (see reverse)	Yield goal	Previous legume N credit (lbs/A)	Tillage method	Soil type
1	<u>IH-TS-003-LSG</u>	<u>8</u>	Code: <u>65</u> Name: <u>Perennial Grass</u>	<u>/</u>	<u>/</u>	No-till <u>Disk</u> Chisel Ridge Moldboard	<u>Coastal plain</u> Piedmont/Mountain
2			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
3			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
4			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
5			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
6			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain

FOR UNIVERSITY OF MARYLAND USE

Instructions

- For sampling, divide fields into areas of 5 to 10 acres each. For each area, take 15 to 20 small samples, mix together well, and fill sample bag to the line indicated.
- Sample to plow depth except for permanent pastures and no-tillage fields where sampling should be at the upper 2 inches.
- Fill out information sheet indicating tests to be run.
- Total all charges and make check payable to The University of Maryland.
- Mail soil samples, information sheets, and check to **Soil Testing Laboratory, The University of Maryland, College Park, MD 20742.**

Test	Charges	1	2	3	4	5	6
*Regular soil test	\$6	\$6	\$6	\$6	\$6	\$6	\$6
Manganese, zinc, and copper	5	—	—	—	—	—	—
Manganese, zinc, copper, and sulfate	7	—	—	—	—	—	—
Boron	5	—	—	—	—	—	—
Nitrate	3	—	—	—	—	—	—
Sulfate	4	—	—	—	—	—	—
Soluble salts	1	<u>1</u>	—	—	—	—	—
Cation exchange capacity	12	—	—	—	—	—	—
Mechanical analysis (% sand, silt, & clay)	8	<u>8</u>	—	—	—	—	—
Total Charges:		\$15	—	—	—	—	—

* Regular test includes pH, texture, Mg, P₂O₅, K₂O, Ca, and percentage of organic matter.

Please Provide Recommendations.

CHAIN-OF-CUSTODY RECORD

COC Number: 809401

Purchase Order Number:

SHAW Environmental & Infrastructure, INC. - 5700 Thurston Ave Suite 116B - Virginia Beach, VA 23455 - (757) 363-7190

Lab Destination:		Lab Receiving Address:					Analysis Desired																		
Accutest		4405 Vineland Road Suite C-1, Orlando FL 32811 (407)425-6700																							
Project Name		Sample Location:					Full TCLP+RCI SW-846	BTEX SW-846 8260B	TPH DRO/GRO SW-846 8015M																
Indian Head		Cover and Top Soil																							
Project Number:		IT Corporation Contact:		IT Corporation Contact Number:																					
809401		Natasha Kelley Sullivan		(410)529-7598																					
Client Rep:		Project Manager:																							
LANTDIV		Dan Pringle																							
Item No.	Sample Number	Date	Time	Matrix		Sample Description	Number of Containers																		
				Soil	Water																				
1	IH-SF-001	9/30/02	1540	X		Select Fill LAPLATA S & G	4	X	X	X															
2	IH-TS-002	9/30/02	1600	X		Topsoil LAPLATA S & G	4	X	X	X															

Turnaround Time Required :	Sampled By:	COMMENTS:	Laboratory Report No.:
1 week <i>Rush.</i>	<i>E Duke</i>		

Transfer Number	Transfers Relinquished By	Date	Time	Transfers Accepted By	Date	Time	Remarks
1	<i>E Duke</i>	10/1	1100				Summary Package Deliverables: EDD Excel *** Fax results to Natasha Sullivan (410) 529-7599
2							
3							
4							

complete passes (400 percent coverage) with ROICC approved compaction equipment. Equipment used for compaction of regraded cover soil and waste shall be a 40,000 lb (minimum) track-type tractor with a minimum ground contact pressure of 8 psi or equipment as appropriate for materials encountered.

3.8.4 Paved Areas

Compact common fill materials to 95 percent of ASTM D 698. Compact pavement materials in accordance with Section 02742, "Pavement With A Bituminous Concrete Surface."

3.9 FINISH OPERATIONS

3.9.1 Grading

Finish grades as indicated within one-tenth of one foot. Grade areas to drain water away from structures. For existing grades that will remain but which were disturbed by Contractor's operations, grade as directed by the ROICC NTR.

3.9.2 Seed and Other Types of Vegetation

Provide as specified in Section 02951, "Mitigated Wetlands Area, Shrubs, Plants, and Grass."

3.9.3 Protection of Surfaces

Protect newly graded areas from traffic, erosion, and settlement that may occur. Repair or reestablish damaged grades, elevations, or slopes.

3.10 DISPOSITION OF SURPLUS REGRADED COVER SOIL AND WASTE MATERIAL

Remove and dispose in accordance with Section 02223, "Transportation and Disposal of Contaminated Material."

3.11 FIELD QUALITY CONTROL

3.11.1 Sampling

Take the number and size of samples required to perform the following tests.

3.11.2 Testing

Perform one of each of the following tests for each material used. Provide additional tests for each source change.

3.11.2.1 Common Fill Material Testing

Test common fill in accordance with ASTM D 698 for moisture density relationship, as applicable.

3.11.2.2 Select Fill Material Testing

Test select fill material in accordance with ASTM C 136 for conformance to ASTM D 2487 gradation limits; ASTM D 1140 for material finer than the No. 200 sieve; ASTM D 4318 for liquid limit and for plastic limit, as applicable.

3.11.2.3 Density Tests

Test density in accordance with ASTM D 1556, or ASTM D 2922 and ASTM D 3017. When ASTM D 2922 and ASTM D 3017 density tests are used, verify density test results by performing an ASTM D 1556 density test at a location already ASTM D 2922 and ASTM D 3017 tested as specified herein. Perform an ASTM D 1556 density test at the start of the job, and for every 10 ASTM D 2922 and ASTM D 3017 density tests thereafter. Test subgrade each lift at randomly selected locations every 2500 square feet of subgrade. Test common fill each lift at randomly selected locations every 2500 square feet and a minimum of 3 tests per lift.

-- End of Section --



Soil Testing Information for Field Recommendations

Send report to Shaw E & I ATTN: DAN PRINGLE
 If commercial co., charge to _____
 Address 2790 Mosside Blvd
Monroeville, Pa 15146 Phone 412-380-6248

Date 10-2-02 County Charles
 Consultant _____
 Tract No./Farm Name INDIAN HEAD NSWC
 Watershed Code _____

Field Information Please fax results to 412-858-3979

Sample number	Field I.D. or sample I.D.	Acres	Crop to be grown (see reverse)	Yield goal	Previous legume N credit (lbs/A)	Tillage method	Soil type
1	205 IH-TS-003-L56	8	Code: <u>65</u> Name: <u>Perennial Grass</u>	—	—	No-till <u>Disk</u> Chisel Ridge Moldboard	<u>Coastal plain</u> Piedmont/Mountain
2			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
3			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
4			Code: <u>20012</u> Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
5			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
6			Code: _____ Name: _____	BU/A T/A		No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain

\$15.00
 \$15.00
 CHIC
 10/7/02
 372336
 10/7/02
 1 100702 403236 TND
 FOR UNIVERSITY OF MARYLAND USE

Instructions

- For sampling, divide fields into areas of 5 to 10 acres each. For each area, take 15 to 20 small samples, mix together well, and fill sample bag to the line indicated.
- Sample to plow depth except for permanent pastures and no-tillage fields where sampling should be at the upper 2 inches.
- Fill out information sheet indicating tests to be run.
- Total all charges and make check payable to The University of Maryland.
- Mail soil samples, information sheets, and check to **Soil Testing Laboratory, The University of Maryland, College Park, MD 20742.**

Test	Charges	1	2	3	4	5	6
*Regular soil test	\$6	.\$6	\$6	\$6	\$6	\$6	\$6
Manganese, zinc, and copper	5	—	—	—	—	—	—
Manganese, zinc, copper, and sulfate	7	—	—	—	—	—	—
Boron	5	—	—	—	—	—	—
Nitrate	3	—	—	—	—	—	—
Sulfate	4	—	—	—	—	—	—
Soluble salts	1	—	—	—	—	—	—
Cation exchange capacity	12	—	—	—	—	—	—
Mechanical analysis (% sand, silt, & clay)	8	—	—	—	—	—	—
Total Charges:		\$15					

* Regular test includes pH, texture, Mg, P₂O₅, K₂O, Ca, and percentage of organic matter.

Please provide recommendations.



Fax 301-7 5616

Date: 10/15/2002
 Receipt: 37336

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

AXED OCT 15 2002

MONROEVILLE

PA 15146

MONROEVILLE

PA 15146

Lab #	Sample ID	*Texture	pH	Mg index	P index	K index	Ca index	O.M. %	Zn ppm	B ppm	Mn ppm	Cu ppm	SO4-S ppm	NO3-N ppm	Sol.Salt ppm	Sand %	Silt %	Clay %	CEC MEQ	Ash %	Me
20012	IH-TS-003-LSG	SL	7.2	20 (L)	78 (O)	54 (O)	6 (L)	1.4							85.08	63	17	20			

* F - Fine, S - Sand or Sandy, L - Loam, Si - Silt or Silty, C - Clay

(L) - Low: 0-25
 (M) - Medium: 26-50
 (O) - Optimum: 51-100
 (E) - Excessive: 100+

To receive further recommendation, please contact your county agent at 301-934-5283

10/18/2002 14:48 FAX 412 372 8968

SHAW E&I MONROEVILLE

002

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland at College Park, and local governments. Thomas A. Fretz, Director of Cooper Extension, University of Maryland at College Park.

The University of Maryland is equal opportunity. The University's policies, programs, and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, and disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990 related legal requirements should be directed to the Director of Personnel/Human Relations, Office of the Dean, College of Agriculture, Symons Hall, College Park, MD 20742.



FERTILIZER RECOMMENDATIONS

Date: 10/15/2002

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

FAXED OCT 15

MONROEVILLE PA 15146

MONROEVILLE PA 15146

Lab #	Sample ID	Crop codes & name	Y. goal (bu/A or T/A)	Lime T/A (% oxides)	Past legume N credit (lbs/A)	Nutrient Recommendation										
						Method	N lbs/A	P2O5 lbs/A	K2O lbs/A	Mg lbs/A	Mn lbs/A	Zn lbs/A	SO4 lbs/A	B lbs/A	Cu lbs/A	Notes
20012	IH-TS-003-LSG	65 Est. cool season perennial grasses		0.0 (50%)	0	Total	60	30	40	15						3,4,7,49
						broadcast & disk in	60	30	40	15						

10/18/2002 14:49 FAX 412 372 8968

SHAW E&I MONROEVILLE

003

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FOR CROP # 65 EST. COOL SEASON PERENNIAL GRASSES

3. For conventional tillage, ag-lime recommendations are based upon the amount of oxides required for the surface 8" of soil. Lime should be thoroughly mixed with the soil by plowing and disking. If recommended amount of oxides exceeds 1.5 tons of lime per acre (assuming 50% total oxides), ½ should be plowed down and the remainder applied after plowing and disking in thoroughly.
4. If topdressing ag-lime without tillage, reduce the total amount of oxides recommended by 50 percent. When topdressing ag-lime, and soil mixing is not possible, do not apply more than 1500 lbs per acre of oxides in any one application. The balance can be applied the next year. It would be best to do a soil test before making the second application.
7. Magnesium will be recommended when the soil test indicates a low or very low level. Use dolomitic lime as a liming material when magnesium is recommended AND when lime is needed to correct soil acidity. The magnesium recommendation is expressed as elemental Mg when lime is not required.
49. For the establishment of cool-season grasses (such as orchardgrass, timothy, bromegrass, tall fescue, reed canarygrass and perennial ryegrass), the TOTAL N recommendation ranges from 40-60 lbs per acre broadcast and disking in before planting.

**EXHIBIT VI-2
SUBMITTAL REGISTER
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND**

Task Order 0062
Contract No. N624790-97-D-5000

Project No. 809401
Project Title: Site 12, Town Gut Landfill, IHDIV-NSWC

Location: Indian Head, Maryland
Contractor: Shaw Environmental, Inc.

Activity Number	Transmittal Control Number	Spec. Section Number	SD No. and Type of Submittal Product	Material or Paragraph Number	Classification Approval by Gvmt. or CQC	Contractor Schedule Dates			Contractor Action			Other Reviewer		Approving Authority			Received from Approving Authority	Remarks	
						Planned Submittal Date	Approval Needed By	Material Needed By	Action Code	Date of Action	Date Forwarded to Other Reviewer	Date Received from Contractor	Date Forwarded to Approving Authority	Date Received from Other Reviewer	Date of Action	Action Code			Date Forwarded to Contractor
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
		01115	SD-01 Preconstruction Submittals																
			Work Plan	1.3															
			SD-11 Closeout Submittals																
			As-Built Records	1.4.1		Final Report	Gvmt												
			Environmental Conditions Report	1.4.2		Final Report	Gvmt												
			Status Reports	1.4.3		Monthly													
			QC Meeting Minutes	1.4.4		Biweekly													
			Test Results Summary Report	1.4.5		Monthly													
			Contractor Production Report	1.4.6		Daily													
			QC Report	1.4.7		Daily													
			Rework Items List	1.4.8		Monthly													
			Permits	1.4.9		NA													
			Storm Water Pollution Prevention Plan	1.20.1		Work Plan	Gvmt		6/21/2002										
			Notice of Intent	1.20.1		Pre-con	Gvmt												
			Notice of Termination	1.20.1		NA													
			Contractor's Closeout Report	1.4.10		Final Report	Gvmt												
		01450N	SD-01 Preconstruction Submittals																
			QC Plan	1.6		Work Plan	Gvmt		6/21/02										
		01525	SD-07 Certificates																
			Accident Prevention Plan	1.4.1		H&S Plan	Gvmt		6/21/2002										
			Activity Hazard Analysis	1.4.2															
			Health and Safety Plan	1.4.3		Work Plan	Gvmt		6/21/02										
			SD-11 Closeout Submittals																
			Daily Confined Space Entry Permit Reports	3.3.7		NA													
				1.17															
		11575N	SD-01 Preconstruction Submittals																
			Environmental Protection Plan	1.9		Work Plan	Gvmt		6/21/2002										
			Sediment and Erosion Control Plan	1.4		Work Plan	Gvmt		6/21/02										
			SD-03 Product Data																
01575N	01575N-01		Silt Fence	1.3	CQC				E	09-09-02				09-09-02	A	09-09-02	09-09-02		
01575N	01575N-01		Super Silt Fence	1.3	CQC				E	09-09-02				09-09-02	A	09-09-02	09-09-02		
01575N	01575N-01		Geotextile	1.3	CQC				E	09-09-02				09-09-02	A	09-09-02	09-09-02		
01575N	01575N-03		Erosion Control Mat	1.3	CQC				E	10-09-02				10-09-02	A	10-09-02	10-09-02		
			SD-06 Test Reports																
01575N	01575N-02		Crushed aggregate for SCE	1.3	CQC				E	09-09-02				09-09-02	A	09-09-02	09-09-02		
01575N	01575N-04		Riprap for Channels	1.3	CQC				E	10-09-02				10-09-02	A	10-09-02	10-09-02		
01575N	01575N-05		Laboratory Analysis - Non-hazardous waste debris	1.5	CQC				E	10-22-02				10-22-02	A	10-22-02	10-22-02		
01575N	01575N-06		Laboratory Analysis - Waste Drums	1.6.2	CQC				E	11-07-02				11-07-02	A	11-07-02	11-07-02		
01575N	01575N-09		Laboratory Analysis - MW drill cuttings	1.6.2	CQC				E	9-16-03				9-16-03	A	9-16-03	9-16-03		
01575N	01575N-09		Laboratory Analysis - MW dev water	1.6.2	CQC				E	9-16-03				9-16-03	A	9-16-03	9-16-03		
			SD-11 Closeout Submittals																
01575N	01575N-06		Solid Waste Disposal Permit (Permit 553)	1.6.1	CQC				E	10-22-02				10-22-02	A	10-22-02	10-22-02		
01575N	01575N-07		Solid Waste Disposal Permit (Permit 586)	1.6.1	CQC				E	12-11-02				12-11-02	A	12-11-02	12-11-02		
01575N	01575N-10		Solid Waste Disposal Permit (Permit)	1.6.1	CQC				E	9-16-03				9-16-03	A	9-16-03	9-16-03		
			Waste Determination Documentation	1.6.2															Waste Profiles signed by Gvmt
			Waste Determination Documentation	3.5.1		NA													
			Disposal Documentation for Hazardous and Regulated Waste	1.6.3															See 02223
01575N	01575N-08		Non-Hazardous Manifests for the disposal of Non-Hazardous Debris	1.6.3	CQC				E	01-22-03				01-22-03	A	01-22-03	01-22-03		
01575N	01575N-11		Non-Hazardous Manifests for the disposal of Non-Hazardous Debris	1.6.3	CQC														
			Contractor 40 CFR Employee Training Records	1.6.4															
			Regulatory Notification	1.6.5															
			Erosion and Sediment Control Inspection Reports	1.6.6															
			Solid Waste Disposal Report	1.6.7															

**EXHIBIT VI-2
SUBMITTAL REGISTER
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND**

Task Order 0062
Contract No. N624790-97-D-5000

Project No. 809401
Project Title: Site 12, Town Gut Landfill, IHDIV-NSWC

Location: Indian Head, Maryland
Contractor: Shaw Environmental, Inc.

Activity Number	Transmittal Control Number	Spec. Section Number	SD No. and Type of Submittal Product	Material or Paragraph Number	Classification Approval by Gvmt. or CQC	Contractor Schedule Dates			Contractor Action			Other Reviewer		Approving Authority			Received from Approving Authority	Remarks	
						Planned Submittal Date	Approval Needed By	Material Needed By	Action Code	Date of Action	Date Forwarded to Other Reviewer	Date Received from Contractor	Date Forwarded to Approving Authority	Date Received from Other Reviewer	Date of Action	Action Code			Date Forwarded to Contractor
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)
			Contractor Hazardous Material Inventory Log	1.11															
		02223	SD-07 Certificates																
02223	02223-01		Treatment Facility Permits - Hazardous drums	1.2.1.1	CQC				E	12-11-02					12-11-02	A	12-11-02	12-11-02	
			SD-11 Closeout Submittals																
02223	02223-02		Shipment Manifests for hazardous drums	1.2.2.1	CQC				E	01-22-03					01-22-03	A	01-22-03	01-22-03	
			Delivery Certificates	1.2.2.2															
			Disposal Site Decontamination Certificates	1.2.2.3															
			Work Site Decontamination Certificates	1.2.2.4															
			Treatment and Disposal Certificates	1.2.2.5															
		02224	SD-11 Closeout Submittals																
			Buried Utility Location Plan	2.1															
			Survey Report	2.2							Final Report								
			GIS CADD File(s)	2.3							Final Report								
			F-Size Plot	2.4							Final Report								
		02315	SD-06 Test Reports																
02315	02315-01		Borrow Site Testing - Select Fill & Topsoil	1.6	G				E	10-14-02	10-14-02			10-14-02	11-07-02	A	11-07-02	11-07-02	
02315	02315-02		Borrow Site Testing - Select Fill	1.6	CQC				E	10-14-02				10-14-02		A	10-14-02	10-14-02	
02315	02315-02		Common Fill	3.11.2.1	CQC				E	10-14-02				10-14-02		A	10-14-02	10-14-02	
02315	02315-02		Select Fill	3.11.2.2	CQC				E	10-14-02				10-14-02		A	10-14-02	10-14-02	
			Density Tests	3.11.2.3	CQC														Submitted with Daily Reports
			SD-07 Certificates																
			Excavation and Handling Work Plan	1.3.1				Work Plan		6/21/02									
			Dewatering Work Plan	3.2.1				Work Plan		6/21/2002									
		02525	SD-02 Shop Drawings																
02525	02525-03		Well Construction Report	1.6.1	CQC				E	9-16-03				9-16-03		A	9-16-03	9-16-03	
			SD-03 Product Data																
			Well Riser	2.1	CQC				E	4-2-03				4-2-03		A	4-2-03	4-2-03	
			Well Screen	2.2	CQC				E	4-2-03				4-2-03		A	4-2-03	4-2-03	
			Filter Pack	2.3	CQC				E	4-2-03				4-2-03		A	4-2-03	4-2-03	
			Cement/Bentonite Grout	2.4.2	CQC				E	4-2-03				4-2-03		A	4-2-03	4-2-03	
			Bentonite Pellet Seal	2.4.1	CQC				E	4-2-03				4-2-03		A	4-2-03	4-2-03	
			SD-07 Certificates																
			Well Drilling/Development Material Handling Plan	1.6.2	CQC				E	4-2-03				4-2-03		A	4-2-03	4-2-03	
			Field Sampling and Laboratory Testing Plan	1.6.4				Work Plan											
			Treatment Facility Permit	1.6.5															See 01575N
02525	02525-01		Well Abandonment Report	1.6.7	CQC				E	01-20-03				01-20-03		A	01-20-03	01-20-03	
02525	02525-03		Well Development Report	1.6.6	CQC				E	9-16-03				9-16-03		A	9-16-03	9-16-03	
02525	02525-03		Borehole Analysis Report	3.2.2	CQC				E	9-16-03				9-16-03		A	9-16-03	9-16-03	
02525	02525-03		Well Survey Report	3.7	CQC				E	9-16-03				9-16-03		A	9-16-03	9-16-03	
			SD-11 Closeout Submittals																
02525	02525-03		Well Construction Permit	1.6.8	CQC				E	9-16-03				9-16-03		A	9-16-03	9-16-03	
		02742	SD-06 Test Reports																
			Subbase Material Density	3.2															Submitted with Daily Reports
			Shoulder Material Density	3.6															
02742	02742-03		Base Course	3.8.1	CQC				E	9-16-03				9-16-03		A	9-16-03	9-16-03	
02742	02742-03		Bituminous Concrete Courses Test	3.8.2	CQC				E	9-16-03				9-16-03		A	9-16-03	9-16-03	
			SD-07 Certificates																
02742	02742-02		Subbase materials	2.1	CQC				E	01-20-03				01-20-03		A	01-20-03	01-20-03	
02742	02742-01		Woven Geotextile Class ST	2.7	CCC				E	12-11-02				12-11-02		A	12-11-02	12-11-02	
			Tack Coat	2.4															
			Bituminous Concrete	2.2															
		02915	SD-06 Test Reports																
			Erosion Control Measures	2.11															

**EXHIBIT VI-2
SUBMITTAL REGISTER
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND**

Task Order 0062
Contract No. N624790-97-D-5000

Project No. 809401
Project Title: Site 12, Town Gut Landfill, IHDIV-NSWC

Location: Indian Head, Maryland
Contractor: Shaw Environmental, Inc.

Activity Number	Transmittal Control Number	Spec. Section Number	SD No. and Type of Submittal Product	Material or	Spec. Paragraph Number	Classification Approval by Gvmt. or CQC *	Contractor Schedule Dates			Contractor Action		Other Reviewer		Approving Authority				Received from Approving Authority	Remarks	
							Planned Submittal Date	Approval Needed By	Material Needed By	Action Code	Date of Action	Date Forwarded to Other Reviewer	Date Received from Contractor	Date Forwarded to Approving Authority	Date Received from Other Reviewer	Date of Action	Action Code			Date Forwarded to Contractor
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)	(m)	(n)	(o)	(p)	(q)	(r)	(s)	(t)	
02315	02315-01		Topsoil		2.2	G				E	10-14-02	10-14-02			10-14-02	11-07-02	A	11-07-02	11-07-02	
			SD-07 Certificates																	
02915	02916-01		Nursery Certifications		2.1.1	CQC				E	4-2-03				4-2-03	A	4-2-03	4-2-03		

* Navy Notes:

Action Code: (Others may be prescribed by Transmittal Form)

Approved by:
G: Contracting Officer
CQC: Contractor's QC Manager

NR: Not Reviewed
A: Approved
AN: Approved as Noted
RR: Disapproved, Revise and Resubmit

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 01575N-01
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-03	1.3	Silt Fence	1	Product Data	E	A
		Super Silt Fence	1	Product Data	E	A
		Geotextile	1	Product Data	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature

Date

Ernie Duke

September 9, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature

Date

NA

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	--	--

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority

NA

ACF Environmental

1801-A Willis Road
 Richmond, VA 23237
 Sales: 1-800-448-3636
 Corporate: 1-800-223-9021
 Fax: 1-804-271-3074
 www.acf-environ.com

LS-30 Silt Fence

LS-30 Silt Fence is a woven polypropylene silt fence fabric. This engineered geotextile is stabilized to resist degradation due to ultraviolet exposure. It is resistant to commonly encountered soil chemicals, mildew and insects, and is non-biodegradable. Polypropylene is stable within a pH range of 2 to 13, making it one of the most stable polymers available for geotextiles today.

This is to certify that LS-30 Silt Fence meets the requirements for Maryland State Highway Administration Class F, and the following minimum average roll (MARV) values:

Property	Test Method	Unit	MARV (English)
Mechanical			
Grab Tensile Strength	ASTM D-4595	lbs/in	100
Secant Modulus at 10% Strain	ASTM D-4595	lbs/in	550
Grab Elongation	ASTM D-4595	%	20
Puncture Strength	ASTM D-4833	lbs	65
Mullen Burst	ASTM D-3786	psi	300
Trapezoidal Tear	ASTM D-4533	lbs	65
Hydraulic			
Filtering Efficiency	ASTM D-5141	%	75
Apparent Opening Size (AOS)	ASTM D-4751	US Sieve	30
Permittivity	ASTM D-4491	Sec ⁻¹	.05
Flow Rate	ASTM D-4491	gal/min/sf	10
Endurance			
UV Resistance	ASTM D-4355	% at 500 hr	80

All test methods are ASTM or industry standards.

Sincerely,

Corey Simonpietri
 Inside Sales Manager

The information presented herein is, to the best of our knowledge, true and accurate. Except when agreed to in writing for specific conditions of use, no warranty or guarantee expressed or implied is made regarding the performance of any product, since the manner of use and handling are beyond our control. Nothing contained herein is to be construed as permission or as a recommendation to infringe on any patent.



ACF Environmental
2831 Cardwell Road
Richmond, VA 23234
Sales: 1-800-448-3636
Corporate: 1-800-223-9021
Fax: 1-804-271-3074
www.acfenvironmental.com

SUPER SILT FENCE

Chain Link Fence—42" x 50" sections, 9 gauge standard
(Also available in 6 gauge and 11 gauge)

Posts (ea)—Type SS 40, 72" tall with the outside diameter of 2.375"
On 10' centers (5 per section of fence)

Fabric—915SC 42" x 300' rolls

Fence Ties (100/bag)—Used to tie chain link to the posts, need 3 ties per post

Hog Rings (lbs)—Used to connect fabric to chain link, 1 lb per 1000 lf

Note: Available in 50' increments only





GEOTEX® 801 Nonwoven Geotextile

GEOTEX 801 is a polypropylene, staple fiber, needlepunched nonwoven geotextile manufactured at one of Synthetic Industries' facilities that has achieved ISO-9002 certification for its systematic approach to quality. The fibers are needled to form a stable network that retains dimensional stability relative to each other. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils. GEOTEX 801 conforms to the property values listed below¹ which have been derived from quality control testing performed by one of Synthetic Industries' GAI-LAP accredited laboratories:

PROPERTY	TEST METHOD	MINIMUM AVERAGE ROLL VALUES ²	
		English	Metric
<u>Mechanical</u>			
Grab Tensile Strength	ASTM D4632	205 lbs	900 N
Grab Elongation	ASTM D4632	50%	50%
Puncture Strength	ASTM D4833	110 lbs	485 N
Mullen Burst	ASTM D3786	350 psi	2410 kPa
Trapezoidal Tear	ASTM D4533	85 lbs	375 N
<u>Hydraulic</u>			
Apparent Opening Size (AOS)	ASTM D4751	80 US Std Sieve	0.180 mm
Permittivity	ASTM D4491	1.50 sec ⁻¹	1.50 sec ⁻¹
Permeability	ASTM D4491	0.38 cm/sec	0.38 cm/sec
Water Flow Rate	ASTM D4491	110 gpm/ft ²	4480 l/min/m ²
<u>Endurance</u>			
UV Resistance (% retained after 500 hours)	ASTM D4355	70%	70%

NOTES:

¹ The property values listed below are effective 6/4/99 and are subject to change without notice.

² Values shown are in weaker principal direction. Minimum average roll values are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT FURNISHED HEREUNDER OTHER THAN AT THE TIME OF DELIVERY IT SHALL BE OF THE QUALITY AND SPECIFICATION STATED HEREIN. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY EXCLUDED, AND, TO THE EXTENT THAT IT IS CONTRARY TO THE FOREGOING SENTENCE, ANY IMPLIED WARRANTY OF MERCHANTABILITY IS EXPRESSLY EXCLUDED. ANY RECOMMENDATIONS MADE BY SELLER CONCERNING THE USE OR APPLICATIONS OF SAID PRODUCT ARE BELIEVED RELIABLE AND SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED. IF THE PRODUCT DOES NOT MEET SYNTHETIC INDUSTRIES CURRENT PUBLISHED SPECIFICATIONS, AND THE CUSTOMER GIVES NOTICE TO SYNTHETIC INDUSTRIES BEFORE INSTALLING THE PRODUCT, THEN SYNTHETIC INDUSTRIES WILL REPLACE THE PRODUCT WITHOUT CHARGE OR REFUND THE PURCHASE PRICE.

Synthetic Industries, Inc.
4019 Industry Drive • Chattanooga, Tennessee • 37416 • USA
Telephone • 423-899-0444 • Fax • 423-899-7619 • 1-800-621-0444

**INDIAN HEAD DIVISION
 NAVAL SURFACE WARFARE CENTER
 INDIAN HEAD, MARYLAND
 SITE 12, DELIVERY ORDER 0062
 SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
 OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-02
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.3	Crushed Aggregate for Stabilized Construction Entrances - #1	1	Test Data	E	A

SUBMITTAL CODES
 D -- Forwarded to ROICC FOR ACTION
 E -- Forwarded to ROICC for Record Purposes

APPROVAL CODES
 A - Approved as Submitted
 AN - Approved as Noted

RR - Disapproved, Revise and Resubmit
 NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature: Ernie Duke Date: September 9, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature: NA Date: _____

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
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Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority: NA

AGGREGATE INDUSTRY, ROCKVILLE QUARRY
September 5, 2002



ATT: Mr. TOM MILLER
LA PLATA, MD PLANT
RE: CERTIFICATE OF COMPLIANCE

Dear Mr. MILLER

This is to certify that our Crushed Stone Aggregates, identified as size #1 and #3, meets the requirements as specified in A.A.S.H.T.O. Designation M43. Samples from our Stockpile were recently tested with the following results:

A.A.S.H.T.O. M-43-#1			
SIEVE SIZE		% PASSING	SPECIFICATIONS
4"	100.0mm	100%	100%
3 1/2"	90.0mm	99%	90-100%
2 1/2"	63.0mm	56%	25-60%
1 1/2"	37.5mm	9%	0-15%
3/4"	19.0mm	1%	0-05%

A.A.S.H.T.O. M43-3			
Sieve Size		% Passing	Specifications
2 1/4"	63.0 mm	100 %	100 %
2"	50.0 mm	96 %	90 - 100 %
1 1/2"	37.5 mm	47 %	35 - 70 %
1"	25.0 mm	5 %	0 - 15 %
1/2"	12.5 mm	2 %	0 - 5 %

PHYSICAL PROPERTIES OF STONE		
Test Name	Results	Specifications
L.A. Abrasion AASHTO T-96	14.1 % Wear	Max. 45 % Wear
Soundness AASHTO T-104	2.7 % Wear	Max. 12 % Loss
Absorption AASHTO T-85	.5 %	Max. 3.0
Sp. Gr. (APP) AASHTO T-85	2.77	Min. 2.50

The above listed results are based on past experience and therefore individual results may vary to some degree as allowed by specifications. We appreciate your business and thank you for your confidence in our product. If I may furnish additional information, please contact me.

Sincerely,
AGGREGATE INDUSTRY, ROCKVILLE QUARRY

Indra Kumar
John S. Croney (301-762-9589)
Director of Technical Services
Aggregate Division, Mid-Atlantic

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
Suite 400
Greenbelt, Maryland 20770

Tel: 301 - 982 - 1400
Fax: 301 - 513 - 0014

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**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-03
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-03	1.3	Erosion Control Mat	1	Product Data	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D - Forwarded to ROICC FOR ACTION	A - Approved as Submitted	RR - Disapproved, Revise and Resubmit
E - Forwarded to ROICC for Record Purposes	AN - Approved as Noted	NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	October 9, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
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Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority
 NA



LANDLOK® TRM 435 Turf Reinforcement Mat

LANDLOK TRM 435 is manufactured at one of Synthetic Industries' facilities that has achieved ISO-9002 certification for its systematic approach to quality. LANDLOK TRM 435 turf reinforcement mat consists of a dense web of green polypropylene fibers positioned between two biaxially oriented nets and mechanically bound together by parallel stitching with polypropylene thread. The matrix possesses strength and elongation properties to limit stretching in a saturated condition. Every component of the matrix is stabilized against ultraviolet degradation and inert to chemicals normally found in a natural soil environment. After a 24 hour saturation period, LANDLOK TRM 435 conforms to the property values listed below¹, which have been derived from quality control testing performed by one of Synthetic Industries' GAL-LAP accredited laboratories:

PROPERTY	TEST METHOD	ENGLISH VALUES ²	
		MARV	TYPICAL
<u>Mechanical</u>			
Tensile Strength	ASTM D5035 ³	145 x 110 lb/ft	200 x 150 lb/ft
Tensile Elongation	ASTM D5035 ³	50% (max)	30%
Tensile Strength @ 10% Elongation	ASTM D5035 ³	100 x 70 lb/ft	160 x 130 lb/ft
<u>Endurance</u>			
UV Resistance @ 1000 hrs	ASTM D4355	80%	90%
<u>Physical</u>			
Mass Per Unit Area	ASTM D5261	8.0 oz/yd ²	9.0 oz/yd ²
Thickness ⁴	ASTM D1777	0.35 in	0.40 in
Resiliency ⁵	ASTM D1777	80%	90%
Moisture Absorption	ASTM D570	0.01% (max)	0.01% (max)
Porosity ⁶	Calculated	95%	95%
Ground Cover Factor ⁷	Light Projection Analysis	60%	70%
<u>Performance</u>			
Velocity ⁸	---	---	18 ft/sec
Shear Stress ⁸	---	---	5 lb/ft ²

ROLL SIZES: 6.5 ft x 138.5 ft = 100 yd² (50 lbs) **SPECIAL ROLL SIZES:** 3.25 ft x 138.5 ft = 50 yd² (25 lbs)
 9.75 ft x 138.5 ft = 150 yd² (75 lbs)
 13.0 ft x 138.5 ft = 200 yd² (100 lbs)

NOTES:

- ¹ The property values listed above are effective 6/28/99 and are subject to change without notice.
- ² Values for machine and cross-machine, respectively, under dry or saturated conditions. Minimum average roll values (MARV) are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported. Typical indicates mean or average of all test data.
- ³ Formerly test method ASTM D1682.
- ⁴ Modified ASTM D1777 using 6" Pressure Plate and 0.2 kPa.
- ⁵ Resiliency defined as percent of original thickness retained after 3 cycles of a 100 psi load for 60 seconds followed by 60 seconds without load... thickness measured 30 measured after load removed by ASTM D1777.
- ⁶ Porosity calculation based upon mass per unit area, thickness, and specific gravity.
- ⁷ Ground Cover Factor represents "% shade" from Luminc Light Projection Test.
- ⁸ Maximum permissible design values listed are based on short-term (0.50 hrs), vegetated data obtained at an independent hydraulics testing facility. Additional values available upon request.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT FURNISHED HEREUNDER OTHER THAN AT THE TIME OF DELIVERY IT SHALL BE OF THE QUALITY AND SPECIFICATION STATED HEREIN. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY EXCLUDED, AND, TO THE EXTENT THAT IT IS CONTRARY TO THE FOREGOING SENTENCE, ANY IMPLIED WARRANTY OF MERCHANTABILITY IS EXPRESSLY EXCLUDED. ANY RECOMMENDATIONS MADE BY SELLER CONCERNING THE USES OR APPLICATIONS OF SAID PRODUCT ARE BELIEVED RELIABLE AND SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED, IF THE PRODUCT DOES NOT MEET SYNTHETIC INDUSTRIES CURRENT PUBLISHED SPECIFICATIONS, AND THE CUSTOMER GIVES NOTICE TO SYNTHETIC INDUSTRIES BEFORE INSTALLING THE PRODUCT, THEN SYNTHETIC INDUSTRIES WILL REPLACE THE PRODUCT WITHOUT CHARGE OR REFUND THE PURCHASE PRICE.

Synthetic Industries, Inc.
 4019 Industry Drive • Chattanooga, Tennessee • 37416 • USA
 Telephone • 423-899-0444 • Fax • 423-899-7619 • 1-800-621-0444

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-04
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.3	Riprap for Channels	1	Test Data	E	A

<u>SUBMITTAL CODES</u> D – Forwarded to ROICC FOR ACTION E – Forwarded to ROICC for Record Purposes	<u>APPROVAL CODES</u> A – Approved as Submitted AN – Approved as Noted	RR – Disapproved, Revise and Resubmit NR – Not Reviewed
---	--	--

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	October 9, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	--	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority
 NA

AGGREGATE INDUSTRY
ROCKVILLE QUARRY
October 3, 2002



SHAW / E&I
P.O. BOX #867
INDIAN HEAD, MARYLAND 20640
ATT: Mr. JOEY GUZZARDO

RE: TOWNGUT LANDFILL SITE #12

Dear Mr. GUZZARDO

This is to certify that our Crushed Stone Aggregate, identified as Class 0 RipRap meets the requirements for that designation as specified in Section 901.02.01 of "Standard Specifications for Construction and Materials, Maryland Department of Transportation, January ,2001".

CLASS OF RIPRAP	SIZE	PERCENT OF TOTAL BY WEIGHT
0	Heavier than 33 lb (15kg)	0
	Heavier than 10 lb (5 kg)	50
	Less than 1 lb (0.5 kg)	10 max

WEIGHT/CU.YARD-----1.52 TONS

Although reasonable care is taken, oversized individual particles may turn up in our Class 0 RIPRAP. However, it will not contain more than 10% by weight of the smallest size stone of that class.

PHYSICAL PROPERTIES OF STONE

Test Name	Results	Specifications
L.A. Abrasion AASHTO T-96	14.1 % Wear	Max. 45 % Wear
Soundness AASHTO T-104	2.7%	Max. 12 % Loss
Absorption AASHTO T-85	.5 %	Max. 3.0
Sp. Gr. (APP) AASHTO T-85	2.77	Min. 2.50

The above listed results are based on past experience. Therefore, individual results may vary to some degree as allowed by specification. We appreciate your business and thank you for your confidence in our product. If I may furnish additional information, please contact me.

Sincerely,
AGGREGATE INDUSTRY
ROCKVILLE QUARRY

A handwritten signature in black ink, appearing to read "John S. Croney".

John S. Croney
Director of Technical Services
Aggregate Division, Mid-Atlantic

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
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**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 01575N-05
Specification Section No. (Only 1 section with each transmittal) <p style="text-align: center;">01575N</p>	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.3	Laboratory Analysis of Waste Debris Demonstrating the waste is Non-Hazardous	1	Test Data	E	A

<u>SUBMITTAL CODES</u> D – Forwarded to ROICC FOR ACTION E – Forwarded to ROICC for Record Purposes	<u>APPROVAL CODES</u> A – Approved as Submitted AN – Approved as Noted	RR – Disapproved, Revise and Resubmit NR – Not Reviewed
---	--	--

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature: Ernie Duke Date: October 22, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned: -
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

LabLink Analytical Data Report - Hits/J-Values Only (a)
Indian Head

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	Limit	DF	Client ID	Collected	Time
F14972-1	Corrosivity as pH		SW846 CHAP7	5.2					1	IH-WD-005	7-Oct-02	14:00
F14972-1	Arsenic	7440-38-2	SW846 6010B	0.023		mg/l	0.01	5	1	IH-WD-005	7-Oct-02	14:00
F14972-1	Barium	7440-39-3	SW846 6010B	0.27	B	mg/l	1	100	1	IH-WD-005	7-Oct-02	14:00
F14972-1	Cadmium	7440-43-9	SW846 6010B	0.0022	B	mg/l	0.01	1	1	IH-WD-005	7-Oct-02	14:00
F14972-1	Chromium	7440-47-3	SW846 6010B	0.024		mg/l	0.01	5	1	IH-WD-005	7-Oct-02	14:00
F14972-1	Lead	7439-92-1	SW846 6010B	0.057		mg/l	0.005	5	1	IH-WD-005	7-Oct-02	14:00
F14972-1	Selenium	7782-49-2	SW846 6010B	0.0077	B	mg/l	0.01	1	1	IH-WD-005	7-Oct-02	14:00

(b) Outside control limits due to dilution.

Found 0 results exceeding regulatory limits.

** Indicates result outside regulatory limits.

* Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. Accutest assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.

Sample Summary

Shaw E & I, Inc.

Job No: F14972

Indian Head

Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F14972-1	10/07/02	14:00	ED	10/08/02	SO Soil	IH-WD-005

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID:	IH-WD-005	Date Sampled:	10/07/02
Lab Sample ID:	F14972-1	Date Received:	10/08/02
Matrix:	SO - Soil	Percent Solids:	92.0
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012535.D	10	10/14/02	JG	10/11/02	MS1808	VC556
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
2037-26-5	Toluene-D8	105%		87-113%
460-00-4	4-Bromofluorobenzene	103%		84-117%
17060-07-0	1,2-Dichloroethane-D4	101%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261.6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-WD-005	Date Sampled:	10/07/02
Lab Sample ID:	F14972-1	Date Received:	10/08/02
Matrix:	SO - Soil	Percent Solids:	92.0
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W012512.D	1	10/14/02	ME	10/11/02	OP6086	SW675
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		19-90%
4165-62-2	Phenol-d5	39%		10-68%
118-79-6	2,4,6-Tribromophenol	100%		36-137%
4165-60-0	Nitrobenzene-d5	99%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	107%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-WD-005		Date Sampled:	10/07/02
Lab Sample ID:	F14972-1		Date Received:	10/08/02
Matrix:	SO - Soil		Percent Solids:	92.0
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07466.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		52-131%
2051-24-3	Decachlorobiphenyl	97%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-WD-005	Date Sampled:	10/07/02
Lab Sample ID:	F14972-1	Date Received:	10/08/02
Matrix:	SO - Soil	Percent Solids:	92.0
Method:	SW846 8082 SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MN16259.D	100	10/10/02	NJ	10/09/02	OP6062	GMN623
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	3700	ug/kg	
11104-28-2	Aroclor 1221	ND	3700	ug/kg	
11141-16-5	Aroclor 1232	ND	3700	ug/kg	
53469-21-9	Aroclor 1242	ND	3700	ug/kg	
12672-29-6	Aroclor 1248	ND	3700	ug/kg	
11097-69-1	Aroclor 1254	ND	3700	ug/kg	
11096-82-5	Aroclor 1260	ND	3700	ug/kg	
	Total PCBs	ND	7500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	0% ^b		50-134%
2051-24-3	Decachlorobiphenyl	0% ^b		48-147%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-WD-005		Date Sampled:	10/07/02
Lab Sample ID:	F14972-1		Date Received:	10/08/02
Matrix:	SO - Soil		Percent Solids:	92.0
Method:	SW846 8151	SW846 1311		
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06709.D	1	10/13/02	ATX	10/11/02	T:OP1451	T:GGG244
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	130%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005	Date Sampled: 10/07/02
Lab Sample ID: F14972-1	Date Received: 10/08/02
Matrix: SO - Soil	Percent Solids: 92.0
Project: Indian Head	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Me
Arsenic	0.023	D004	5.0	0.010	0.0028	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Barium	0.27 B	D005	100	1.0	0.0049	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Cadmium	0.0022 B	D006	1.0	0.010	0.0026	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Chromium	0.024	D007	5.0	0.010	0.0043	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Lead	0.057	D008	5.0	0.0050	0.0012	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.0022	mg/l	1	10/11/02	10/15/02	DM	SW846 7470
Selenium	0.0077 B	D010	1.0	0.010	0.0020	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/11/02	10/15/02	DM	SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID: IH-WD-005
 Lab Sample ID: F14972-1
 Matrix: SO - Soil
 Project: Indian Head

Date Sampled: 10/07/02
 Date Received: 10/08/02
 Percent Solids: 92.0

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	5.2			1	10/15/02 SJL	SW846 CHAP7
Cyanide Reactivity	<1.6	1.6	mg/kg	1	10/14/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	>200		Deg. F	1	10/15/02 SJL	SW846 1010
Solids, Percent	92		%	1	10/10/02 SJL	EPA 160.3 M
Sulfide Reactivity	<54	54	mg/kg	1	10/09/02 LL	SW846 CHAP7

RL = Reporting Limit

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-06
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.6.1	Solid Waste Facility Permit Permit Number 553 Commonwealth of VA.	1	Documentation	E	A

<u>SUBMITTAL CODES</u> D – Forwarded to ROICC FOR ACTION E – Forwarded to ROICC for Record Purposes	<u>APPROVAL CODES</u> A – Approved as Submitted AN – Approved as Noted	RR – Disapproved, Revise and Resubmit NR – Not Reviewed
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I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature Ernie Duke	Date October 22, 2002
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PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

Street address: 629 East Main Street, Richmond, Virginia 23219

Mailing address: P.O. Box 10009, Richmond, Virginia 23240

Fax (804) 698-4500 TDD (804) 698-4021

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James S. Gilmore, III
Governor

John Paul Woodley, Jr.
Secretary of Natural Resources

Dennis H. Treacy
Director

(804) 698-4000
1-800-592-5482

SOLID WASTE FACILITY PERMIT PERMIT NUMBER 553

Facility Name: Old Dominion Sanitary Landfill & Resource Management Facility

Facility Type: Sanitary Landfill **Latitude:** 37:29:20 North

Site Location: Henrico County **Longitude:** 77:22:20 West

Location Description: The Old Dominion Sanitary Landfill and Resource Management Facility is located in eastern Henrico County, Virginia, on Charles City Road, approximately one half mile south of U.S. Route 60. An asphalt-paved road from Charles City Road accesses the site. The total area for permitting consists of approximately 268 acres. The total area approved for actual lined disposal area, or landfill "footprint" consists of approximately 70 acres, with additional areas for ancillary features.

Background: The owner and operator of the facility is Browning-Ferris Industries of South Atlantic, Inc. This facility will be open to all municipal, government, commercial, and industrial customers. One of the major sources of solid waste will be the waste collected by BFI in the Richmond Metropolitan area. Waste types will generally consist of household, commercial and industrial refuse, to include those waste types allowed by the Department of Environmental Quality. Hazardous waste will not be accepted. Liquid waste may be accepted if treated and disposed in accordance with this permit. The landfill capacity is estimated to be 11.74 million cubic yards. Of this airspace, 20% consists of daily and intermediate cover. The design life is estimated to be approximately 28 years, and is based on a current waste acceptance rate of 1,300 cubic yards per day (800 tons per day); however, the facility has the capacity to receive up to 3,300 cubic yards per day (2,000 tons per day) which would result in a design life of approximately 12 years. Higher or lower daily volumes will alter the site life accordingly. The hours of operation are from 6:30 AM to 6:00 PM, Monday through Friday,

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 01575N-06
Specification Section No. (Only 1 section with each transmittal) <p style="text-align: center;">01575N</p>	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.3	Laboratory Analysis of Waste Drums Demonstrating that 6 drums are Hazardous and 1 drum is non-hazardous.	1	Test Data	E	A

<u>SUBMITTAL CODES</u> D – Forwarded to ROICC FOR ACTION E – Forwarded to ROICC for Record Purposes	<u>APPROVAL CODES</u> A – Approved as Submitted AN – Approved as Noted	RR – Disapproved, Revise and Resubmit NR – Not Reviewed
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I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature: Ernie Duke Date: November 7, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

LabLink Analytical Data Report
Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261.6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	Limit	DF	Client ID	Collected	Time
F15057-1	2,4-D	94-75-7	SW846 8151	ND		mg/l	0.01	10	1	IH-DM-006	15-Oct-02	11:20
F15057-1	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND		mg/l	0.002	1	1	IH-DM-006	15-Oct-02	11:20
F15057-1	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND		mg/l	0.0005	0.4	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Chlordane	12789-03-6	SW846 8081A	ND		mg/l	0.005	0.03	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Endrin	72-20-8	SW846 8081A	ND		mg/l	0.001	0.02	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Heptachlor	76-44-8	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Heptachlor epoxide	1024-57-3	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Methoxychlor	72-43-5	SW846 8081A	ND		mg/l	0.001	10	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Toxaphene	8001-35-2	SW846 8081A	ND		mg/l	0.025	0.5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Aroclor 1016	12674-11-2	SW846 8082	ND		ug/kg	220		4	IH-DM-006	15-Oct-02	11:20
F15057-1	Aroclor 1221	11104-28-2	SW846 8082	ND		ug/kg	220		4	IH-DM-006	15-Oct-02	11:20
F15057-1	Aroclor 1232	11141-16-5	SW846 8082	ND		ug/kg	220		4	IH-DM-006	15-Oct-02	11:20
F15057-1	Aroclor 1242	53469-21-9	SW846 8082	ND		ug/kg	220		4	IH-DM-006	15-Oct-02	11:20
F15057-1	Aroclor 1248 (b)	12672-29-6	SW846 8082	405	J	ug/kg	220		4	IH-DM-006	15-Oct-02	11:20
F15057-1	Aroclor 1254 (b)	11097-69-1	SW846 8082	371	J	ug/kg	220		4	IH-DM-006	15-Oct-02	11:20
F15057-1	Aroclor 1260	11096-82-5	SW846 8082	ND		ug/kg	220		4	IH-DM-006	15-Oct-02	11:20
F15057-1	Total PCBs (b)		SW846 8082	776	J	ug/kg	440		4	IH-DM-006	15-Oct-02	11:20
F15057-1	2,4-DCAA	19719-28-9	SW846 8151	103		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Tetrachloro-m-xylene	877-09-8	SW846 8081A	94		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Tetrachloro-m-xylene	877-09-8	SW846 8082	61		%			4	IH-DM-006	15-Oct-02	11:20
F15057-1	Decachlorobiphenyl	2051-24-3	SW846 8081A	120		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Decachlorobiphenyl	2051-24-3	SW846 8082	75		%			4	IH-DM-006	15-Oct-02	11:20
F15057-1	Ignitability (Flashpoint)		SW846 1010	65		Deg. F			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Sulfide Reactivity		SW846 CHAP7	<83	<	mg/kg	83		1	IH-DM-006	15-Oct-02	11:20
F15057-1	Corrosivity as pH		SW846 CHAP7	7.9					1	IH-DM-006	15-Oct-02	11:20
F15057-1	Cyanide Reactivity		SW846 CHAP7	<2.5	<	mg/kg	2.5		1	IH-DM-006	15-Oct-02	11:20
F15057-1	Solids, Percent		EPA 160.3 M	60.2		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Arsenic	7440-38-2	SW846 6010B	0.011		mg/l	0.01	5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Barium	7440-39-3	SW846 6010B	0.94	B	mg/l	1	100	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Cadmium	7440-43-9	SW846 6010B	0.18		mg/l	0.005	1	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Chromium	7440-47-3	SW846 6010B	13.1**		mg/l	0.01	5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Lead	7439-92-1	SW846 6010B	0.12		mg/l	0.01	5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Mercury	7439-97-6	SW846 7470A	0.00022	U	mg/l	0.01	0.2	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Selenium	7782-49-2	SW846 6010B	0.0056	B	mg/l	0.01	1	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Silver	7440-22-4	SW846 6010B	0.00055	U	mg/l	0.01	5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	2-Methylphenol	95-48-7	SW846 8270C	ND		mg/l	0.05	200	1	IH-DM-006	15-Oct-02	11:20
F15057-1	3&4-Methylphenol		SW846 8270C	0.0304	J	mg/l	0.05	200	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Pentachlorophenol	87-86-5	SW846 8270C	ND		mg/l	0.25	100	1	IH-DM-006	15-Oct-02	11:20
F15057-1	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND		mg/l	0.05	400	1	IH-DM-006	15-Oct-02	11:20
F15057-1	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND		mg/l	0.05	2	1	IH-DM-006	15-Oct-02	11:20
F15057-1	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	0.05	7.5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	0.05	0.5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	0.05	3	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	0.05	2	1	IH-DM-006	15-Oct-02	11:20
F15057-1	Pyridine	110-86-1	SW846 8270C	ND		mg/l	0.05	5	1	IH-DM-006	15-Oct-02	11:20
F15057-1	2-Fluorophenol	367-12-4	SW846 8270C	54		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Phenol-d5	4165-62-2	SW846 8270C	34		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	2,4,6-Tribromophenol	118-79-6	SW846 8270C	89		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Nitrobenzene-d5	4165-60-0	SW846 8270C	86		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	2-Fluorobiphenyl	321-60-8	SW846 8270C	88		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Terphenyl-d14	1718-51-0	SW846 8270C	82		%			1	IH-DM-006	15-Oct-02	11:20
F15057-1	Benzene	71-43-2	SW846 8260B	ND		mg/l	1	0.5	1000	IH-DM-006	15-Oct-02	11:20

LabLink Analytical Data Report
 Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261.6/96)*

F15057-1	Chlorobenzene	108-90-7	SW846 8260B	ND	mg/l	2	100	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Chloroform	67-66-3	SW846 8260B	ND	mg/l	2	6	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Carbon tetrachloride	56-23-5	SW846 8260B	ND	mg/l	2	0.5	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND	mg/l	2	0.7	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	1,2-Dichloroethane	107-06-2	SW846 8260B	ND	mg/l	2	0.5	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	p-Dichlorobenzene	106-46-7	SW846 8260B	ND	mg/l	2	7.5	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Methyl ethyl ketone	78-93-3	SW846 8260B	ND	mg/l	10	200	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Tetrachloroethylene	127-18-4	SW846 8260B	ND	mg/l	2	0.7	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Trichloroethylene	79-01-6	SW846 8260B	ND	mg/l	2	0.5	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Vinyl chloride	75-01-4	SW846 8260B	ND	mg/l	1	0.2	1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Dibromofluoromethane	1868-53-7	SW846 8260B	99	%			1000	IH-DM-006	15-Oct-02	11:20
F15057-1	Toluene-D8	2037-26-5	SW846 8260B	98	%			1000	IH-DM-006	15-Oct-02	11:20
F15057-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	92	%			1000	IH-DM-006	15-Oct-02	11:20
F15057-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	103	%			1000	IH-DM-006	15-Oct-02	11:20
F15057-2	2,4-D	94-75-7	SW846 8151	ND	mg/l	0.01	10	1	IH-DM-007	15-Oct-02	11:30
F15057-2	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND	mg/l	0.002	1	1	IH-DM-007	15-Oct-02	11:30
F15057-2	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND	mg/l	0.0005	0.4	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Chlordane	12789-03-6	SW846 8081A	ND	mg/l	0.005	0.03	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Endrin	72-20-8	SW846 8081A	ND	mg/l	0.001	0.02	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Heptachlor	76-44-8	SW846 8081A	ND	mg/l	0.0005	0.008	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Heptachlor epoxide	1024-57-3	SW846 8081A	ND	mg/l	0.0005	0.008	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Methoxychlor	72-43-5	SW846 8081A	ND	mg/l	0.001	10	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Toxaphene	8001-35-2	SW846 8081A	ND	mg/l	0.025	0.5	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Aroclor 1016	12674-11-2	SW846 8082	ND	ug/kg	650		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Aroclor 1221	11104-28-2	SW846 8082	ND	ug/kg	650		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Aroclor 1232	11141-16-5	SW846 8082	ND	ug/kg	650		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Aroclor 1242	53469-21-9	SW846 8082	ND	ug/kg	650		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Aroclor 1248	12672-29-6	SW846 8082	ND	ug/kg	650		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Aroclor 1254	11097-69-1	SW846 8082	ND	ug/kg	650		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Aroclor 1260	11096-82-5	SW846 8082	ND	ug/kg	650		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Total PCBs		SW846 8082	ND	ug/kg	1300		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Tetrachloro-m-xylene	877-09-8	SW846 8081A	59	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Tetrachloro-m-xylene	877-09-8	SW846 8081A	65	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Tetrachloro-m-xylene	877-09-8	SW846 8082	71	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	2,4-DCAA	19719-28-9	SW846 8151	66	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Decachlorobiphenyl (c)	2051-24-3	SW846 8081A	2	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Decachlorobiphenyl	2051-24-3	SW846 8082	64	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Decachlorobiphenyl (d)	2051-24-3	SW846 8081A	IND	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Sulfide Reactivity		SW846 CHAP7	<98	< mg/kg	98		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Cyanide Reactivity		SW846 CHAP7	<2.9	< mg/kg	2.9		1	IH-DM-007	15-Oct-02	11:30
F15057-2	Corrosivity as pH		SW846 CHAP7	10				1	IH-DM-007	15-Oct-02	11:30
F15057-2	Ignitability (Flashpoint)		SW846 1010	>210	> Deg. F			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Solids, Percent		EPA 160.3 M	51	%			1	IH-DM-007	15-Oct-02	11:30
F15057-2	Arsenic	7440-38-2	SW846 6010B	0.028	U mg/l	0.1	5	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Barium	7440-39-3	SW846 6010B	0.24	B mg/l	10	100	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Cadmium	7440-43-9	SW846 6010B	0.0026	U mg/l	0.05	1	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Chromium	7440-47-3	SW846 6010B	0.0043	U mg/l	0.1	5	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Lead	7439-92-1	SW846 6010B	0.058	mg/l	0.01	5	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Mercury	7439-97-6	SW846 7470A	0.00022	U mg/l	0.01	0.2	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Selenium	7782-49-2	SW846 6010B	0.12	mg/l	0.2	1	1	IH-DM-007	15-Oct-02	11:30
F15057-2	Silver	7440-22-4	SW846 6010B	0.0055	U mg/l	0.1	5	1	IH-DM-007	15-Oct-02	11:30
F15057-2	2-Methylphenol	95-48-7	SW846 8270C	ND	mg/l	1	200	20	IH-DM-007	15-Oct-02	11:30
F15057-2	3&4-Methylphenol		SW846 8270C	ND	mg/l	1	200	20	IH-DM-007	15-Oct-02	11:30
F15057-2	Pentachlorophenol	87-86-5	SW846 8270C	ND	mg/l	5	100	20	IH-DM-007	15-Oct-02	11:30
F15057-2	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND	mg/l	1	400	20	IH-DM-007	15-Oct-02	11:30
F15057-2	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND	mg/l	1	2	20	IH-DM-007	15-Oct-02	11:30

LabLink Analytical Data Report
Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261.6/96)*

F15057-2	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	1	7.5	20	IH-DM-007	15-Oct-02	11:30
F15057-2	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	1	0.13	20	IH-DM-007	15-Oct-02	11:30
F15057-2	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	1	0.13	20	IH-DM-007	15-Oct-02	11:30
F15057-2	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	1	0.5	20	IH-DM-007	15-Oct-02	11:30
F15057-2	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	1	3	20	IH-DM-007	15-Oct-02	11:30
F15057-2	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	1	2	20	IH-DM-007	15-Oct-02	11:30
F15057-2	Pyridine	110-86-1	SW846 8270C	ND		mg/l	1	5	20	IH-DM-007	15-Oct-02	11:30
F15057-2	2-Fluorophenol	367-12-4	SW846 8270C	30		%			20	IH-DM-007	15-Oct-02	11:30
F15057-2	Phenol-d5	4165-62-2	SW846 8270C	18		%			20	IH-DM-007	15-Oct-02	11:30
F15057-2	2,4,6-Tribromophenol (e)	118-79-6	SW846 8270C	IND	*	%			20	IH-DM-007	15-Oct-02	11:30
F15057-2	Nitrobenzene-d5	4165-60-0	SW846 8270C	53		%			20	IH-DM-007	15-Oct-02	11:30
F15057-2	2-Fluorobiphenyl	321-60-8	SW846 8270C	72		%			20	IH-DM-007	15-Oct-02	11:30
F15057-2	Terphenyl-d14	1718-51-0	SW846 8270C	62		%			20	IH-DM-007	15-Oct-02	11:30
F15057-2	Benzene	71-43-2	SW846 8260B	ND		mg/l	10	0.5	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Chlorobenzene	108-90-7	SW846 8260B	ND		mg/l	20	100	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Chloroform	67-66-3	SW846 8260B	ND		mg/l	20	6	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Carbon tetrachloride	56-23-5	SW846 8260B	ND		mg/l	20	0.5	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND		mg/l	20	0.7	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	1,2-Dichloroethane	107-06-2	SW846 8260B	ND		mg/l	20	0.5	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	p-Dichlorobenzene	106-46-7	SW846 8260B	ND		mg/l	20	7.5	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Methyl ethyl ketone	78-93-3	SW846 8260B	ND		mg/l	100	200	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Tetrachloroethylene	127-18-4	SW846 8260B	ND		mg/l	20	0.7	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Trichloroethylene	79-01-6	SW846 8260B	ND		mg/l	20	0.5	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Vinyl chloride	75-01-4	SW846 8260B	ND		mg/l	10	0.2	10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Dibromofluoromethane	1868-53-7	SW846 8260B	96		%			10000	IH-DM-007	15-Oct-02	11:30
F15057-2	Toluene-D8	2037-26-5	SW846 8260B	97		%			10000	IH-DM-007	15-Oct-02	11:30
F15057-2	4-Bromofluorobenzene	460-00-4	SW846 8260B	96		%			10000	IH-DM-007	15-Oct-02	11:30
F15057-2	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	100		%			10000	IH-DM-007	15-Oct-02	11:30

(b) Estimated value due to the presence of multiple overlapping Arochlor patterns.

(c) Confirmed by re-extraction and reanalysis.

(d) Outside control limits due to matrix interference.

(e) Outside control limits due to dilution.

Found 1 results exceeding regulatory limits.

** Indicates result outside regulatory limits.

* Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. Accutest assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.

Sample Summary

Shaw E & I, Inc.

Job No: F15057

Indian Head

Project No: 809401-Site 12

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F15057-1	10/15/02	11:20 ED	10/16/02	SO	Soil	IH-DM-006
F15057-2	10/15/02	11:30 ED	10/16/02	SO	Soil	IH-DM-007

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID:	IH-DM-006	Date Sampled:	10/15/02
Lab Sample ID:	F15057-1	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	60.2
Method:	SW846 8260B SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	G0018589.D	1000	10/24/02	RAW	10/17/02	OP6133	VG612
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	1.0	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	2.0	mg/l	
67-66-3	Chloroform	ND	D022	6.0	2.0	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	2.0	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	2.0	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	2.0	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	2.0	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	2.0	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	2.0	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	98%		87-113%
460-00-4	4-Bromofluorobenzene	92%		84-117%
17060-07-0	1,2-Dichloroethane-D4	103%		78-125%

(a) Dilution required due to matrix interference (non-target analytes present above calibration range).

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-006	Date Sampled:	10/15/02
Lab Sample ID:	F15057-1	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	60.2
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015013.D	1	10/22/02	ME	10/19/02	OP6142	SL830
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	0.0304	D024	200	0.050	mg/l	J
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		19-90%
4165-62-2	Phenol-d5	34%		10-68%
118-79-6	2,4,6-Tribromophenol	89%		36-137%
4165-60-0	Nitrobenzene-d5	86%		49-119%
321-60-8	2-Fluorobiphenyl	88%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261.6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-006		Date Sampled:	10/15/02
Lab Sample ID:	F15057-1		Date Received:	10/16/02
Matrix:	SO - Soil		Percent Solids:	60.2
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST17235.D	1	10/22/02	SKW	10/21/02	OP6148	GST623
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		52-131%
2051-24-3	Decachlorobiphenyl	120%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-006	Date Sampled:	10/15/02
Lab Sample ID:	F15057-1	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	60.2
Method:	SW846 8082 SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MN16315.D	4	10/22/02	NJ	10/21/02	OP6151	GMN625
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	220	ug/kg	
11104-28-2	Aroclor 1221	ND	220	ug/kg	
11141-16-5	Aroclor 1232	ND	220	ug/kg	
53469-21-9	Aroclor 1242	ND	220	ug/kg	
12672-29-6	Aroclor 1248 ^b	405	220	ug/kg	J
11097-69-1	Aroclor 1254 ^b	371	220	ug/kg	J
11096-82-5	Aroclor 1260	ND	220	ug/kg	
	Total PCBs ^b	776	440	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	61%		50-134%
2051-24-3	Decachlorobiphenyl	75%		48-147%

(a) All hits confirmed by dual column analysis.

(b) Estimated value due to the presence of multiple overlapping Arochlor patterns.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-006		Date Sampled:	10/15/02
Lab Sample ID:	F15057-1		Date Received:	10/16/02
Matrix:	SO - Soil		Percent Solids:	60.2
Method:	SW846 8151	SW846 1311		
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG07132.D	1	10/24/02	ATX	10/23/02	T:OP1501	T:GGG255
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		10-150%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006	Date Sampled: 10/15/02
Lab Sample ID: F15057-1	Date Received: 10/16/02
Matrix: SO - Soil	Percent Solids: 60.2
Project: Indian Head	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Me
Arsenic	0.011	D004	5.0	0.010	0.0028	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B SW846 3010
Barium	0.94 B	D005	100	1.0	0.00049	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B SW846 3010
Cadmium	0.18	D006	1.0	0.0050	0.00026	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B SW846 3010
Chromium	13.1	D007	5.0	0.010	0.00043	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B SW846 3010
Lead	0.12	D008	5.0	0.010	0.0012	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/22/02	10/23/02	DM	SW846 7470A SW846 7470
Selenium	0.0056 B	D010	1.0	0.010	0.0020	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	IH-DM-006	Date Sampled:	10/15/02
Lab Sample ID:	F15057-1	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	60.2
Project:	Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	7.9			1	10/24/02 SJL	SW846 CHAP7
Cyanide Reactivity	<2.5	2.5	mg/kg	1	10/24/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	65		Deg. F	1	10/24/02 SJL	SW846 1010
Solids, Percent	60.2		%	1	10/18/02 SJL	EPA 160.3 M
Sulfide Reactivity	<83	83	mg/kg	1	10/23/02 LL	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID:	IH-DM-007	Date Sampled:	10/15/02
Lab Sample ID:	F15057-2	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	51.0
Method:	SW846 8260B SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	G0018590.D	10000	10/24/02	RAW	10/17/02	OP6133	VG612
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	10	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	20	mg/l	
67-66-3	Chloroform	ND	D022	6.0	20	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	20	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	20	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	20	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	20	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	100	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	20	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	20	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	96%		84-117%
17060-07-0	1,2-Dichloroethane-D4	100%		78-125%

(a) Dilution required due to matrix interference; sample foamed.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261.6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-007	Date Sampled:	10/15/02
Lab Sample ID:	F15057-2	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	51.0
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L015014.D	20	10/22/02	ME	10/19/02	OP6142	SL830
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	1.0	mg/l	
	3&4-Methylphenol	ND	D024	200	1.0	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	5.0	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	1.0	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	1.0	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	1.0	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	1.0	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	1.0	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	1.0	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	1.0	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	1.0	mg/l	
110-86-1	Pyridine	ND	D038	5.0	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	30%		19-90%
4165-62-2	Phenol-d5	18%		10-68%
118-79-6	2,4,6-Tribromophenol	0% ^b		36-137%
4165-60-0	Nitrobenzene-d5	53%		49-119%
321-60-8	2-Fluorobiphenyl	72%		45-118%
1718-51-0	Terphenyl-d14	62%		46-135%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-007	Date Sampled:	10/15/02
Lab Sample ID:	F15057-2	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	51.0
Method:	SW846 8081A SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST17236.D	1	10/22/02	SKW	10/21/02	OP6148	GST623
Run #2	DD07499.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2	100 ml	10.0 ml

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%	59%	52-131%
2051-24-3	Decachlorobiphenyl	0% ^b	2% ^a	16-153%

(a) Confirmed by re-extraction and reanalysis.

(b) Outside control limits due to matrix interference.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261.6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-007	Date Sampled:	10/15/02
Lab Sample ID:	F15057-2	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	51.0
Method:	SW846 8082 SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MN16317.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625
Run #2							

Run #	Initial Weight	Final Volume
Run #1	3.00 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	650	ug/kg	
11104-28-2	Aroclor 1221	ND	650	ug/kg	
11141-16-5	Aroclor 1232	ND	650	ug/kg	
53469-21-9	Aroclor 1242	ND	650	ug/kg	
12672-29-6	Aroclor 1248	ND	650	ug/kg	
11097-69-1	Aroclor 1254	ND	650	ug/kg	
11096-82-5	Aroclor 1260	ND	650	ug/kg	
	Total PCBs	ND	1300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		50-134%
2051-24-3	Decachlorobiphenyl	64%		48-147%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-007	Date Sampled:	10/15/02
Lab Sample ID:	F15057-2	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	51.0
Method:	SW846 8151 SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG07133.D	1	10/24/02	ATX	10/23/02	T:OP1501	T:GGG255
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007	Date Sampled: 10/15/02
Lab Sample ID: F15057-2	Date Received: 10/16/02
Matrix: SO - Soil	Percent Solids: 51.0
Project: Indian Head	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Met	
Arsenic	0.028 U	D004	5.0	0.10	0.028	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B	SW846 3010
Barium	0.24 B	D005	100	10	0.0049	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B	SW846 3010
Cadmium	0.0026 U	D006	1.0	0.050	0.0026	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B	SW846 3010
Chromium	0.0043 U	D007	5.0	0.10	0.0043	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B	SW846 3010
Lead	0.058	D008	5.0	0.010	0.012	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/22/02	10/23/02	DM	SW846 7470A	SW846 7470
Selenium	0.12	D010	1.0	0.20	0.020	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B	SW846 3010
Silver	0.0055 U	D011	5.0	0.10	0.0055	mg/l	1	10/21/02	10/22/02	DM	SW846 6010B	SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	IH-DM-007	Date Sampled:	10/15/02
Lab Sample ID:	F15057-2	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	51.0
Project:	Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	10.0			1	10/24/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 2.9	2.9	mg/kg	1	10/24/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 210		Deg. F	1	10/23/02 ATX	SW846 1010
Solids, Percent	51		%	1	10/18/02 SJL	EPA 160.3 M
Sulfide Reactivity	< 98	98	mg/kg	1	10/23/02 LL	SW846 CHAP7

RL = Reporting Limit

**INDIAN HEAD DIVISION
 NAVAL SURFACE WARFARE CENTER
 INDIAN HEAD, MARYLAND
 SITE 12, DELIVERY ORDER 0062
 SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
 OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-07
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.6.1	Solid Waste Facility Permit Permit Number 586 Commonwealth of VA. Disposal of Non-Hazardous Debris	1	Documentation	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Emie Duke	December 11, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (r one):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
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Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority
NA

NOV: -06' 95 (MON) 11:15 DEQ SW PERMITTING

TEL: 804 527 5233

P. 003



COMMONWEALTH of VIRGINIA
DEPARTMENT OF ENVIRONMENTAL QUALITY

Peter W. Schmidt
Director

SOLID WASTE MANAGEMENT FACILITY
PERMIT NUMBER 586

P. O. Box 10009
Richmond, Virginia 23240-0009
(804) 762-4000

Facility Name: King George County Landfill and Recycling Facility
Facility Type: Sanitary Landfill **Latitude:** 37° 16' 49"
Site Location: King George County **Longitude:** 79° 08' 51"

Location Description: The King George County Landfill and Recycling Facility is located on property owned by King George County (Landfill Owner) and leased to Garnet of Virginia (Landfill Operator), Inc. The facility is located on State Route 665 approximately 1.1 miles North of Route 3 and approximately 9 miles East of Fredericksburg. The site is bounded by State Routes 605 and 603. The south end of the facility is adjacent to the Dahlgren Branch of the CSX Railroad Line. The permit is being issued to encompass 290.5 acres of waste disposal area. The waste disposal area includes 168.9 acres dedicated to municipal solid waste and 121.3 acres dedicated to incinerator ash.

Background: The facility is to serve as a sanitary waste landfill for disposal of incinerator ash and municipal solid waste. The waste accepted will conform to those wastes listed in Permit Attachment II-1 (Operations Manual). The facility is designed with a liner system that is alternate to that found in the Virginia Solid Waste Management Regulations (VR 672-20-10). The variance pertaining to the alternate liner system is outlined in Permit Attachment III-5. The liner system consists of (top to bottom) 18 inches of drainage material (VDOT #8) with a minimum hydraulic conductivity of 1×10^{-3} cm/sec., 16 oz/say nonwoven geotextile, 60 mil textured High Density Polyethylene (HDPE) liner, geocomposite clay liner, geocomposite drainage layer (geonet with nonwoven geotextile on both sides, 60 mil textured HDPE liner, geocomposite clay liner, 40 mil textured HDPE liner, 12 inches of soil with a maximum permeability of 1×10^{-5} cm/sec. Leachate generated from the ash portion of the landfill will be directed to the leachate holding tank and leachate generated from the municipal solid waste portion of the landfill will be directed to a separate leachate holding tank. Each leachate tank will have a capacity of 250,000 gallons. From there the leachate will be pumped and hauled to a local wastewater treatment facility. Waste received will be transported to the facility by both rail and road. Based on a disposal rate of 2900 tons/day the facility will operate for an estimated 52 years with an ultimate solid waste

NOV: -06' 95 (MON) 11:15 DEQ SW PERMITTING

TEL: 804 527 5233

P. 004

disposal capacity of 45,500,000 million cubic yards. The landfill has been designed to accept 1,248,000 tons per year or 4000 ton/day of waste (see Attachment III-2) from King George County and other in state or out of state communities.

Permit Highlights: This permit includes permit modules and associated permit attachments which are, in general, based on information submitted in the permit application. The permit is issued to King George County, however, Garnet of Virginia, Inc., 11528 Ridge Road, King George, VA 22485, is the operator of the landfill and is providing the financial assurance corresponding to the closure/post-closure cost estimate in Permit Attachment XII-1. The permit issued on August 17, 1995 is amended as per November 1, 1995 request, in order to change the operational hours to Monday through Saturday from 6:00 a.m. to 6:00 p.m.. In addition informational changes have been made.

THIS IS TO CERTIFY THAT:

King George County
P.O. Box 169
King George, VA 22485

is hereby granted a permit to construct, operate, and maintain the facility as described in the attached Permit Modules I, II, III, X and XII and the Permit Attachments cited in these Modules. These Permit Modules and Permit Attachments are as referenced hereinafter and are incorporated into and become a part of this permit.

The herein described activity is to be established, modified, constructed, installed, operated, used, maintained, and closed in accordance with the terms and conditions of this permit and the plans, specifications, and reports submitted and cited in the permit. The facility shall comply with all regulations of the Virginia Waste Management Board.

Failure to comply with the terms and conditions of this permit shall constitute grounds for the revocation or suspension of this permit and for the initiation of necessary enforcement actions.

The permit is issued in accordance with the provisions of § 10.1-1408.1.A, Chapter 14, Title 10.1, Code of Virginia (1950) as amended.

NOV -06' 95 (MOY) 11:16 DEQ SW PERMITING

TEL:804 527 5233

P.005

The permit is amended to change the hours of operations and clarify waste acceptance and service area.

APPROVED:

Issued August 17, 1995

Peter W. Schmidt
fw Peter W. Schmidt
Director

DATE: 11/6/95
Amended

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 01575N-08
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.6.3	Non-Hazardous Manifests for the Disposal of Non-Hazardous Debris (14 Loads)	1	Documentation	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	January 22, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave. Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	--	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	---	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority
NA



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236174
DATE: 10/12/2002
TIME: 10:00 17:00

CUSTOMER: A13 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROPOSE # 5219
Origin: MD / MARYLAND
TRUCK: M1 LICENSE:
ROUTE: NA / NON APP MANIFEST: 000
Carrier: NA / NON APP

P.C.: 0
GROSS: 38600 LBS
TARE: 24400 LBS
NET: 14200 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CB T 7.11

Russell Worrell

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER: *Russell Worrell II*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-002

SECTION 1

GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME
b) Generator's Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD, MD 20640 k) Address: SAME
c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME
d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - [] Friable; [] Both; [] % friable [] % non-friable
g) Description of Waste: RESIDUAL [] Non-Friable; [] N/A

h) Disposal Volume: EST 20400 TONS IX n) Type of Containers: TR

- TYPE OF CONTAINERS
TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

i) Number of Containers: [] Tons [] Cubic Yards [] Others []

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Heidi A Morgan Heidi A Morgan 12/12/02
Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

SECTION 2

TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.
b) Transporter's Address: P.O. BOX 2155
c) Telephone Number: (804) 301-7944
d) Vehicle License No./State: TWO BROS. VA
e) Trailer or Container No.: 1
f) Name of Driver (print/type) Russell Worrell

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Russell Worrell III 12-12-02
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver Date of Delivery

SECTION 3

TRANSFER FACILITY

Complete if applicable)

a) Transfer Facility's Name:
b) Transfer Facility's Address:
c) Telephone Number: ()
d) Vehicle License No./State:
e) Trailer or Container No.:
f) Name of Transfer Facility's Authorized Agent (print/type)

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name:
b) Transporter's Address:
c) Telephone Number: ()
d) Vehicle License No./State:
e) Trailer or Container No.:
f) Name of Driver (print/type)

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver Date of Delivery

SECTION 5

DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL
b) Physical Address: 10376 BULLOCK DRIVE RG VA
c) Telephone Number: (540) 775-3123
d) Mailing Address: SAME
e) Name of Disposal Facility's Authorized Agent (print/type)

f) The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent Date of Rejection
Signature of Driver Date of Rejection

SECTION 6

ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: c) Telephone Number: ()
b) Operator's Address:
d) Recommended special handling instructions and additional information:

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

TICKET: 230169
DATE: 12/18/2002
TIME: 16:42 - 16:43

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 2800 LICENSE:
ROUTE: NA / NON APP MANHOLE: 0
Carrier: NA / NON APP

P.O.: 9
GROSS: 32520 LBSManual
TARE: 25040 LBSManual
NET: 7480 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CB T 3.74

Russell Worrell

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

Russell Worrell

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



KING GEORGE LANDFILL
 A WASTE MANAGEMENT COMPANY
 10376 Bullock Drive • King George, VA 22485



000093

DATE 12/12/02 ACCOUNT # 9219 P.O. # _____

COMPANY Tadous Head NWSC

PLEASE CIRCLE ONE OF THE FOLLOWING

MSW	C&D	SLU	SOL	TIR	RES	ASH	RGC
TRAILER	YDS. <u>374</u>	TONS	GROSS	<u>3250</u>	TARE	<u>25040</u>	
VEHICLE TYPE: RO	FEL	REL	GROSS		TARE		

CUBIC YARDS/TONS _____ AMOUNT \$ _____

DRIVER NAME/SIG Russell Warrill Russell Warrill LICENSE PLATE # _____

TRK #: 01 TIME _____ PREPARED BY: _____

WHITE: FILE COPY

GREEN: CUSTOMER COPY

PINK: DO NOT REMOVE



NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1

GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC
j) Generating Location (Name): SAME
b) Generator's Address: 101 STRAUSS CODE 044 INDIAN HEAD, MD 20640
k) Address: SAME
c) Generator's Representative: SHAWN JORGENSEN
l) Telephone Number: () SAME
d) Telephone Number: (301) 744-2263
e) WASTE MANAGEMENT APPROVAL CODE MD 586 20602 5219
f) Common Name of Waste: EXCAVATION DEBRIS
g) Description of Waste: RESIDUAL
h) Disposal Volume: 20.400 TONS IX
i) Number of Containers:
m) Asbestos ONLY - Friable, Both, Non-Friable, N/A
n) Type of Containers: TR
o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Generator's Authorized Agent Name (print/type): Heidi A. Morgan
Signature of Generator's Authorized Agent: Heidi A. Morgan
Shipment Date: 12/12/02

TYPE OF CONTAINERS
TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2

TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.
b) Transporter's Address: P.O. BOX 2155
c) Telephone Number: (804) 301-7944
d) Vehicle License No./State: TWO BROS VA
e) Trailer or Container No.: 1
f) Name of Driver (print/type): Russell Worrell
g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Signature of Driver: Russell Worrell
Date of Receipt: 12/12/02
h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver:
Date of Delivery:

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name:
b) Transfer Facility's Address:
c) Telephone Number: ()
d) Vehicle License No./State:
e) Trailer or Container No.:
f) Name of Transfer Facility's Authorized Agent (print/type):
g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent:
Date of Receipt:
h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent:
Date of Delivery:

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name:
b) Transporter's Address:
c) Telephone Number: ()
d) Vehicle License No./State:
e) Trailer or Container No.:
f) Name of Driver (print/type):
g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver:
Date of Receipt:
h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver:
Date of Delivery:

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL
b) Physical Address: 10376 BULLOCK DRIVE KG VA
c) Telephone Number: (540) 775-3123
d) Mailing Address: SAME
e) Name of Disposal Facility's Authorized Agent (print/type):
f) The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent:
Date of Receipt: 12/12
g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent:
Date of Rejection:
Signature of Driver:
Date of Rejection:

SECTION 6

ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
a) Operator's Name:
c) Telephone Number: ()
b) Operator's Address:
d) Recommended special handling instructions and additional information:
e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.
Operator's Name (print/type):
Signature of Operator's Authorized Agent:
Date:
f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236255
DATE: 12/13/2008
TIME: 11:11 - 12:03

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 01 LICENSE:
ROUTE: NA / NON APP MANIFEST: 000
Carrier: NA / NON APP

P.O.: 0
GROSS: 40860 LBS
TARE: 25140 LBS
NET: 15720 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	7.86

Russell Worrell

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

Russell Worrell

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-008

SECTION 1

GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC; Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD, MD 20640; Representative: SHAWN JORGENSEN; Telephone: (301) 744-2263; Waste Management Approval Code: MD 586 120602 5219; Common Name of Waste: EXCAVATION DEBRIS; Description of Waste: RESIDUAL; Disposal Volume: 20400 TONS IX; Type of Containers: TR; Number of Containers: 780; Signature of Heidi A. Morgan, 12/13/02

Table with 1 column: TYPE OF CONTAINERS. Rows: TR - TRUCK, DM - METAL DRUM, DP - PLASTIC DRUM, BA - BAG, BB - 6 MIL. PLASTIC BAG, BC - 12 MIL. PLASTIC BAG

SECTION 2

TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC; Address: P.O. BOX 2155; Telephone: (804) 301-7944; Vehicle License No./State: TWO BROS VA; Name of Driver: Russell Worrell; Date of Receipt: 12-13-02

SECTION 3

TRANSFER FACILITY - (Complete if applicable)

Transfer Facility's Name, Address, Telephone, Vehicle License No./State, Trailer or Container No., Name of Transfer Facility's Authorized Agent, Date of Receipt, Signature of Transfer Facility's Authorized Agent, Date of Delivery

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

Transporter's Name, Address, Telephone, Vehicle License No./State, Trailer or Container No., Name of Driver, Date of Receipt, Signature of Driver, Date of Delivery

SECTION 5

DESTINATION (Disposal Facility)

Disposal Facility's Name: KING GEORGE LANDFILL; Physical Address: 10376 BULLOCK DRIVE RG VA; Telephone: (540) 775-3123; Mailing Address: SAME; Name of Disposal Facility's Authorized Agent; Date of Receipt: 12/13; Signature of Disposal Facility's Authorized Agent, Date of Rejection

SECTION 6

ASBESTOS (operator to complete)

Operator's Name, Address, Telephone, Recommended special handling instructions, Operator's Certification, Signature of Operator's Authorized Agent, Date, Responsible Agency Name and Address



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
 King George, VA 22485
 540-775-3123

10376 BULLOCK DRIVE
 KING GEORGE VA 22485
 540.775.3123

TICKET: 226329
 DATE: 12/13/2002
 TIME: 15:42 - 16:27

CUSTOMER: 413 / INDIAN HEAD DIVISION
 GENERATOR: NA / NON APP PROFILE #: 5219
 Origin: MD / MARYLAND
 TRUCK: 01 LICENSE:
 ROUTE: NA / NON APP MANIFEST: 012
 Carrier: NA / NON APP

P.O. : \$
 GROSS: 42720 LBS
 TARE: 25200 LBS
 NET: 17520 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	8.76

IN OPERATOR: CINDY SIMMONS G U T OPERATOR: CINDY SIMMONS

DRIVER: Russell Wonnell III

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1

GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODE 044
INDIAN HEAD, MD 20640 k) Address: SAME

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE

MD	5	8	6	1	2	0	6	0	2	5	2	1	9
----	---	---	---	---	---	---	---	---	---	---	---	---	---

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; _____ % friable _____ % non-friable

g) Description of Waste: RESIDUAL Non-Friable, N/A

h) Disposal Volume: EST 20400 TONS 1X n) Type of Containers:

TR

i) Number of Containers: _____

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Heidi A Morgan Heidi A Morgan 12/13/02
Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

TYPE OF CONTAINERS	
TR	TRUCK
DM	METAL DRUM
DP	PLASTIC DRUM
BA	BAG
BB	6 MIL. PLASTIC BAG
BC	12 MIL. PLASTIC BAG

SECTION 2

TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. Box 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: Two Bros LA

e) Trailer or Container No.: 1

f) Name of Driver (print/type) Russell Wornell

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Russell Wornell 12-13-02
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type) _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4

TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type) _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type) _____

f) The material delivered by the Transporter has been received at the Disposal Facility.

[Signature] 12/13
Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6

ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236177
DATE: 12/12/2002
TIME: 17:15 - 17:15

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 135 LICENSE:
ROUTE: NA / NON APP MANIFEST: 004
Carrier: NA / NON APP

P.O.: 0
GROSS: 30120 LBS
TARE: 24780 LBSManual
NET: 13340 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CD T 6.67

*AJ + Brian
Truck # 135
AJ + Brian
Truck # 135*

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER:

Celia Fields

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections.
If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TE-004

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODE 044 k) Address: SAME
INDIAN HEAD MD 20640

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE

M	D	5	8	6	1	7	0	6	0	2	5	2	1	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; _____ % friable _____ % non-friable
 Non-Friable; N/A

g) Description of Waste: RESIDUAL

h) Disposal Volume: EST 20400 TONS IX n) Type of Containers:

T	R
---	---

Tons _____ Cubic Yards _____ Others lets

i) Number of Containers: _____

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal location identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Heidi A Moran Generator's Authorized Agent Name (print/type) Heidi A Moran Signature of Generator's Authorized Agent 12 2/02 Shipment Date

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. BOX 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: VA 14298P

e) Trailer or Container No.: _____

f) Name of Driver (print/type) Brian K. Fields

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Brian K. Fields Signature of Driver 12-12-02 Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver _____
Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type) _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent _____
Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent _____
Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type) _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver _____
Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver _____
Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type) _____

f) The material delivered by the Transporter has been received at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent _____
Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent _____
Date of Rejection

Signature of Driver _____
Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) _____
Signature of Operator's Authorized Agent _____
Date _____

f) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY
 10376 Bullock Drive
 King George, VA 22485
 540-775-3123

10376 BULLOCK DRIVE
 KING GEORGE VA 22485
 540.775.3123

TICKET: 236251
 DATE: 12/13/2002
 TIME: 10:29 - 11:35

CUSTOMER: 413 / INDIAN HEAD DIVISION
 GENERATOR: NA / NON APP PROFILE #: 5219
 Origin: MD / MARYLAND
 TRUCK: 41130 LICENSE:
 ROUTE: NA / NON APP MANIFEST: 007
 Carrier: NA / NON APP

P.O.: 8
 GROSS: 39020 LBS
 TARE: 24000 LBS
 NET: 15120 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	7.56

*AJ + Brian
 Trucking Inc.*

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER:

Brian Tidd

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

23425

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-007

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODE 044
INDIAN HEAD MD 20640 k) Address: SAME

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SA

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; % friable; % non-friable
 Non-Friable; N/A

g) Description of Waste: RESIDUAL

h) Disposal Volume: 20400 TONS 1X n) Type of Containers: TR

i) Number of Containers: 750

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Hiedi A Morgan Generator's Authorized Agent Name (print/type) Hiedi A Morgan Signature of Generator's Authorized Agent 12/13/02 Shipment Date

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. Box 2155

c) Telephone Number: () 804 301-7944

d) Vehicle License No./State: VA 14298P

e) Trailer or Container No.: 41130 VA ID #

f) Name of Driver (print/type): BOIAN K. FIELDS

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Boian K. Fields Signature of Driver 12-13-02 Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name:

b) Transfer Facility's Address:

c) Telephone Number: ()

d) Vehicle License No./State:

e) Trailer or Container No.:

f) Name of Transfer Facility's Authorized Agent (print/type):

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name:

b) Transporter's Address:

c) Telephone Number: ()

d) Vehicle License No./State:

e) Trailer or Container No.:

f) Name of Driver (print/type):

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: () 540 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type):

f) The material delivered by the Transporter has been received at the Disposal Facility.

[Signature] Signature of Disposal Facility's Authorized Agent 12/13 Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name:

b) Operator's Address:

c) Telephone Number: ()

d) Recommended special handling instructions and additional information:

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236316
DATE: 12/13/2002
TIME: 15:06 - 15:41

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 41130 LICENSE:
ROUTE: NA / NON APP MANIFEST: 010
Carrier: NA / NON APP

P.O.: 0
GROSS: 34900 LBS
TARE: 24440 LBS
NET: 10460 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	5.23

*AJ & Brian
Truckers Inc.*

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER:

[Signature]

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

WASTE MANAGEMENT

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

Generator's Address: 101 STRAUSS AVENUE CODED44 INDIAN HEAD, MD 20640 k) Address: SAME

Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

Telephone Number: (301) 744-2263

WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - [] Friable; [] Both; [] Non-Friable; [] N/A

Description of Waste: RESIDUAL

Disposal Volume: EST 20400 TONS 1X n) Type of Containers: TR

X Tons [] Cubic Yards [] Others []

Number of Containers: _____

I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

Heidi A Morgan Generator's Authorized Agent Name (print/type) Heidi A Morgan Signature of Generator's Authorized Agent 12/13/02 Shipment Date

TYPE OF CONTAINERS: TR - TRUCK, DM - METAL DRUM, DP - PLASTIC DRUM, BA - BAG, BB - 6 MIL. PLASTIC BAG, BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1 SECTION 3 TRANSFER FACILITY - (Complete if applicable)

Transporter's Name: RED BONE TRUCKING, INC. Transporter's Address: P.O. Box 2155 Telephone Number: (804) 301-7944 Vehicle License No./State: Va. 14298-P Trailer or Container No.: VA FO# 41130 Name of Driver (print/type): Brian Falls

I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

Brian Falls Signature of Driver 12-13-02 Date of Receipt

I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

Signature of Driver Date of Delivery

a) Transfer Facility's Name: b) Transfer Facility's Address: c) Telephone Number: () d) Vehicle License No./State: e) Trailer or Container No.: f) Name of Transfer Facility's Authorized Agent (print/type):

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable) SECTION 5 DESTINATION (Disposal Facility)

a) Transporter's Name: b) Transporter's Address: c) Telephone Number: () d) Vehicle License No./State: e) Trailer or Container No.: f) Name of Driver (print/type):

I hereby warrant that the above named and described material was received on the date of receipt referenced below.

Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

Signature of Driver Date of Delivery

a) Disposal Facility's Name: KING GEORGE LANDELL b) Physical Address: 10376 BULLOCK DRIVE KG VA c) Telephone Number: (540) 775-3123 d) Mailing Address: SAME e) Name of Disposal Facility's Authorized Agent (print/type):

f) The material delivered by the Transporter has been received at the Disposal Facility. Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility. Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: c) Telephone Number: ()

b) Operator's Address:

d) Recommended special handling instructions and additional information:

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236227
DATE: 12/13/2002
TIME: 09:51 - 10:23

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #2.5219
Origin: MD / MARYLAND
TRUCK: 107 LICENSE:
ROUTE: NA / NON APP MANIFEST: 005
Carrier: NA / NON APP

P.O.: 0
GROSS: 38400 LBS
TARE: 25900 LBS
NET: 12420 LBS

COMMENT:

COMMODITY UNIT NET/TONS
CD T 6.21

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

W A Hasmi

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

If waste is asbestos waste, complete all Sections.
If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-005

SECTION 1 GENERATOR INFORMATION (generator to complete)

i) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

k) Generator's Address: 101 STRAUSS AVENUE k) Address: SAME

l) Generator's Representative: S. JORGENSEN l) Telephone Number: () SAME

m) Telephone Number: (609) 588-6355 2203

n) WASTE MANAGEMENT APPROVAL CODE:

M	D	5	8	6	1	2	0	6	0	2	5	2	1	9
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

o) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; % friable % non-friable

p) Description of Waste: _____ Non-Friable; N/A

q) Disposal Volume: _____ n) Type of Containers:

--	--

r) Number of Containers: _____

s) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.

t) Generator's Authorized Agent Name (print/type): Heidi A. Moran Signature of Generator's Authorized Agent: Heidi A. Moran Shipment Date: 10/13/02

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

u) Transporter's Name: Red Bone Trucking, Inc.

v) Transporter's Address: PO Box 2155

w) Telephone Number: (804) 301-7944

x) Vehicle License No./State: 20-798 P Va.

y) Trailer or Container No.: _____

z) Name of Driver (print/type): William Harris

aa) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.

ab) Signature of Driver: W. Harris Date of Receipt: 12-13-02

ac) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.

ad) Signature of Driver: _____ Date of Delivery: _____

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

ae) Transfer Facility's Name: _____

af) Transfer Facility's Address: _____

ag) Telephone Number: () _____

ah) Vehicle License No./State: _____

ai) Trailer or Container No.: _____

aj) Name of Transfer Facility's Authorized Agent (print/type): _____

ak) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.

al) Signature of Transfer Facility's Authorized Agent: _____ Date of Receipt: _____

am) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.

an) Signature of Transfer Facility's Authorized Agent: _____ Date of Delivery: _____

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

ao) Transporter's Name: _____

ap) Transporter's Address: _____

aq) Telephone Number: () _____

ar) Vehicle License No./State: _____

as) Trailer or Container No.: _____

at) Name of Driver (print/type): _____

au) I hereby warrant that the above named and described material was received on the date of receipt referenced below.

av) Signature of Driver: _____ Date of Receipt: _____

aw) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.

ax) Signature of Driver: _____ Date of Delivery: _____

SECTION 5 DESTINATION (Disposal Facility)

ay) Disposal Facility's Name: KING GEORGE LANDFILL, INC.

az) Physical Address: 10376 BULLOCK DR.

ba) Telephone Number: (KING GEORGE, VA 22485) (540)775-3123

bb) Mailing Address: _____

bc) Name of Disposal Facility's Authorized Agent (print/type): _____

bd) The material delivered by the Transporter has been received at the Disposal Facility.

be) Signature of Disposal Facility's Authorized Agent: Date of Receipt: 12/13

bf) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.

bg) Signature of Disposal Facility's Authorized Agent: _____ Date of Rejection: _____

bh) Signature of Driver: _____ Date of Rejection: _____

SECTION 6 ASBESTOS (operator to complete)

bi) "Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

bj) Operator's Name: _____ c) Telephone Number: () _____

bk) Operator's Address: _____

bl) Recommended special handling instructions and additional information: _____

bm) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

bn) Operator's Name (print/type): _____ Signature of Operator's Authorized Agent: _____ Date: _____

bo) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

TICKET: 236289
DATE: 12/13/2002
TIME: 13:40 - 14:35

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 107 LICENSE:
ROUTE: NA / NON APP MANIFEST: 009
Carrier: NA / NON APP

P.O.: 0
GROSS: 45840 LBS
TARE: 25560 LBS
NET: 20280 LBS

COMMENT:

COMMODITY UNIT NET/TONS

CD T 10.14

IN OPERATOR: CINDY SIMMONS O U T OPERATOR: CINDY SIMMONS

DRIVER: W D Lewis

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1 GENERATOR INFORMATION (generator to complete)

i) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

k) Address: 101 STRAUSS AVENUE CODE 044 INDIAN HEAD, MD 20640

l) Telephone Number: SHAWN JORGENSEN (301) 744-2263

WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

m) Asbestos ONLY - Friable; Both; % friable % non-friable Non-Friable; N/A

n) Type of Containers: TR Description of Waste: EXCAVATION DEBRIS Disposal Volume: RESIDUAL EST 20400 TONS IX

- TYPE OF CONTAINERS ITR - TRUCK DM - METAL DRUM DP - PLASTIC DRUM BA - BAG BB - 6 MIL. PLASTIC BAG BC - 12 MIL. PLASTIC BAG

Heidi A Morgan Generator's Authorized Agent Name Heidi A Morgan Signature of Generator's Authorized Agent 12/13/02 Shipment Date

SECTION 2 TRANSPORTER 1

RED BONE TRUCKING, INC. P.O. Box 2155 (804) 301-7944 20-798 P Vg. 107 William Harris

W A Harris 12-13-02 Signature of Driver Date of Receipt

Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: b) Transfer Facility's Address: c) Telephone Number: d) Vehicle License No./State: e) Trailer or Container No.: f) Name of Transfer Facility's Authorized Agent

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below. Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below. Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

i) Transporter's Name: j) Transporter's Address: k) Telephone Number: l) Vehicle License No./State: m) Trailer or Container No.: n) Name of Driver

Signature of Driver Date of Receipt

Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

KING GEORGE LANDFILL 10376 BULLOCK DRIVE KG VA (540) 775-3123 SAME

Signature of Disposal Facility's Authorized Agent Date of Receipt 12/13

Signature of Disposal Facility's Authorized Agent Date of Rejection Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: b) Operator's Address: c) Telephone Number: d) Recommended special handling instructions and additional information:

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

f) Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY
 10376 Bullock Drive
 King George, VA 22485
 540-775-3123

10376 BULLOCK DRIVE
 KING GEORGE VA 22485
 540.775.3123

TICKET: 236336
 DATE: 12/13/2002
 TIME: 17:44 - 17:45

CUSTOMER: 413 / INDIAN HEAD DIVISION
 GENERATOR: NA / NON APP PROFILE #: 5219
 Origin: MD / MARYLAND
 TRUCK: 107 LICENSE:
 ROUTE: NA / NON APP MANIFEST: 013
 Carrier: NA / NON APP

P.O.: 0
 GROSS: 39340 LBS
 TARE: 25980 LBSManual
 NET: 13360 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	6.68

IN OPERATOR: CINDY SIMMONS

O U T OPERATOR: CINDY SIMMONS

DRIVER:

W L Harris

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. 76-013

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC
j) Generating Location (Name): SAME
Generator's Address: 101 STRAUSS AVENUE CODED44
INDIAN HEAD, MD 20640
k) Address: SAME
Generator's Representative: SHAWN JORGENSEN
l) Telephone Number: (301) 744-2263

WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

Common Name of Waste: EXCAVATION DEBRIS
Description of Waste: RESIDUAL
Disposal Volume: EST 20400 TONS IX
X Tons
m) Asbestos ONLY - Friable; Both; % friable % non-friable
Non-Friable; N/A
n) Type of Containers: TR

- TYPE OF CONTAINERS
TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Heidi A Morgan
Signature of Generator's Authorized Agent
12/13/02
Shipment Date

SECTION 2 TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC.
Transporter's Address: P.O. Box 2155
Telephone Number: (804) 301-7944
Vehicle License No./State: 20-798 P Va.
Trailer or Container No.: 107
Name of Driver (print/type): William Harris

I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Wd Harris
Signature of Driver
12-13-02
Date of Receipt
I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver
Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name:
b) Transfer Facility's Address:
c) Telephone Number:
d) Vehicle License No./State:
e) Trailer or Container No.:
f) Name of Transfer Facility's Authorized Agent (print/type):
g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent
Date of Receipt
h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent
Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

Transporter's Name:
Transporter's Address:
Telephone Number:
Vehicle License No./State:
Trailer or Container No.:
Name of Driver (print/type):

I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver
Date of Receipt
I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver
Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDELL
b) Physical Address: 10376 BULLOCK DRIVE KG VA
c) Telephone Number: (540) 775-3123
d) Mailing Address: SAME
e) Name of Disposal Facility's Authorized Agent (print/type):
f) The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent
Date of Receipt
g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent
Date of Rejection
Signature of Driver
Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

Operator is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.
Operator's Name:
Operator's Address:
Recommended special handling instructions and additional information:
Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) Signature of Operator's Authorized Agent Date

Responsible Agency Name and Address:



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 235175
DATE: 12/12/2002
TIME: 16:40 - 17:11

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: @03
Carrier: NA / NON APP

P.O.: 0
GROSS: 38660 LBS
TARE: 24420 LBS
NET: 14240 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	7.12

B. Veneq Jr. Inc.

IN OPERATOR: CINDY SIMMONS O U T OPERATOR: CINDY SIMMONS

DRIVER: *[Signature]*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections.
If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-003

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CODE 044
INDIAN HEAD MD 20640 k) Address: SAME

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE MD 586 120602 5219

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; % friable % non-friable
 Non-Friable; N/A

g) Description of Waste: RESIDUAL

h) Disposal Volume: 400 TONS IX n) Type of Containers: TR
 Tons Cubic Yards Others IX

i) Number of Containers: _____

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Heidi A Morgan Heidi A Morgan 12/12/02
Generator's Authorized Agent Name (print/type) Signature of Generator's Authorized Agent Shipment Date

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. Box 2155

c) Telephone Number: (804) 301-7941

d) Vehicle License No./State: 14664 P VA

e) Trailer or Container No.: 11602

f) Name of Driver (print/type) Brecher L Venej

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Heidi A Morgan Dec 12, 2002
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver Date of Delivery

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type) _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent Date of Receipt

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent Date of Delivery

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type) _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver Date of Receipt

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver Date of Delivery

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type) _____

f) The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent Date of Receipt

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent Date of Rejection

Signature of Driver Date of Rejection

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

d) Recommended special handling instructions and additional information: _____

e) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) _____ Signature of Operator's Authorized Agent _____ Date _____

f) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236236
DATE: 12/13/2002
TIME: 10:25 - 10:44

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: 006
Carrier: NA / NON APP

P.O.: 0
GROSS: 41350 LBS
TARE: 25700 LBS
NET: 15650 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	7.83

B. Kney Jr. Inc.

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER:

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.

SECTION 1 GENERATOR INFORMATION (generator to complete)

a) Generator's Name: INDIAN HEAD NWSC j) Generating Location (Name): SAME

b) Generator's Address: 101 STRAUSS AVENUE CONE D44 k) Address: SAME
INDIAN HEAD MD 20640

c) Generator's Representative: SHAWN JORGENSEN l) Telephone Number: () SAME

d) Telephone Number: (301) 744-2263

e) WASTE MANAGEMENT APPROVAL CODE MD 586120602 5219

f) Common Name of Waste: EXCAVATION DEBRIS m) Asbestos ONLY - Friable; Both; % friable % non-friable
 Non-Friable; N/A

g) Description of Waste: RESIDUAL

n) Type of Containers: TR

h) Disposal Volume: 400 TONS IX
 Tons Cubic Yards Others TONS 3

i) Number of Containers: 1000

o) I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Generator's Authorized Agent Name (print/type) Heidi A MORTAN Signature of Generator's Authorized Agent Heidi A Mortan Shipment Date 12/13/02

TYPE OF CONTAINERS

TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

a) Transporter's Name: RED BONE TRUCKING, INC.

b) Transporter's Address: P.O. BOX 2155

c) Telephone Number: (804) 301-7944

d) Vehicle License No./State: 146601 P VA

e) Trailer or Container No.: 41602

f) Name of Driver (print/type) Beacher L Venej

g) I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Signature of Driver Beacher L Venej Date of Receipt 12.13.02

h) I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver _____ Date of Delivery _____

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

a) Transfer Facility's Name: _____

b) Transfer Facility's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Transfer Facility's Authorized Agent (print/type) _____

g) I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent _____ Date of Receipt _____

h) I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent _____ Date of Delivery _____

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

a) Transporter's Name: _____

b) Transporter's Address: _____

c) Telephone Number: () _____

d) Vehicle License No./State: _____

e) Trailer or Container No.: _____

f) Name of Driver (print/type) _____

g) I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver _____ Date of Receipt _____

h) I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver _____ Date of Delivery _____

SECTION 5 DESTINATION (Disposal Facility)

a) Disposal Facility's Name: KING GEORGE LANDFILL

b) Physical Address: 10376 BULLOCK DRIVE KG VA

c) Telephone Number: (540) 775-3123

d) Mailing Address: SAME

e) Name of Disposal Facility's Authorized Agent (print/type) _____

f) The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent [Signature] Date of Receipt 12/13

g) The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent _____ Date of Rejection* _____

Signature of Driver _____ Date of Rejection _____

SECTION 6 ASBESTOS (operator to complete)

"Operator" is defined as the company which owns, leases, operates, controls, or supervises the facility being demolished or renovated, or the demolition or renovation operation or both.

a) Operator's Name: _____ c) Telephone Number: () _____

b) Operator's Address: _____

c) Recommended special handling instructions and additional information: _____

d) Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.

Operator's Name (print/type) _____ Signature of Operator's Authorized Agent _____ Date _____

e) Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL
A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236313
DATE: 12/13/2002
TIME: 15:08 - 15:36

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: 011
Carrier: NA / NON APP

P. O. : 0
GROSS: 36000 LBS
TARE: 25340 LBS
NET: 10660 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	5.33

B. Verney Jr. Inc

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER: *Paul D. H.*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections. If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. _____

SECTION 1

GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC; Generating Location (Name): SAME; Generator's Address: 101 STRAUSS AVENUE CODED44 INDIAN HEAD, MD 20640; Generator's Representative: SHAWN JORGENSEN; Telephone Number: (301) 744-2263; WASTE MANAGEMENT APPROVAL CODE: MD 586 120602 5219; Common Name of Waste: EXCAVATION DEBRIS; Description of Waste: RESIDUAL; Disposal Volume: 20400 TONS IX; Type of Containers: TR; Generator's Authorized Agent Name: Heidi A Morgan; Signature of Generator's Authorized Agent: Heidi A Morgan; Shipment Date: 12/13/02

TYPE OF CONTAINERS: TR - TRUCK, DM - METAL DRUM, DP - PLASTIC DRUM, BA - BAG, BB - 6 MIL. PLASTIC BAG, BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1

Transporter's Name: RED BONE TRUCKING, INC.; Transporter's Address: P.O. Box 2155; Telephone Number: (804) 301-7944; Vehicle License No./State: 14664 W VA; Trailer or Container No.: 41609; Name of Driver (print/type): Beecher h-Venes; Signature of Driver: Beecher h-Venes; Date of Receipt: 12-13-02

SECTION 3 TRANSFER FACILITY - (Complete if applicable)

Transfer Facility's Name: _____; Transfer Facility's Address: _____; Telephone Number: _____; Vehicle License No./State: _____; Trailer or Container No.: _____; Name of Transfer Facility's Authorized Agent (print/type): _____; Signature of Transfer Facility's Authorized Agent: _____; Date of Receipt: _____

SECTION 4 TRANSPORTER 2 - (Complete if applicable)

Transporter's Name: _____; Transporter's Address: _____; Telephone Number: _____; Vehicle License No./State: _____; Trailer or Container No.: _____; Name of Driver (print/type): _____; Signature of Driver: _____; Date of Receipt: _____

SECTION 5 DESTINATION (Disposal Facility)

Disposal Facility's Name: KING GEORGE LANDFILL; Physical Address: 10376 BULLOCK DRIVE KG VA; Telephone Number: (540) 775-3123; Mailing Address: SAME; Name of Disposal Facility's Authorized Agent (print/type): _____; Signature of Disposal Facility's Authorized Agent: _____; Date of Receipt: 12/13

SECTION 6 ASBESTOS (operator to complete)

Operator's Name: _____; Operator's Address: _____; Recommended special handling instructions and additional information: _____; Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards. Operator's Name (print/type): _____; Signature of Operator's Authorized Agent: _____; Date: _____; Responsible Agency Name and Address: _____



KING GEORGE COUNTY LANDFILL

A WASTE MANAGEMENT COMPANY

10376 Bullock Drive
King George, VA 22485
540-775-3123

10376 BULLOCK DRIVE
KING GEORGE VA 22485
540.775.3123

TICKET: 236357
DATE: 12/14/2002
TIME: 08:22 - 08:54

CUSTOMER: 413 / INDIAN HEAD DIVISION
GENERATOR: NA / NON APP PROFILE #: 5219
Origin: MD / MARYLAND
TRUCK: 5 LICENSE:
ROUTE: NA / NON APP MANIFEST: 014
Carrier: NA / NON APP

P.O. : 0
GROSS: 51880 LBS
TARE: 24160 LBS
NET: 27720 LBS

COMMENT:

COMMODITY	UNIT	NET/TONS
CD	T	13.86

B. Verney Jr. Inc.

IN OPERATOR: CINDY SIMMONS

OUT OPERATOR: CINDY SIMMONS

DRIVER: *Eric H*

I have read and fully understand the King George Landfill Safety Rules. By signing this ticket, I further agree to abide by these rules while I am on the landfill property.



WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANIFEST

If waste is asbestos waste, complete all Sections.
If waste is NOT asbestos waste, complete only Sections 1, 2, 3, 4 and 5.

Manifest No. TG-014

SECTION 1 GENERATOR INFORMATION (generator to complete)

Generator's Name: INDIAN HEAD NWSC
Generating Location (Name): SAME
Generator's Address: 101 STRAUSS AVENUE CODED44
Address: SAME
Generator's Representative: SHAWN JORGENSEN
Telephone Number: (301) 744-2263
Telephone Number: () SAME
WASTE MANAGEMENT APPROVAL CODE: MD 586 1120602 5219
Common Name of Waste: EXCAVATION DEBRIS
Description of Waste: RESIDUAL
Disposal Volume: 20400 TONS IX
Type of Containers: TR
I hereby warrant that the above named material is the same material as represented on the Special Waste Disposal Application identified by the above Waste Management Code and such material was delivered to the transporter on the shipment date referenced below.
Signature of Generator's Authorized Agent: Heidi A Morgan
Shipment Date: 12/13/02

TYPE OF CONTAINERS
TR - TRUCK
DM - METAL DRUM
DP - PLASTIC DRUM
BA - BAG
BB - 6 MIL. PLASTIC BAG
BC - 12 MIL. PLASTIC BAG

SECTION 2 TRANSPORTER 1
Transporter's Name: RED BONE TRUCKING, INC.
Transporter's Address: P.O. Box 2155
Telephone Number: (804) 301-7944
Vehicle License No./State: 14664 P VA
Trailer or Container No.: 41602
Name of Driver (print/type): Beecher J. Venej
I hereby warrant that the above named and described material was received from the generator on the date of receipt referenced below.
Signature of Driver: Beecher J. Venej
Date of Receipt: 12-13-02
I hereby warrant that the above named and described material was delivered without incident or contamination on the date of delivery referenced below.
Signature of Driver:
Date of Delivery:

SECTION 3 TRANSFER FACILITY - (Complete if applicable)
Transfer Facility's Name:
Transfer Facility's Address:
Telephone Number: ()
Vehicle License No./State:
Trailer or Container No.:
Name of Transfer Facility's Authorized Agent (print/type):
I hereby warrant that the above named and described material was received from the transporter on the date of receipt referenced below.
Signature of Transfer Facility's Authorized Agent:
Date of Receipt:
I hereby warrant that the above named and described material was delivered to the transporter without incident or contamination on the date of delivery referenced below.
Signature of Transfer Facility's Authorized Agent:
Date of Delivery:

SECTION 4 TRANSPORTER 2 - (Complete if applicable)
Transporter's Name:
Transporter's Address:
Telephone Number: ()
Vehicle License No./State:
Trailer or Container No.:
Name of Driver (print/type):
I hereby warrant that the above named and described material was received on the date of receipt referenced below.
Signature of Driver:
Date of Receipt:
I hereby warrant that the above named and described material was delivered on the delivery date referenced below.
Signature of Driver:
Date of Delivery:

SECTION 5 DESTINATION (Disposal Facility)
Disposal Facility's Name: KING GEORGE LANDFILL
Physical Address: 10376 BULLOCK DRIVE KG VA
Telephone Number: (540) 775-3123
Mailing Address: SAME
Name of Disposal Facility's Authorized Agent (print/type):
The material delivered by the Transporter has been received at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent:
Date of Receipt: 12/14
The material delivered by the Transporter has been rejected for disposal at the Disposal Facility.
Signature of Disposal Facility's Authorized Agent:
Date of Rejection:
Signature of Driver:
Date of Rejection:

SECTION 6 ASBESTOS (operator to complete)
Operator's Name:
Operator's Address:
Recommended special handling instructions and additional information:
Operator's Certification: I hereby warrant and declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and domestic law, regulations, ordinances, orders, rules and/or standards.
Operator's Name (print/type):
Signature of Operator's Authorized Agent:
Date:
Responsible Agency Name and Address:

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02223-01
Specification Section No. (Only 1 section with each transmittal) <p style="text-align: center;">02223</p>	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-07	1.1	Permit for Hazardous Waste Storage, Treatment and Disposal Permit Number PAD 067098822 Commonwealth of Pa. Disposal of Hazardous Drums	1	Documentation	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	December 11, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT PROGRAM
SOUTHCENTRAL REGION

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, as amended, Solid Waste Permit Number PAD06709882, issued on February 16, 1993 to:

Remtech Environmental Lewisberry, Inc.
550 Industrial Drive
Lewisberry, PA 17339-9537

Fairview Township
York County

is hereby modified as follows:

This permit modification is issued approving the reissuance of the Remtech Environmental (Lewisberry) L.P. Hazardous Waste Storage/Treatment Permit to Cycle Chem, Inc. This approval is issued based on the following submissions:

1. Change of ownership request, submitted under Cycle Chem, Inc. cover, received April 1, 1999, consisting of the following:
 - General Information Form
 - Form A, Hazardous Waste Permit Application
 - Application for a Hazardous Waste Treatment, Storage, and Disposal Permit
 - Form HW-C, Compliance History
 - Notification of Regulated Waste Activity
 - Proof of Public Notification
2. Updated Form HW-C, Remtech's statement of liability transfer, and proof of publication submitted under Cycle Chem, Inc. cover, received June 16, 1999.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof, effective as of the date of the sale of the Remtech Environmental (Lewisberry) L.P. facility to Cycle Chem, Inc.

Kevin C. Kern

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES

PERMIT

FOR HAZARDOUS WASTE STORAGE, TREATMENT AND DISPOSAL

Permittee: Remtech Environmental LewisberryPermit Number: PAD067098822Facility: Remtech Environmental LewisberryFairview Township, York County

This permit is issued by the Commonwealth of Pennsylvania Department of Environmental Resources (DER) under authority of the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, Act 97, 35 P.S. Section 6018.101 et seq. (the Act) and DER hazardous waste regulations to REMTECH Environmental Lewisberry, Inc. (hereafter called the Permittee), to operate a hazardous waste management facility located in Lewisberry, Pennsylvania at latitude 40°10'001" North and longitude 076°50'017" West.

The Permittee must comply with all terms and conditions of this permit. This permit consists of the conditions contained herein (Parts I - V, consisting of pages 1 through 48 and Attachments 1 through 12) and the applicable regulations contained in 25 Pa. Code Chapters 260-270 as specified in the permit.

This permit is based on the assumption that the information submitted in the permit application dated March 31, 1991 as modified by subsequent amendments dated July 3, 1991; February 24, 1992; June 19, 1992; and August 27, 1992 (hereafter referred to as the application) is accurate and that the facility will be constructed and/or operated as specified in the application. Any inaccuracies found in this information may be grounds for the revocation or modification of this permit and potential enforcement action. The Permittee must inform DER of any deviation from or changes in the information in the application which would affect the Permittee's ability to comply with the applicable regulations or permit conditions.

This permit is conditioned upon full compliance with all applicable provisions of the Act; DER regulations contained in 25 Pa. Code Chapter 75; the Clean Streams Law, 35 P.S. §691.1 et seq.; the Air Pollution Control Act, 35 P.S. §4001 et seq.; the Dam Safety and Encroachments Act, 32 P.S. §893.1 et seq.; the Surface Mining Conservation and Reclamation Act, 52 P.S. §1396.1 et seq.; the Coal Refuse Disposal Control Act, 52 P.S. §30.51 et seq.; all other Pennsylvania statutes related to the protection of the environment; and all Pennsylvania statutes related to the protection of public health, safety, and welfare.

This permit is effective as of February 16, 1993, and shall remain in effect until February 15, 2003, unless revoked and reissued, or revoked in accordance with 25 Pa. Code §§270.31, 270.32 and 270.33, or continued.



STATE OF NEW JERSEY
DIVISION OF SOLID AND HAZARDOUS WASTE
Bureau of Hazardous Waste Regulation
PO BOX 414
Trenton, NJ 08625-0414
(609)-292-7081

Expiration Date: 08/30/01
Decal No. : 00B2997
Vehicle ID# : 1GRAA9028CB102201 NJ
License # : T78F2Z
Certified : CLEAN VENTURE INCORPORATED
201 SOUTH FIRST STREET
ELIZABETH NJ 07208
DEP No. : 05811 Type: 3

Transporter Vehicle Registration Card

CLEAN VENTURE INCORPORATED
201 SOUTH FIRST STREET
ELIZABETH NJ 07208

SEE BACK FOR INSTRUCTIONS ON MOUNTING
YOUR DECALS.

HAZARDOUS WASTE

Document #:

TR-299 BROS

ATT: Andy Potter
Lewisberry

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT PROGRAM
SOUTHCENTRAL REGION

FORM NO. 13-A

MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Solid Waste Management Act of July 7, 1980, as amended, Solid Waste Permit Number 301280, issued on April 17, 1997 to:

Remtech Environmental Lewisberry, Inc.
550 Industrial Drive
Lewisberry, PA 17339-9537

Fairview Township
York County

is hereby modified as follows:

This permit modification is issued approving the reissuance of the Remtech Environmental (Lewisberry) L.P. residual waste processing/transfer permit to Cycle Chem, Inc. This approval is issued based on the following submissions:

- Change of ownership request submitted under Cycle Chem, Inc. cover, received April 1, 1999, consisting of the following:
 - General Information Form
 - Form A, Application for Municipal Waste Permit
 - Form B, Professional Certification
 - Form HW-C, Compliance History
 - Statement of Liability
 - Proof of Public Notification (received June 16, 1999)

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof, effective as of the date of the sale of the Remtech Environmental (Lewisberry) L.P. facility to Cycle Chem, Inc.

Keith C. Kern

FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
WASTE MANAGEMENT PROGRAM
SOUTHCENTRAL REGION

FORM NO. 8

PERMIT FOR SOLID WASTE DISPOSAL AND/OR PROCESSING FACILITY

Permit No. 301280
Date Issued April 17, 1997
Date Expired April 16, 2007

Under the provisions of the Pennsylvania Solid Waste Management Act of July 7, 1980, Act 97, as amended, a permit for a solid waste disposal and/or processing at Fairview Township in the County of York is granted to:

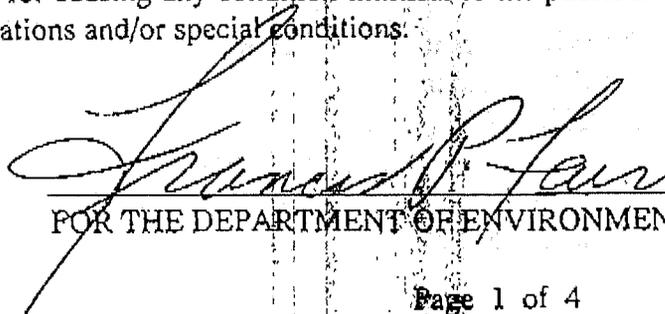
REMTECH Environmental (Lewisberry), L.P.
550 Industrial Drive
Lewisberry, PA 17339-9537

(Consisting of approximately 0.6 acres)

Latitude 76° 50' 18" N

Longitude 40° 10' 00" W

This permit is subject to modification by the Department of Environmental Protection and is further subject to revocation or suspension by the Department of Environmental Protection for any violation of the applicable laws or the rules and regulations adopted thereunder, for failure to comply in whole or in part with the conditions of this permit and the provisions set forth in Application No. 301280 which is made a part hereof, or for causing any condition inimical to the public health, safety or welfare. See attachment for waste limitations and/or special conditions.



FOR THE DEPARTMENT OF ENVIRONMENTAL PROTECTION

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 - FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill - Site 12 Submittal No: 02223-02
Specification Section No. (Only 1 section with each transmittal) <p style="text-align: center;">02223</p>	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.2.2.1 and 1.2.2.2	Hazardous Waste Manifest and Certificate of Receipt for the Disposal of Hazardous Drums (5 Drums)	1	Documentation	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D - Forwarded to ROICC FOR ACTION	A - Approved as Submitted	RR - Disapproved, Revise and Resubmit
E - Forwarded to ROICC for Record Purposes	AN - Approved as Noted	NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Emie Duke	January 22, 2003

PART 2 - FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA	Date	

PART 3 - FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management

P.O. Box 8550

Harrisburg, PA 17105-8550

Form approved.

OMB No. 2050-0039

2500-FM-LRWM0051 REV. 7/99

OFFICIAL PENNSYLVANIA MANIFEST FORM

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DEP (717) 787-4343

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MD4170024109		Manifest Document No. 57645	2. Page 1 of 1	Information within the bold red border is not required by Federal law but may be required by State law.	
3. Generator's Name and Mailing Address Attn: INDIAN HEAD NAVAL SURFACE WAREFARE 101 STRAUSS AVENUE INDIAN HEAD MD 20640				A. State Manifest Document Number PAG 457645		B. State Gen. ID SAME	
4. Generator's Phone 301-744-2283		5. Transporter 1 Company Name CLEAN VENTURE INC		6. US EPA ID Number NJ0000027193		C. State Trans. ID PA-AH 0299	
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone 908-355-5800		E. State Trans. ID PA-AH	
9. Designated Facility Name and Site Address CYCLE CHEM. INC. 550 INDUSTRIAL DRIVE LEWISBERG, PA 17339				10. US EPA ID Number PAD067098822		F. Transporter's Phone 717-938-4700	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM				12. Containers		13. Total Quantity	
a. X RC, WASTE FLAMMABLE SOLIDS, ORGANIC NO5(CHROMIUM, XYLENE) 4.1				No. 5		Type DM	
b. UN1325, P.G. II						1000	
c. ERG 4.1.35						P	
d.						0001 0007	
J. Additional Descriptions for Materials Listed Above S Note: 1.E, 1.25, 0%				K. Handling Codes for Wastes Listed Above a. 501			
15. Special Handling Instructions and Additional Information 11a. 0AP027-A-353				MD PERMIT# 006465-CH811941		Emergency Response # 908-355-5800	
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Lynne Bolin				Signature <i>Lynne Bolin</i>		MONTH DAY YEAR 12 13 02	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ATILIO REYES				Signature <i>Atilio Reyes</i>		MONTH DAY YEAR 12 13 02	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature		MONTH DAY YEAR	
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name Annie E. Hied				Signature <i>Annie E. Hied</i>		MONTH DAY YEAR 12 13 02	

GENERATOR

PAG 457645

December 2, 2002

Mr. Shawn Jorgensen
Indian Head Naval Surface Warefare center
101 Strauss Avenue
Indian Head, MD 20640

Pickup Site:
Indian Head Naval Surface Warefare
101 Strauss Avenue
Indian Head, MD

RE: Notification of Facility Ability and Willingness to Accept Generator's Waste:

<u>Gencode:</u>	<u>Waste Stream Name:</u>	<u>Waste Codes:</u>
CAP027 - A - SSM	Drum Carcasses cont w/paint	D001 D007

Dear Mr. Jorgensen :

As directed by 40 CFR 264.12(b) and Cycle Chem, Inc.'s hazardous waste facility permit, Cycle Chem, Inc. hereby informs you the above referenced waste stream has been granted Pre-Acceptance Approval.

Cycle Chem, Inc. is permitted, is capable, has capacity and is willing to accept your waste via Capitol Environmental Services, provided it conforms to the Material Profile Sheet upon which the Pre-Acceptance Approval was granted.

This document is important. Please file it for safekeeping. A copy is also held at the Cycle Chem, Inc. facility.

Please direct any questions to Capitol Environmental Services at 703-356-3135.

Sincerely,

Todd Meyer
Account Manager

cc: Capitol Environmental Services



**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02315-01
Specification Section No. (Only 1 section with each transmittal) 02315	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.6	Analytical Test Data Laplata Sand and Gravel Select Fill and Topsoil	1 Paper 1 elec	Test Report	D	

SUBMITTAL CODES	APPROVAL CODES	
D - Forwarded to ROICC FOR ACTION	A - Approved as Submitted	RR - Disapproved, Revise and Resubmit
E - Forwarded to ROICC for Record Purposes	AN - Approved as Noted	NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	October 14, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
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This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
--------------------	------

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	---	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority

Project Engineer 11/7/02

Sample Summary

Shaw E & I, Inc.

Job No: F14850

Indian Head
Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F14850-1	09/30/02	15:40 ED	10/02/02	SO	Soil	IH-SF-001
F14850-2	09/30/02	16:00 ED	10/02/02	SO	Soil	IH-TS-002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

CHAIN-OF-CUSTODY RECORD

COC Number: 809401
 Purchase Order Number:

F14850

SHAW Environmental & Infrastructure, INC. - 5700 Thurston Ave Suite 116B - Virginia Beach, VA 23455 - (757) 363-7190

Lab/Inch		Lab/Company Address		Analysis Desired																			
Accutest		4406 Vineland Road Suite C-1, Orlando FL 32811 (407)428-8700																					
Project Name		Sample Location		Full TCLP+RC SW-846	BTEX SW-846 8280B	TPH DROGRO SW-846	8015M																
Indian Head		Cover and Top Soil																					
Project Number	Project Contact Name		Project Contact Phone																				
809401	Natasha Kelley Sullivan		(410)529-7598																				
Client Name		Project Manager																					
LANTDIV		Dan Pringle																					
Item No	Sample Number	Date	Time	Soil	Water	Sample Description		Number of Containers															
1	IH-SF-001	9/30/02	1540	X		Select Fill LAPLATA S + G		4		X	X	X											
2	IH-TS-002	9/30/02	1600	X		Topsoil Lap/ETA S + G		4		X	X	X											

P/C

Turnaround Time Required:	Sampled By:	COMMENTS:	Laboratory Report No.:
1 week Rush.	E. Duke		

Transfer Number	Transfers Relinquished By	Date	Time	Transfers Accepted By	Date	Time	Remarks
1	E. Duke	10/1	1100	...	10/2/02	0940	Summary Package Deliverables: EDD Excel Fax results to Natasha Sullivan (410) 529-7599
2							
3							
4							

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LabLink Analytical Data Report
 Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	Limit	DF	Client ID	Collected	Time
F14850-1	2,4-D	94-75-7	SW846 8151	ND		mg/l	0.01	10	1	IH-SF-001	30-Sep-02	15:40
F14850-1	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND		mg/l	0.002	1	1	IH-SF-001	30-Sep-02	15:40
F14850-1	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND		mg/l	0.0005	0.4	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Chlordane	12789-03-6	SW846 8081A	ND		mg/l	0.005	0.03	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Endrin	72-20-8	SW846 8081A	ND		mg/l	0.001	0.02	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Heptachlor	76-44-8	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Heptachlor epoxide	1024-57-3	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Methoxychlor	72-43-5	SW846 8081A	ND		mg/l	0.001	10	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Toxaphene	8001-35-2	SW846 8081A	ND		mg/l	0.025	0.5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	TPH (C10-C28)		SW846 8015 M	5.99	J	mg/kg	8.9		1	IH-SF-001	30-Sep-02	15:40
F14850-1	2,4-DCAA	19719-28-9	SW846 8151	89		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Tetrachloro-m-xylene	877-09-8	SW846 8081A	86		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	o-Terphenyl	84-15-1	SW846 8015 M	93		%	18		1	IH-SF-001	30-Sep-02	15:40
F14850-1	Decachlorobiphenyl	2051-24-3	SW846 8081A	68		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.5		1	IH-SF-001	30-Sep-02	15:40
F14850-1	4-Bromofluorobenzene	460-00-4	SW846 8015	72		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	aaa-Trifluorotoluene	98-08-8	SW846 8015	82		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Ignitability (Flashpoint)		SW846 1010	>200	>	Deg. F			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Corrosivity as pH		SW846 CHAP7	5					1	IH-SF-001	30-Sep-02	15:40
F14850-1	Sulfide Reactivity		SW846 CHAP7	<54	<	mg/kg	54		1	IH-SF-001	30-Sep-02	15:40
F14850-1	Cyanide Reactivity		SW846 CHAP7	<1.6	<	mg/kg	1.6		1	IH-SF-001	30-Sep-02	15:40
F14850-1	Solids, Percent		EPA 160.3 M	91.9		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Arsenic	7440-38-2	SW846 6010B	0.0029	B	mg/l	0.01	5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Barium	7440-39-3	SW846 6010B	0.14	B	mg/l	1	100	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Cadmium	7440-43-9	SW846 6010B	0.00026	U	mg/l	0.005	1	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Chromium	7440-47-3	SW846 6010B	0.00043	U	mg/l	0.01	5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Lead	7439-92-1	SW846 6010B	0.0074		mg/l	0.005	5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Mercury	7439-97-6	SW846 7470A	0.003	B	mg/l	0.01	0.2	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Selenium	7782-49-2	SW846 6010B	0.0041	B	mg/l	0.01	1	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Silver	7440-22-4	SW846 6010B	0.00055	U	mg/l	0.01	5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	2-Methylphenol	95-48-7	SW846 8270C	ND		mg/l	0.05	200	1	IH-SF-001	30-Sep-02	15:40
F14850-1	3&4-Methylphenol		SW846 8270C	ND		mg/l	0.05	200	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Pentachlorophenol	87-86-5	SW846 8270C	ND		mg/l	0.25	100	1	IH-SF-001	30-Sep-02	15:40
F14850-1	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND		mg/l	0.05	400	1	IH-SF-001	30-Sep-02	15:40
F14850-1	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND		mg/l	0.05	2	1	IH-SF-001	30-Sep-02	15:40
F14850-1	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	0.05	7.5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	0.05	0.5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	0.05	3	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	0.05	2	1	IH-SF-001	30-Sep-02	15:40
F14850-1	Pyridine	110-86-1	SW846 8270C	ND		mg/l	0.05	5	1	IH-SF-001	30-Sep-02	15:40
F14850-1	2-Fluorophenol	367-12-4	SW846 8270C	45		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Phenol-d5	4165-62-2	SW846 8270C	32		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	2,4,6-Tribromophenol	118-79-6	SW846 8270C	74		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Nitrobenzene-d5	4165-60-0	SW846 8270C	94		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	2-Fluorobiphenyl	321-60-8	SW846 8270C	89		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Terphenyl-d14	1718-51-0	SW846 8270C	87		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Benzene	71-43-2	SW846 8260B	ND		ug/kg	6.9		1	IH-SF-001	30-Sep-02	15:40
F14850-1	Toluene	108-88-3	SW846 8260B	ND		ug/kg	6.9		1	IH-SF-001	30-Sep-02	15:40
F14850-1	Ethylbenzene	100-41-4	SW846 8260B	ND		ug/kg	6.9		1	IH-SF-001	30-Sep-02	15:40

LabLink Analytical Data Report
Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	Limit	DF	Client ID	Collected	Time
F14850-1	Xylene (total)	1330-20-7	SW846 8260B	ND		ug/kg	21		1	IH-SF-001	30-Sep-02	15:40
F14850-1	Benzene	71-43-2	SW846 8260B	ND		mg/l	0.01	0.5	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Chlorobenzene	108-90-7	SW846 8260B	ND		mg/l	0.02	100	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Chloroform	67-66-3	SW846 8260B	ND		mg/l	0.02	6	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Carbon tetrachloride	56-23-5	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-SF-001	30-Sep-02	15:40
F14850-1	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-SF-001	30-Sep-02	15:40
F14850-1	1,2-Dichloroethane	107-06-2	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-SF-001	30-Sep-02	15:40
F14850-1	p-Dichlorobenzene	106-46-7	SW846 8260B	ND		mg/l	0.02	7.5	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Methyl ethyl ketone	78-93-3	SW846 8260B	ND		mg/l	0.1	200	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Tetrachloroethylene	127-18-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Trichloroethylene	79-01-6	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Vinyl chloride	75-01-4	SW846 8260B	ND		mg/l	0.01	0.2	10	IH-SF-001	30-Sep-02	15:40
F14850-1	Dibromofluoromethane	1868-53-7	SW846 8260B	101		%			10	IH-SF-001	30-Sep-02	15:40
F14850-1	Dibromofluoromethane	1868-53-7	SW846 8260B	96		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	Toluene-D8	2037-26-5	SW846 8260B	99		%			10	IH-SF-001	30-Sep-02	15:40
F14850-1	Toluene-D8	2037-26-5	SW846 8260B	101		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	101		%			10	IH-SF-001	30-Sep-02	15:40
F14850-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	102		%			1	IH-SF-001	30-Sep-02	15:40
F14850-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	99		%			10	IH-SF-001	30-Sep-02	15:40
F14850-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	101		%			1	IH-SF-001	30-Sep-02	15:40
F14850-2	2,4-D	94-75-7	SW846 8151	ND		mg/l	0.01	10	1	IH-TS-002	30-Sep-02	16:00
F14850-2	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND		mg/l	0.002	1	1	IH-TS-002	30-Sep-02	16:00
F14850-2	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND		mg/l	0.0005	0.4	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Chlordane	12789-03-6	SW846 8081A	ND		mg/l	0.005	0.03	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Endrin	72-20-8	SW846 8081A	ND		mg/l	0.001	0.02	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Heptachlor	76-44-8	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Heptachlor epoxide	1024-57-3	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Methoxychlor	72-43-5	SW846 8081A	ND		mg/l	0.001	10	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Toxaphene	8001-35-2	SW846 8081A	ND		mg/l	0.025	0.5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	TPH (C10-C28)		SW846 8015 M	ND		mg/kg	9.4		1	IH-TS-002	30-Sep-02	16:00
F14850-2	2,4-DCAA	19719-28-9	SW846 8151	87		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Tetrachloro-m-xylene	877-09-8	SW846 8081A	91		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	o-Terphenyl	84-15-1	SW846 8015 M	95		%	19		1	IH-TS-002	30-Sep-02	16:00
F14850-2	Decachlorobiphenyl	2051-24-3	SW846 8081A	76		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.4		1	IH-TS-002	30-Sep-02	16:00
F14850-2	4-Bromofluorobenzene	460-00-4	SW846 8015	72		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	aaa-Trifluorotoluene	98-08-8	SW846 8015	81		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Ignitability (Flashpoint)		SW846 1010	>200	>	Deg. F			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Sulfide Reactivity		SW846 CHAP7	<57	<	mg/kg	57		1	IH-TS-002	30-Sep-02	16:00
F14850-2	Cyanide Reactivity		SW846 CHAP7	<1.7	<	mg/kg	1.7		1	IH-TS-002	30-Sep-02	16:00
F14850-2	Corrosivity as pH		SW846 CHAP7	4.8					1	IH-TS-002	30-Sep-02	16:00
F14850-2	Solids, Percent		EPA 160.3 M	88.4		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Arsenic	7440-38-2	SW846 6010B	0.0028 U	U	mg/l	0.01	5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Barium	7440-39-3	SW846 6010B	0.41 B	B	mg/l	1	100	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Cadmium	7440-43-9	SW846 6010B	0.00026 U	U	mg/l	0.005	1	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Chromium	7440-47-3	SW846 6010B	0.00043 U	U	mg/l	0.01	5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Lead	7439-92-1	SW846 6010B	0.0051		mg/l	0.005	5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Mercury	7439-97-6	SW846 7470A	0.0031 B	B	mg/l	0.01	0.2	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Selenium	7782-49-2	SW846 6010B	0.0020 U	U	mg/l	0.01	1	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Silver	7440-22-4	SW846 6010B	0.00055 U	U	mg/l	0.01	5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	2-Methylphenol	95-48-7	SW846 8270C	ND		mg/l	0.05	200	1	IH-TS-002	30-Sep-02	16:00

LabLink Analytical Data Report
Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	Limit	DF	Client ID	Collected	Time
F14850-2	3&4-Methylphenol		SW846 8270C	ND		mg/l	0.05	200	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Pentachlorophenol	87-86-5	SW846 8270C	ND		mg/l	0.25	100	1	IH-TS-002	30-Sep-02	16:00
F14850-2	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND		mg/l	0.05	400	1	IH-TS-002	30-Sep-02	16:00
F14850-2	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND		mg/l	0.05	2	1	IH-TS-002	30-Sep-02	16:00
F14850-2	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	0.05	7.5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	0.05	0.5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	0.05	3	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	0.05	2	1	IH-TS-002	30-Sep-02	16:00
F14850-2	Pyridine	110-86-1	SW846 8270C	ND		mg/l	0.05	5	1	IH-TS-002	30-Sep-02	16:00
F14850-2	2-Fluorophenol	367-12-4	SW846 8270C	60		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Phenol-d5	4165-62-2	SW846 8270C	40		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	2,4,6-Tribromophenol	118-79-6	SW846 8270C	94		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Nitrobenzene-d5	4165-60-0	SW846 8270C	92		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	2-Fluorobiphenyl	321-60-8	SW846 8270C	91		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Terphenyl-d14	1718-51-0	SW846 8270C	90		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Benzene	71-43-2	SW846 8260B	ND		ug/kg	6		1	IH-TS-002	30-Sep-02	16:00
F14850-2	Toluene	108-88-3	SW846 8260B	ND		ug/kg	6		1	IH-TS-002	30-Sep-02	16:00
F14850-2	Ethylbenzene	100-41-4	SW846 8260B	ND		ug/kg	6		1	IH-TS-002	30-Sep-02	16:00
F14850-2	Xylene (total)	1330-20-7	SW846 8260B	ND		ug/kg	18		1	IH-TS-002	30-Sep-02	16:00
F14850-2	Benzene	71-43-2	SW846 8260B	ND		mg/l	0.01	0.5	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Chlorobenzene	108-90-7	SW846 8260B	ND		mg/l	0.02	100	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Chloroform	67-66-3	SW846 8260B	ND		mg/l	0.02	6	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Carbon tetrachloride	56-23-5	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-TS-002	30-Sep-02	16:00
F14850-2	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-TS-002	30-Sep-02	16:00
F14850-2	1,2-Dichloroethane	107-06-2	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-TS-002	30-Sep-02	16:00
F14850-2	p-Dichlorobenzene	106-46-7	SW846 8260B	ND		mg/l	0.02	7.5	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Methyl ethyl ketone	78-93-3	SW846 8260B	ND		mg/l	0.1	200	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Tetrachloroethylene	127-18-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Trichloroethylene	79-01-6	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Vinyl chloride	75-01-4	SW846 8260B	ND		mg/l	0.01	0.2	10	IH-TS-002	30-Sep-02	16:00
F14850-2	Dibromofluoromethane	1868-53-7	SW846 8260B	100		%			10	IH-TS-002	30-Sep-02	16:00
F14850-2	Dibromofluoromethane	1868-53-7	SW846 8260B	100		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	Toluene-D8	2037-26-5	SW846 8260B	98		%			10	IH-TS-002	30-Sep-02	16:00
F14850-2	Toluene-D8	2037-26-5	SW846 8260B	105		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	4-Bromofluorobenzene	460-00-4	SW846 8260B	101		%			10	IH-TS-002	30-Sep-02	16:00
F14850-2	4-Bromofluorobenzene	460-00-4	SW846 8260B	111		%			1	IH-TS-002	30-Sep-02	16:00
F14850-2	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	100		%			10	IH-TS-002	30-Sep-02	16:00
F14850-2	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	102		%			1	IH-TS-002	30-Sep-02	16:00

Found 0 results exceeding regulatory limits.

** Indicates result outside regulatory limits.

* Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. Accutest assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8260B SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012356.D	10	10/08/02	JG	10/07/02	OP6046	VC548
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	101%		84-117%
17060-07-0	1,2-Dichloroethane-D4	99%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-SF-001	Date Sampled:	09/30/02
Lab Sample ID:	F14850-1	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K010518.D	1	10/08/02	NAF	n/a	n/a	VK417
Run #2							

Run #	Initial Weight
Run #1	3.95 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	6.9	ug/kg	
108-88-3	Toluene	ND	6.9	ug/kg	
100-41-4	Ethylbenzene	ND	6.9	ug/kg	
1330-20-7	Xylene (total)	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	101%		79-121%
460-00-4	4-Bromofluorobenzene	102%		77-133%
17060-07-0	1,2-Dichloroethane-D4	101%		72-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-SF-001	Date Sampled:	09/30/02
Lab Sample ID:	F14850-1	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L014737.D	1	10/08/02	ME	10/07/02	OP6048	SL816
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	74%		36-137%
4165-60-0	Nitrobenzene-d5	94%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	87%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8015	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD032128.D	1	10/04/02	RM	n/a	n/a	GCD1271
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	72%		57-144%	
98-08-8	aaa-Trifluorotoluene	82%		65-132%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-SF-001		Date Sampled:	09/30/02
Lab Sample ID:	F14850-1		Date Received:	10/02/02
Matrix:	SO - Soil		Percent Solids:	91.9
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07257.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		52-131%
2051-24-3	Decachlorobiphenyl	68%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8015 M SW846 3550B	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP24379.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units Q
	TPH (C10-C28)	5.99	8.9	mg/kg J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-SF-001	Date Sampled:	09/30/02
Lab Sample ID:	F14850-1	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8151 SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06534.D	1	10/09/02	ATX	10/05/02	T:OP1421	T:GGG239
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	89%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Project: Indian Head	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Me
Arsenic	0.0029 B	D004	5.0	0.010	0.0028	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Barium	0.14 B	D005	100	1.0	0.00049	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Lead	0.0074	D008	5.0	0.0050	0.0012	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Mercury	0.0030 B	D009	0.20	0.010	0.00022	mg/l	1	10/08/02	10/08/02	DM	SW846 7470A EPA 245.1
Selenium	0.0041 B	D010	1.0	0.010	0.0020	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID: IH-SF-001		Date Sampled: 09/30/02
Lab Sample ID: F14850-1		Date Received: 10/02/02
Matrix: SO - Soil		Percent Solids: 91.9
Project: Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	5.0			1	10/08/02 SJL	SW846 CHAP7
Cyanide Reactivity	<1.6	1.6	mg/kg	1	10/03/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	>200		Deg. F	1	10/08/02 SJL	SW846 1010
Solids, Percent	91.9		%	1	10/03/02 FR	EPA 160.3 M
Sulfide Reactivity	<54	54	mg/kg	1	10/03/02 LL	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8260B SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012357.D	10	10/08/02	JG	10/07/02	OP6046	VC548
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
2037-26-5	Toluene-D8	98%		87-113%
460-00-4	4-Bromofluorobenzene	101%		84-117%
17060-07-0	1,2-Dichloroethane-D4	100%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K010519.D	1	10/08/02	NAF	n/a	n/a	VK417
Run #2							

Run #	Initial Weight
Run #1	4.68 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	6.0	ug/kg	
108-88-3	Toluene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	105%		79-121%
460-00-4	4-Bromofluorobenzene	111%		77-133%
17060-07-0	1,2-Dichloroethane-D4	102%		72-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L014738.D	1	10/08/02	ME	10/07/02	OP6048	SL816
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		19-90%
4165-62-2	Phenol-d5	40%		10-68%
118-79-6	2,4,6-Tribromophenol	94%		36-137%
4165-60-0	Nitrobenzene-d5	92%		49-119%
321-60-8	2-Fluorobiphenyl	91%		45-118%
1718-51-0	Terphenyl-d14	90%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8015		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD032129.D	1	10/04/02	RM	n/a	n/a	GCD1271
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.45 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	72%		57-144%	
98-08-8	aaa-Trifluorotoluene	81%		65-132%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002		Date Sampled:	09/30/02
Lab Sample ID:	F14850-2		Date Received:	10/02/02
Matrix:	SO - Soil		Percent Solids:	88.4
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07258.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		52-131%
2051-24-3	Decachlorobiphenyl	76%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8015 M SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP24382.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	9.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	95%		64-121%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002		Date Sampled:	09/30/02
Lab Sample ID:	F14850-2		Date Received:	10/02/02
Matrix:	SO - Soil		Percent Solids:	88.4
Method:	SW846 8151	SW846 1311		
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06535.D	1	10/09/02	ATX	10/05/02	T:OP1421	T:GGG239
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits			
19719-28-9	2,4-DCAA	87%		10-150%			

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002	Date Sampled: 09/30/02
Lab Sample ID: F14850-2	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 88.4
Project: Indian Head	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Me:
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Barium	0.41 B	D005	100	1.0	0.00049	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Lead	0.0051	D008	5.0	0.0050	0.0012	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Mercury	0.0031 B	D009	0.20	0.010	0.00022	mg/l	1	10/08/02	10/08/02	DM	SW846 7470A EPA 245.1
Selenium	0.0020 U	D010	1.0	0.010	0.0020	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/07/02	10/08/02	DM	SW846 6010B SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID: IH-TS-002	Date Sampled: 09/30/02
Lab Sample ID: F14850-2	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 88.4
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	4.8			1	10/08/02 SJL	SW846 CHAP7
Cyanide Reactivity	<1.7	1.7	mg/kg	1	10/03/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	>200		Deg. F	1	10/08/02 SJL	SW846 1010
Solids, Percent	88.4		%	1	10/03/02 FR	EPA 160.3 M
Sulfide Reactivity	<57	57	mg/kg	1	10/03/02 LL	SW846 CHAP7

RL = Reporting Limit

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02315-02
Specification Section No. (Only 1 section with each transmittal) 02315	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.6 & 3.11	Geotechnical Test Data Laplata Sand and Gravel Select Fill	1 Paper 1 elec.	Test Report	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature

Date

Ernie Duke

October 14, 2002

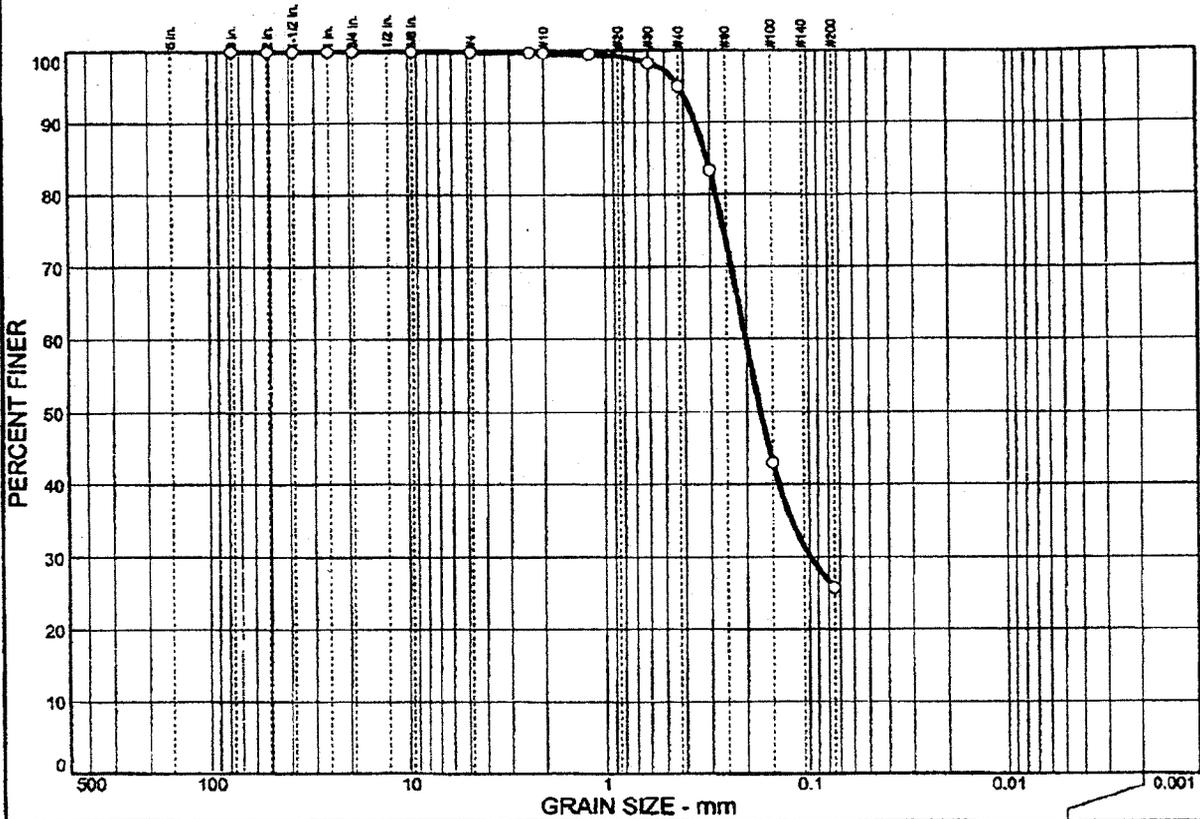
PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

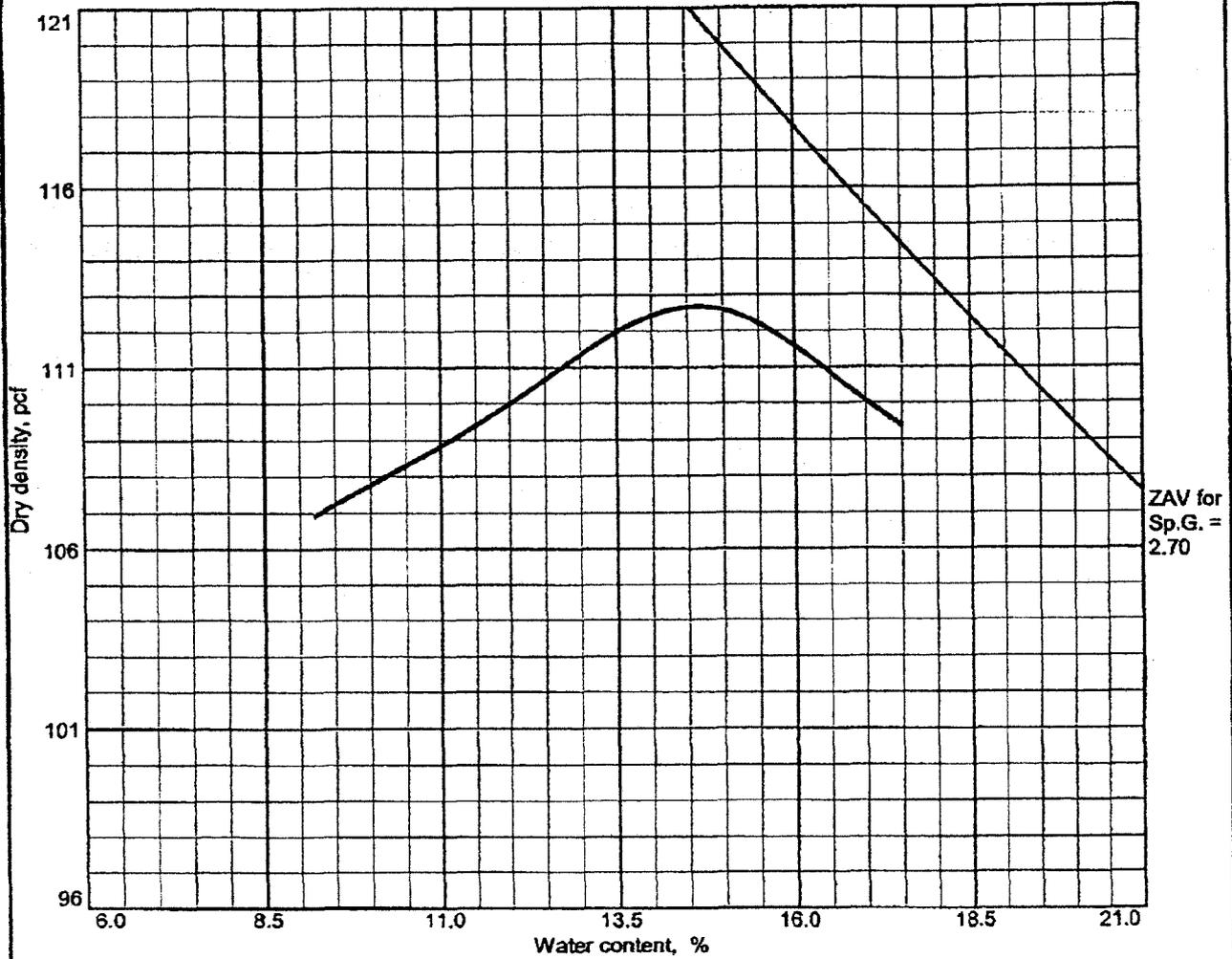
PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

Particle Size Distribution Report



COMPACTION TEST REPORT



Test specification: ASTM D 698-91 Procedure B Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SM	A-2-4(0)		2.70	NP	NP	0.0	25.8

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 112.7 pcf Optimum moisture = 14.6 %	Brown silty sand
Project No. 02530A Client: SHAW Environmental Project: Indian Head NSWC Location: LaPlata Sand & Gravel	Remarks: 10/09/2002
COMPACTION TEST REPORT HILLIS-CARNES ENGINEERING ASSOCIATES, INC.	

Figure

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02525-01
Specification Section No. (Only 1 section with each transmittal) 02525	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-07	1.6.7	Monitoring Well Abandonment Reports	1	Certificate	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	January 20, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature		Date
NA		

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority		
NA		

 WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

S-12
 WP-04

DATE WELL ABANDONED: 9/24/02 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

* PERMIT NUMBER OF REPLACEMENT WELL _____

* PERSON ABANDONING WELL: Aaron Eichelberger

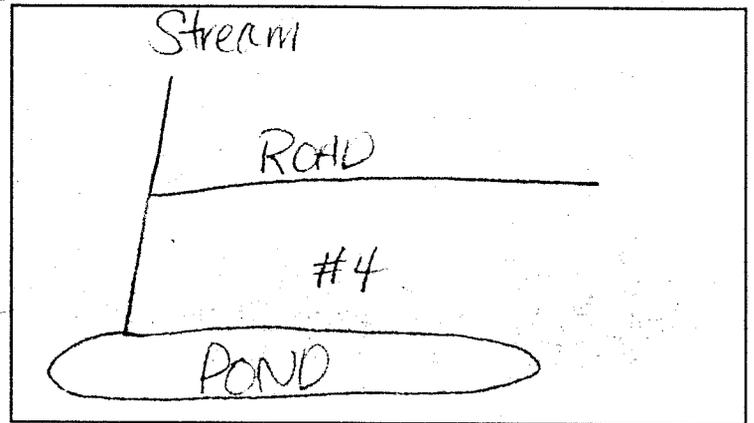
WELL DRILLERS LICENSE NUMBER: 336

* OWNER'S NAME: US Navy

CIRCLE MWD /MSD/ MGD

SITE LOCATION MAP

* WELL LOCATION:
 COUNTY: Charles
 NEAREST TOWN: Indian Head
 TAX MAP 10 BLOCK _____ PARCEL _____
 SUBDIVISION: US Naval Surface Warfare Center
 SECTION: _____ LOT: _____
 NEAREST ROAD: Atkins Road



* TYPE OF WELL BEING ABANDONED:

- DRILLED JETTED
- BORED/AUGERED HAND DUG
- OTHER (specify) _____

* USE CODE:

- DOMESTIC MUNICIPAL/PUBLIC
- IRRIGATION INDUSTRIAL
- TEST/OBSERVATION GEOTHERMAL

* TYPE OF CASING:

- STEEL PLASTIC
- CONCRETE OTHER (specify) _____

* SIZE OF CASING: 3/4 INCHES IN DIAMETER

* DEPTH OF WELL: 10 FEET DEEP

* WAS ANY CASING REMOVED? YES NO
 if yes, length removed, in feet: 10

* WAS CASING RIPPED OR PERFORATED? YES NO

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Easy grout	0	10
VOLUME OF MATERIAL USED		
1/2 bag 251b		

Aaron Eichelberger
 SIGNATURE - MASTER WELL DRILLER OR SUPERVISING SANITARIAN

336

LICENSE #

CIRCLE MWD /MSD/ MGD

CIRCLE ONE

12/24/02

DATE

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
 2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

 WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

S12
 WP-06

DATE WELL ABANDONED: 9/24/02 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

* PERMIT NUMBER OF REPLACEMENT WELL _____

* PERSON ABANDONING WELL: Aaron Eichelberger

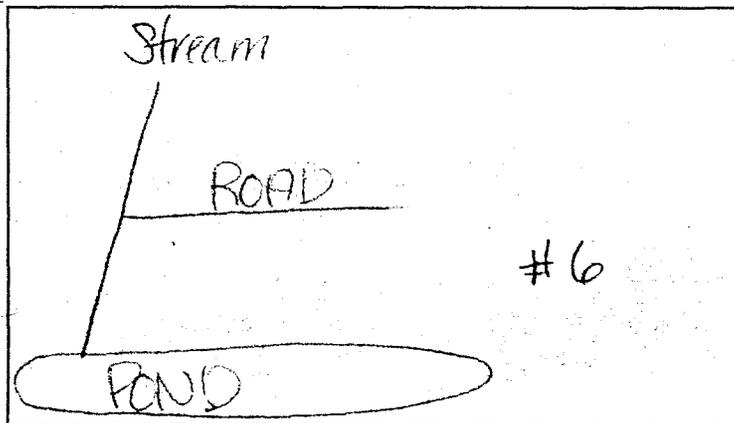
WELL DRILLERS LICENSE NUMBER: 336

* OWNER'S NAME: US Navy

CIRCLE: MWD MSD/MGD

SITE LOCATION MAP

* WELL LOCATION:
 COUNTY: Charles
 NEAREST TOWN: Indian Head
 TAX MAP 10 BLOCK _____ PARCEL _____
 SUBDIVISION: US Naval Surface Warfare Center
 SECTION: _____ LOT: _____
 NEAREST ROAD: Atkins Road



TYPE OF WELL BEING ABANDONED:

- DRILLED JETTED
- BORED/AUGERED HAND DUG
- OTHER (specify) _____

USE CODE:

- DOMESTIC MUNICIPAL/PUBLIC
- IRRIGATION INDUSTRIAL
- TEST/OBSERVATION GEOTHERMAL

TYPE OF CASING:

- STEEL PLASTIC
- CONCRETE OTHER (specify) _____

SIZE OF CASING: 3/4 INCHES IN DIAMETER

DEPTH OF WELL: 6 FEET DEEP

WAS ANY CASING REMOVED? YES NO
 if yes, length removed, in feet: 6

WAS CASING RIPPED OR PERFORATED? YES NO

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Easy grout	0	6
VOLUME OF MATERIAL USED		
bag 25lb		

Aaron Eichelberger
 SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN

336
 LICENSE #

MWD/MSD/MGD
 CIRCLE ONE

12/24/02
 DATE

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
 2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

 WATER WELL ABANDONMENT-SEALING REPORT FORM

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- * COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
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- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

S-12
 WP-01

DATE WELL ABANDONED: 9/24/02 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

* PERMIT NUMBER OF REPLACEMENT WELL _____

* PERSON ABANDONING WELL: Aaron Eichelberger

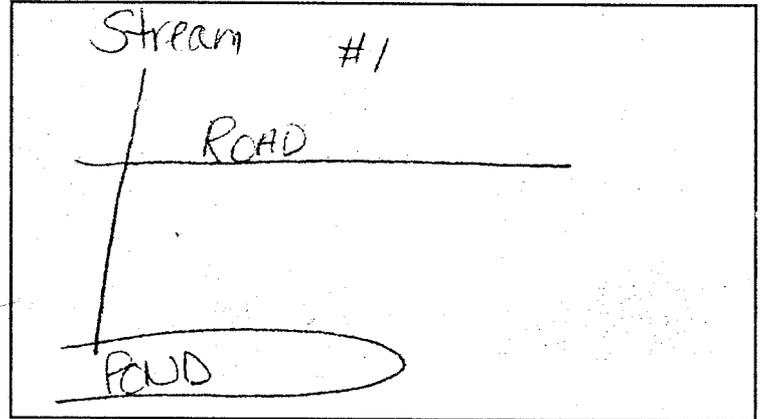
WELL DRILLERS LICENSE NUMBER: 336

* OWNER'S NAME: US Navy

CIRCLE MWD MSD/MGD

SITE LOCATION MAP

* WELL LOCATION:
 COUNTY: Charles
 NEAREST TOWN: Indian Head
 TAX MAP 10 BLOCK _____ PARCEL _____
 SUBDIVISION: US Naval SURFACE Warfare Center
 SECTION: _____ LOT: _____
 NEAREST ROAD: Atkins Road



* TYPE OF WELL BEING ABANDONED:

- DRILLED JETTED
- BORED/AUGERED HAND DUG
- OTHER (specify) _____

* USE CODE:

- DOMESTIC MUNICIPAL/PUBLIC
- IRRIGATION INDUSTRIAL
- TEST/OBSERVATION GEOTHERMAL

* TYPE OF CASING:

- STEEL PLASTIC
- CONCRETE OTHER (specify) _____

* SIZE OF CASING: 3/4 INCHES IN DIAMETER

* DEPTH OF WELL: 7 FEET DEEP

* WAS ANY CASING REMOVED? YES NO
 if yes, length removed, in feet: 1

* WAS CASING RIPPED OR PERFORATED? YES NO

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Easy grout	0	7
VOLUME OF MATERIAL USED		
1 bag/ 12 lbs		

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN
Aaron Eichelberger

336
 LICENSE #

CIRCLE MWD MSD/MGD
 CIRCLE ONE

12/24/02
 DATE

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
 2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

 WATER WELL ABANDONMENT-SEALING REPORT FORM

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- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

SP12
 WP-02

DATE WELL ABANDONED: 9/24/02 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

* PERMIT NUMBER OF REPLACEMENT WELL _____

* PERSON ABANDONING WELL: Aaron Eichelberger

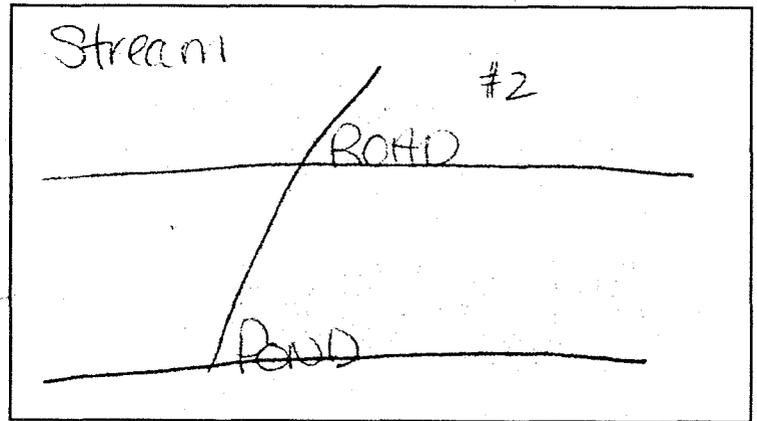
WELL DRILLERS LICENSE NUMBER: 336

* OWNER'S NAME: US Navy

CIRCLE: MWD/MSD/MGD

SITE LOCATION MAP

* WELL LOCATION:
 COUNTY: Charles
 NEAREST TOWN: Indian Head
 TAX MAP 10 BLOCK _____ PARCEL _____
 SUBDIVISION: US Naval Surface Warfare Center
 SECTION: _____ LOT: _____
 NEAREST ROAD: Atkins Road



* TYPE OF WELL BEING ABANDONED:

- DRILLED _____ JETTED _____
- _____ BORED/AUGERED _____ HAND DUG _____
- _____ OTHER (specify) _____

* USE CODE:

- _____ DOMESTIC _____ MUNICIPAL/PUBLIC _____
- _____ IRRIGATION _____ INDUSTRIAL _____
- TEST/OBSERVATION _____ GEOTHERMAL _____

* TYPE OF CASING:

- _____ STEEL _____ PLASTIC _____
- _____ CONCRETE _____ OTHER (specify) _____

* SIZE OF CASING: 3/4 INCHES IN DIAMETER

* DEPTH OF WELL: 7.5 FEET DEEP

* WAS ANY CASING REMOVED? YES _____ NO
 if yes, length removed, in feet: _____

* WAS CASING RIPPED OR PERFORATED? _____ YES NO

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Easy grout	0	7.5
VOLUME OF MATERIAL USED		
12.5lb 1/4 bag		

SIGNATURE-MASTER WELL DRILLER OR SUPERVISING SANITARIAN
Aaron Eichelberger

LICENSE # 336

CIRCLE ONE MWD/MSD/MGD

DATE 12/24/02

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
 2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

 WATER WELL ABANDONMENT-SEALING REPORT FORM

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- * COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

SP-12
 WP-03

DATE WELL ABANDONED: 9/24/02 (month/day/year)

PERMIT NUMBER OF ABANDONED WELL (if any) _____

PERMIT NUMBER OF REPLACEMENT WELL _____

PERSON ABANDONING WELL: A. Eichelberger

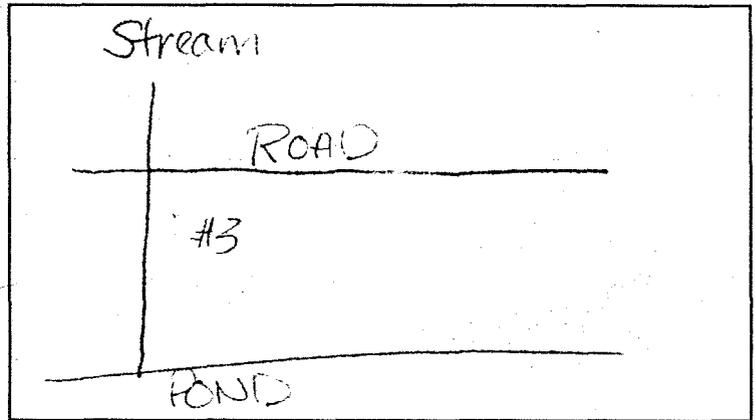
WELL DRILLERS LICENSE NUMBER: 336

OWNER'S NAME: US Navy

CIRCLE: MWD MSD/MGD

SITE LOCATION MAP

WELL LOCATION:
 COUNTY: Charles
 NEAREST TOWN: Indian Head
 TAX MAP 10 BLOCK _____ PARCEL _____
 SUBDIVISION: US Naval Surface Warfare Center
 SECTION: _____ LOT: _____
 NEAREST ROAD: Atkins Road



TYPE OF WELL BEING ABANDONED:

- DRILLED _____ JETTED
- _____ BORED/AUGERED _____ HAND DUG
- _____ OTHER (specify) _____

USE CODE:

- _____ DOMESTIC _____ MUNICIPAL/PUBLIC
- _____ IRRIGATION _____ INDUSTRIAL
- TEST/OBSERVATION _____ GEOTHERMAL

TYPE OF CASING:

- _____ STEEL _____ PLASTIC
- _____ CONCRETE _____ OTHER (specify) _____

SIZE OF CASING: 3/4 INCHES IN DIAMETER

DEPTH OF WELL: 7 FEET DEEP

WAS ANY CASING REMOVED? YES _____ NO
 if yes, length removed, in feet: 7

WAS CASING RIPPED OR PERFORATED? _____ YES NO

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Easy grout	0	7
VOLUME OF MATERIAL USED		
1/2 bag 25lb		

Arnon Eichelberger
 SIGNATURE - MASTER WELL DRILLER OR SUPERVISING SANITARIAN

336
 LICENSE #

MWD MSD/MGD
 CIRCLE ONE

12/24/02
 DATE

MARYLAND DEPARTMENT OF THE ENVIRONMENT, WATER MANAGEMENT ADMINISTRATION
 2500 BROENING HIGHWAY, BALTIMORE, MARYLAND 21224, (410) 631-3784

 WATER WELL ABANDONMENT-SEALING REPORT FORM

SUBMIT COPIES OF COMPLETED FORM TO:

- * COUNTY ENVIRONMENT AGENCY (contact MDE, WMA if address needed)
- * WELL OWNER
- * MDE, WATER MANAGEMENT ADMINISTRATION, WELL PROGRAM

WP-05
 SP-12

DATE WELL ABANDONED: 9/24/02 (month/day/year)

* PERMIT NUMBER OF ABANDONED WELL (if any) _____

* PERMIT NUMBER OF REPLACEMENT WELL _____

* PERSON ABANDONING WELL: Aaron Eichelberger

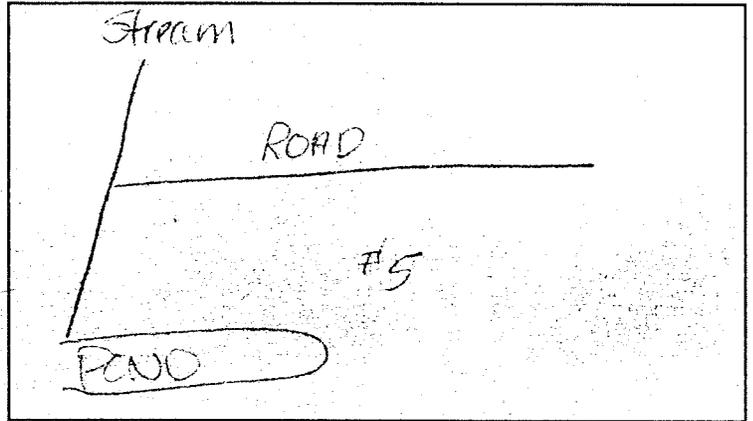
WELL DRILLERS LICENSE NUMBER: 336

* OWNER'S NAME: US Navy

CIRCLE: MWD MSD/MGD

SITE LOCATION MAP

* WELL LOCATION: ---
 COUNTY: Charles
 NEAREST TOWN: Indian Head
 TAX MAP 10 BLOCK _____ PARCEL _____
 SUBDIVISION: US Naval Surface Warfare Center
 SECTION: _____ LOT: _____
 NEAREST ROAD: Atkins Road



* TYPE OF WELL BEING ABANDONED:

- DRILLED _____ JETTED _____
- _____ BORED/AUGERED _____ HAND DUG _____
- _____ OTHER (specify) _____

* USE CODE:

- _____ DOMESTIC _____ MUNICIPAL/PUBLIC _____
- _____ IRRIGATION _____ INDUSTRIAL _____
- TEST/OBSERVATION _____ GEOTHERMAL _____

* TYPE OF CASING:

- _____ STEEL _____ PLASTIC _____
- _____ CONCRETE _____ OTHER (specify) _____

* SIZE OF CASING: 3/4 INCHES IN DIAMETER

* DEPTH OF WELL: 10 FEET DEEP

* WAS ANY CASING REMOVED? YES _____ NO
 if yes, length removed, in feet: 10

* WAS CASING RIPPED OR PERFORATED? _____ YES NO

LOG OF SEALING MATERIAL

MATERIAL	FEET	
	FROM	TO
Easy grout	0	10
VOLUME OF MATERIAL USED		
bag 25lb		

* Aaron Eichelberger
 SIGNATURE - MASTER WELL DRILLER OR SUPERVISING SANITARIAN

336
 LICENSE #

MWD MSD/MGD
 CIRCLE ONE

12/24/02
 DATE

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02525-02
Specification Section No. (Only 1 section with each transmittal) 02525	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-03	1.4	Well Riser	1	Catalog Data	E	A
SD-03	1.4	Well Screen	1	Catalog Data	E	A
SD-03	1.4	Filter Pack	1	Catalog Data	E	A
SD-03	1.4	Bentonite Pellet Seal	1	Catalog Data	E	A
SD-07	1.4	Well Drilling/ Development Plan With cement/bentonite grout mix	1	Certificate	E	AN
SD-07	COMAR	MD. Well Driller License	1	Certificate	E	A

SUBMITTAL CODES

D – Forwarded to ROICC FOR ACTION
 E – Forwarded to ROICC for Record Purposes

APPROVAL CODES

A – Approved as Submitted
 AN – Approved as Noted

RR – Disapproved, Revise and Resubmit
 NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature

Date

Ernie Duke



April 2, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (I) Copy No. of copies returned
---	---	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature

Date

NA

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	--	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority

NA

LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

SAVE THIS PORTION OF CARD AND USE REVERSE SIDE FOR NAME AND / OR ADDRESS CHANGES. BOARD MUST BE NOTIFIED OF THESE CHANGES IMMEDIATELY.

Board of

WELL DRILLERS
2500 BROENING HIGHWAY
BALTIMORE MD 21224

C R HUGO

CARL R HUGO
19327 GRIST MILL LANE
KNOXVILLE MD 21758

STATE OF MARYLAND
DEPARTMENT OF THE ENVIRONMENT
LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

THE MARYLAND STATE BOARD OF

WELL DRILLERS

CERTIFIES THAT

CARL R HUGO

IS AN AUTHORIZED

MASTER WELL DRILLER - GEOTECHNICAL

In accordance with the Environment Article of the Annotated Code of Maryland

LIC. REG. CERT. NO.

MGD051

EXPIRATION DATE

06/01/03



James Teshida
SECRETARY MDE

SIGNATURE OF BEARER

State of



Maryland

026663

DEPARTMENT OF THE ENVIRONMENT

LICENSE, REGISTRATION, OR CERTIFICATION RENEWAL

THE MARYLAND STATE BOARD OF WELL DRILLERS

CERTIFIES THAT CARL R HUGO

IS AN AUTHORIZED MASTER WELL DRILLER - GEOTECHNICAL

IN ACCORDANCE WITH THE ENVIRONMENT ARTICLE OF THE ANNOTATED CODE OF MARYLAND

LIC. REG. CERT. NO.

MGD051

EXPIRATION DATE

06/01/03

James Teshida
SECRETARY MDE

WHERE REQUIRED BY LAW THIS MUST BE CONSPICUOUSLY DISPLAYED IN OFFICE TO WHICH IT APPLIES

SIGNATURE OF BEARER

19327 Gristmill Ln.
Knoxville, Md 21758

C. R. Hugo Inc.

March 26, 2003

Janna Staszak

Re.: Indianhead Drilling

Well Drilling/Development Material Handling Plan

WELL EMPLACEMENT

Bore holes will be advanced with 4 1/4 in. hollow stem augers

Split spoon sampling will be conducted at prescribed intervals

4 in. ID Schedule 40S Stainless steel screen and 2 in. pvc riser will be set through the augers or in the open hole

#2 filter sand will be emplaced adjacent to and 6 in. above well screen

a minimum of 6 in. of bentonite will be emplaced above the sand

Grout slurry consisting of 5% granular bentonite and 95% portland cement will be emplaced above the bentonite pellets

A 6 in. X 6 in. Steel protective stick-up will be set with approx. 2 ft. above and 2 ft. below ground surface

(Click here and type signature)

March 26, 2003

Page 2

A 4ft.X 4ft. concrete pad will be installed around stick-up

4in. X 5ft. bollards will be installed at corners of the concrete pad

DEVELOPMENT AND MATERIAL HANDLING

Drill cuttings will be drummed and staged by use of skid steer loader at prescribed location

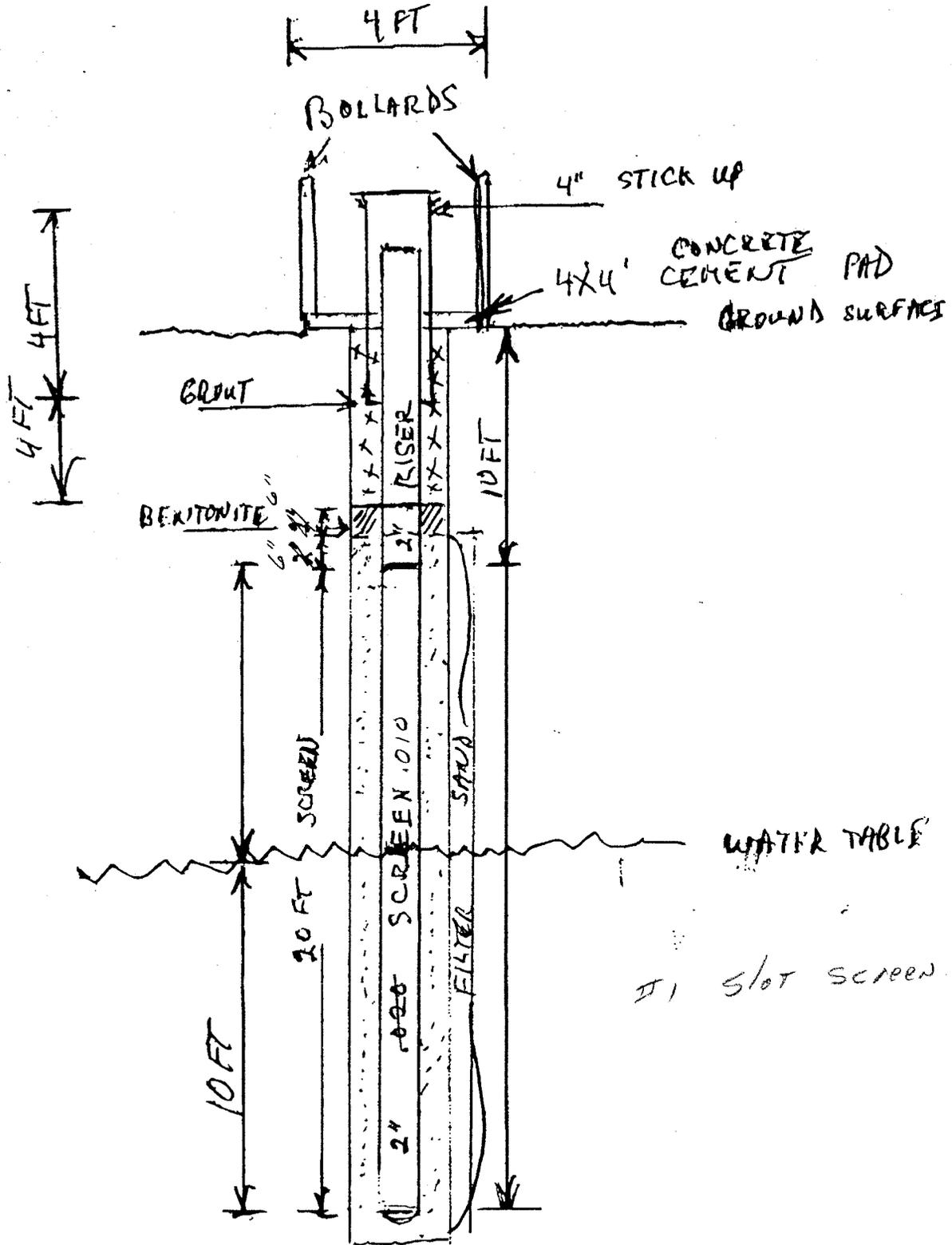
Monitor Wells will be developed by a method chosen by the CPC and approved by the ROICC NTR.

Development water will be contained in drums and staged at prescribed location

Sincerely,



Carl Hugo
Pres.



INDIAN HEAD, MD NAVAL SURFACE WARFARE ETC.

2" MONITOR WELL



Drillers Service, Inc.

ENVIRONMENTAL PRODUCTS

(800)334-2308
FAX (704)322-7674

ASTM 2-THD PVC FLUSH JOINT RISER PIPE & SCREEN

AVAILABLE IN 2" - 8" SCH 40 & 80

SPECIFICATIONS

RESIN & MANUFACTURING - Manufactured with Type 1, Grade 1 virgin PVC (Polyvinylchloride) calcium carbonate resin for high impact. Extruded at a slow rate to assure concentricity and high quality of pipe. Pipe shall exceed standard schedule 40 and 80 thickness to allow for deeper threads. Pipe must meet or exceed ASTM D1784, D1785, D2665 and F-480. Pipe must have NSF approval.

THREADING - The flush joint threads shall be a 2 thread per inch to meet ASTM 480-88 specification. Machined groove at the base of threads for the seating of a Nitrile O-Ring.

SLOTTED SCREENS - ~~The slot size of the screen will be .010 (10 slot), .016 (16 slot) or .020 (20 slot). slotting will begin 6" from each end of the pipe. The vertical rows will be 4-3/4" long with 1/4" interval between the slots for added strength, and a 3/8" spacing between the vertical rows. The 2" screen will have 3 horizontal rows, and the 4" will have 6 horizontal rows. After the slotting process, the screen will be scrubbed both inside and out to remove all loose cuttings.~~

CLEANING & DECONTAMINATION - Each piece of riser pipe and screen shall be individually scrubbed with isopropyl alcohol and sealed separately in a 6-mil polyethylene bag to insure cleanliness and free of contamination.

PACKAGING - Individually sealed pipe and screen placed in a heavy cardboard box and strapped for shipment.

TESTING - Threads on both riser pipe and screen shall be pressure tested by an independent certified laboratory to insure accurate pressure ratings.

ASTM 2-THD IS A TRADE NAME OF PVC, STAINLESS STEEL AND TEFLON FLUSH JOINT RISER PIPE AND SCREEN MANUFACTURED BY DRILLERS SERVICE, INC., HICKORY, NC.

Alloy Machine Works, Inc. - Well Screen
1-800-577-5068specs
4/2/2003 1:11 PM

WELL SCREEN SUBMITTAL DATA

Attention: Amanda
 CLIENT: Drillers Service
 PROJECT: 2" ES .010" slot 304 SS

Material	304 SS	
Nominal Size	2 PS	51 mm
Estimated Well Depth	100 ft	30 meters
Estimated Feet of Screen	10 ft	3 meters
Slot Size	0.010 in	0.25 mm
Outside Diameter Approx.	2.375 in	60 mm
Inside Diameter Rod Base Screen	2 in	51 mm
Inside Diameter at Fittings Approx.	2 in	51 mm
Weight Per Foot Approx.	2 lbs.	0.9 kg
Wire Width	0.058 in	1.5 mm
Wire Height	0.085 in	2.2 mm
Collapse Strength Calculated*	1295.69 PSI	91.08701 kg/sq.cm
Open Area	14.71 %	14.71 %
Intake Area	13.188 sq.in./ft.	279 sq.cm /meter
Transmitting Capacity @ 0.1 ft/sec	4.088 GPM/ft.	0.85 lps/meter
Support Rod Diameter	0.125 in	3.18 mm
Number of Support Rods	20	20
Cross Sectional Support Rod Area	0.244 sq.in	1.57 sq.cm.
Design Yield Area	30,000 PSI	2109 kg/sq.cm
Calculated Tensile Strength*	5,124 lbs.	2326.296 kg
Maximum Recommended Hanging Weight*	2562 lbs.	1163.148 kg
Critical Compression Load**	6,316 lbs.	2867.464 kg

* Many site conditions can affect the physical strength requirements for a successful screen installation. Contact Alloy Machine Works, Inc. With any questions.

** Rigid centralizers are recommended for all screen installations.



Drillers Service, Inc.

Environmental Products Division

Phone: (800)334-2308 Fax: (828)322-7674

2" & 4" LOCKING PLUG

- * Superior strength & chemical resistance
- * Santoprene thermoplastic dual rubber gasket
- * Highly visible color & Test Well, No Fill Markings
- * Tethering attachment will support heavy monitoring equipment
- * 2" & 4" works in Sch. 80, 40, & Sch. 5 Pipe
- * Light Weight (3.4 oz)
- * Accepts #3 locks (sold separately)
- * Easily torque on by hand, providing the ultimate well security



DSI Part No.	Description	1 - 24	25 or more
560LOCKPLUG-T2	2" Locking Plug	\$7.50	\$6.00
560LOCKPLUG-T4	4" Locking Plug	\$12.00	\$9.50

1800 HIGHLAND AVENUE NE - PO DRAWER 1407 - HICKORY, NC 28601
"Serving The Drilling Industry Since 1954"

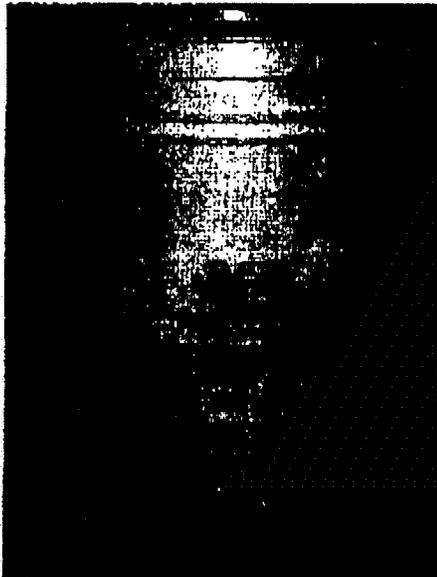
ITS



SHUR-PEL

SHUR-PEL Bentonite Pellets are manufactured for use in piezometer holes, monitor wells and other sealing and plugging applications and are available in 1/2", 3/8" and 1/4" sizes. SHUR-PEL Pellets swell in water to more than 10 times their original volume.

SHUR-PEL Pellets should be poured directly into the hole or may be placed by the tremie method. Since the result desired is actually a "bentonite pack" some care must be used in placing the pellets to prevent bridging, just as in gravel packing. The pellet seal or plug should be placed against a clay or other impervious formation.



Advantages:

- Clean, dust-free and easy to handle
- Non-toxic, non-polluting
- No bridging; poured into hole dry
- Does not disintegrate upon swelling; seals are tough but flexible and do not crack when subjected to movement.

Amount to use:

Hole Diameter	2"	3"	4"	5"	6"	7"	8"
Pounds of Tablets Per Foot of Seal	1.75	4	7	11	16	22	26

These are DRY weights and volumes. In use, the swelling of the pellets will increase the length of the seal, depending upon the hole conditions.

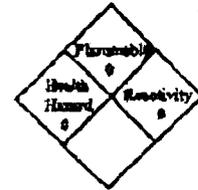
SHUR-PEL Pellets are packaged in waterproof plastic pails, 50 pounds per pail.



Drillers Services, Inc.	Hickory, NC	(828) 322-1100
--------------------------------	-------------	----------------

DRILLERS SERVICE, INC.

MATERIAL SAFETY DATA SHEET



NFPA FIRE HAZARD IDENTIFICATION SYSTEM

I. PRODUCT IDENTIFICATION			
Trade Name(s): SHUR-PEL			
Generic Name(s): Wyoming (Western) Bentonite; Bentonite Clay (CAS No. 1302-78-9)			
Chemical Name(s): Sodium Montmorillonite (CAS No. 1318-93-0)			
Manufacturer: WYO-BEN, INC. for DRILLERS SERVICE, INC.		Telephone Number:	
Address: P.O. Box 1979 1792 Highland Ave. N		Wyo-Ben, Inc.: (406) 652-6351	
Billings, MT 59103 Hickory, NC 28603		Drillers Service, Inc.: (704) 322-1100	
II. HAZARDOUS INGREDIENTS			
Ingredient	CAS NO.	%	Hazard
Crystalline Silica (SiO ₂) as Quartz	14808-60-7	See Note	Low concentrations of crystalline silica (SiO ₂) in the form of quartz, may be present in airborne bentonite dust. See Section VI for discussion of health hazard.
Note: Although the typical quartz content of western bentonite is in the range of 2 to 5% most of the quartz particles are larger than the 10 μ respirable threshold size. The actual respirable quartz concentration in airborne bentonite dust will depend upon bentonite source, fineness of product, moisture content of product, local humidity and wind conditions at point of use and other use specific factors.			
III. PHYSICAL DATA			
Boiling Point (°F): NA		Specific Gravity (H ₂ O=1): 2.45-2.55	
Vapor Pressure (mm Hg): NA		Melting Point: Approx. 1450°C	
Vapor Density (Air = 1): NA		Evaporation Rate (Butyl Acetate = 1): NA	
Solubility in Water: Insoluble, forms colloidal suspension.		pH: 8-10 (5% aqueous suspension)	
Density (at 20° C): 74 lbs/cu.ft. as product.			
Appearance and Odor: Bluegray to green as moist solid, light tan to gray as dry powder. No odor.			
IV. FIRE AND EXPLOSION DATA			
Flash Point: NA		Flammable Limits: LEL: NA UEL: NA	
Special Fire Fighting Procedures: NA			
Unusual Fire and Explosion Hazards: None. Product will not support combustion.			
Extinguishing Media: None for product. Any media can be used for the packaging. Product becomes slippery when wet.			
V. REACTIVITY			
Stability: Stable			
Hazardous Polymerization: None			
Incompatibility: None			
Hazardous Decomposition Products: None			
NA = Not Applicable ND = Not Determined			

VI. HEALTH HAZARD INFORMATION

Routes of Exposure and Effects:

Skin: Possible drying resulting in dermatitis.

Eyes: Mechanical irritant.

Inhalation: Acute (short term) exposure to dust levels exceeding the PEL may cause irritation of respiratory tract resulting in a dry cough.

Chronic (long term) exposure to airborne bentonite dust containing respirable size ($\leq 10 \mu$) quartz particles, where respirable quartz particle levels are higher than TLV's, may lead to development of silicosis or other respiratory problems. Persistent dry cough and labored breathing upon exertion may be symptomatic.

Ingestion: No adverse effects.

Permissible Exposure Limits: (for air contaminants)

OSHA PEL
(8hr. TWA)

ACGIH TLV

Bentonite as "Particulates not
otherwise regulated"
(formerly nuisance dust)

Total dust

15mg/m³

ND

Respirable dust

5mg/m³

ND

Crystalline Quartz (respirable)

0.1mg/m³

0.1mg/m³

Carcinogenicity: Bentonite is not listed by NTP or OSHA. IARC, 1997, concludes that there is sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica from occupational sources (IARC Class 1), that carcinogenicity was not detected in all industrial circumstances studied and that carcinogenicity may depend on characteristics of the crystalline silica or on external factors affecting its biological activity.

Acute Oral LD₅₀: ND

Acute Dermal LD₅₀: ND

Aquatic Toxicology LC₅₀: ND

Emergency and First Aid Procedures:

Skin: Wash with soap and water until clean.

Eyes: Flush with water until irritation ceases.

Inhalation: Move to area free from dust. If symptoms of irritation persist contact physician. Inhalation may aggravate existing respiratory illness.

VII. HANDLING AND USE PRECAUTIONS

Steps to be Taken if Material is Released or Spilled: Avoid breathing dust; wear respirator approved for silica bearing dust. Vacuum up to avoid generating airborne dust. Avoid using water. Product slippery when wetted.

Waste Disposal Methods: Product should be disposed of in accordance with applicable local, state and federal regulations.

Handling and Storage Precautions: Use NIOSH/MSHA respirators approved for silica bearing dust when free silica containing airborne bentonite dust levels exceed PEL/TLV's. Clean up spills promptly to avoid making dust. Storage area floors may become slippery if wetted.

VIII. INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements: Mechanical, general room ventilation. Use local ventilation to maintain PEL's/TLV's.

Respirator: Use respirators approved by NIOSH/MSHA for silica bearing dust.

Eye Protection: Generally not necessary. Personal preference.

Gloves: Generally not necessary. Personal preference.

Other Protective Clothing or Equipment: None

IX. SPECIAL PRECAUTIONS

Avoid prolonged inhalation of airborne dust.

DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIAL INFORMATION

Shipping Name: NA (Not Regulated)

Hazard Class: NA

Hazardous Substance: NA

Caution Labeling: NA

Date Prepared: January 14, 2000

Doc #: 51993

All information presented herein is believed to be accurate, however, it is the user's responsibility to determine in advance of need that the information is current and suitable for their circumstances. No warranty or guarantee, expressed or implied is made by WYO-BEN, INC. as to this information, or as to the safety, toxicity or effect of the use of this product.



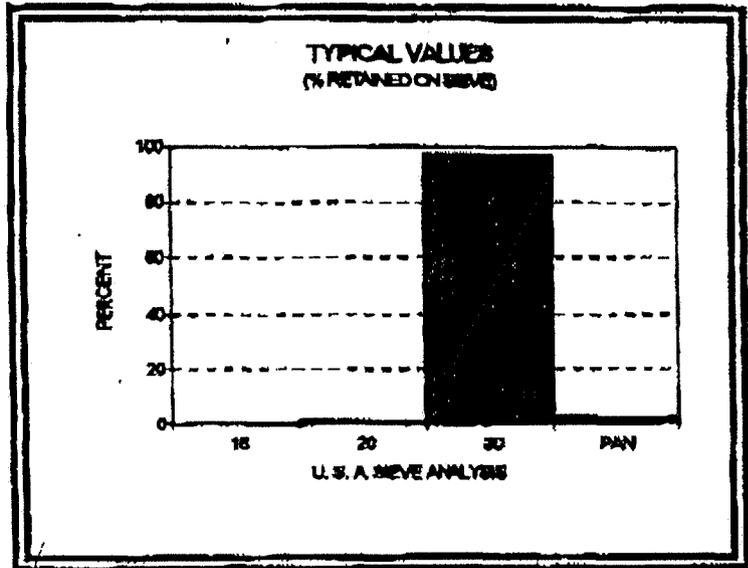
PRODUCT DATA

ASTM™ 20/30 SAND

UNGROUND SILICA

PLANT: OTTAWA, ILLINOIS

an American Society for Testing and Materials



USA STD SIEVE SIZE	MILLIMETERS	% RETAINED		CUMULATIVE % PASSING
		INDIVIDUAL	CUMULATIVE	
16	1.180	0.0	0.0	100.0
20	0.850	1.0	1.0	99.0
30	0.600	97.0	98.0	2.0
PAN		2.0	100.0	

TYPICAL PHYSICAL PROPERTIES

COLOR WHITE
 GRAIN SHAPE ROUND
 HARDNESS (MOHS) 7
 MELTING POINT (DEGREES F) 3100

MINERAL QUARTZ
 pH 7.0
 SPECIFIC GRAVITY (g/cc) 2.65

TYPICAL CHEMICAL ANALYSIS

SiO₂ (SILICON DIOXIDE) 99.8
 Fe₂O₃ (IRON OXIDE) 0.02
 Al₂O₃ (ALUMINUM OXIDE) 0.06
 TiO₂ (TITANIUM DIOXIDE) 0.012
 CaO (CALCIUM OXIDE) <0.01

MgO (MAGNESIUM OXIDE) <0.01
 Na₂O (SODIUM OXIDE) <0.01
 K₂O (POTASSIUM OXIDE) <0.01
 LOI (LOSS ON IGNITION) 0.1

CONFORMS TO ASTM C778

DISCLAIMER: The information set forth in this Product Data Sheet represents typical properties of the product described; the information and the typical values are not specifications. U.S. Silica Company makes no representation or warranty concerning the Products, expressed or implied, by this Product Data Sheet.

WARNING: This product contains crystalline silica - quartz, which can cause silicosis (an occupational lung disease) and lung cancer. For detailed information on the potential health effects of crystalline silica - quartz, see the U.S. Silica Company Material Safety Data Sheet.

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02742-01
Specification Section No. (Only 1 section with each transmittal) 02742	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

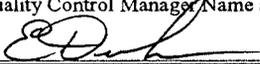
Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-03	12.7	Woven Geotextile Class ST	1	Product Data	E	A

SUBMITTAL CODES
 D – Forwarded to ROICC FOR ACTION
 E – Forwarded to ROICC for Record Purposes

APPROVAL CODES
 A – Approved as Submitted
 AN – Approved as Noted

RR – Disapproved, Revise and Resubmit
 NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature: Ernie Duke  Date: December 11, 2002

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		



GEOTEX® 315ST Woven Geotextile

GEOTEX 315ST is a woven slit film geotextile manufactured at one of Synthetic Industries' facilities that has achieved ISO-9002 certification for its systematic approach to quality. The individual slit films are woven together in such a manner as to provide dimensional stability relative to each other. The construction of the geotextile makes GEOTEX 315ST ideal for soil separation and stabilization. The geotextile is resistant to ultraviolet degradation and to biological and chemical environments normally found in soils. GEOTEX 315ST conforms to the property values listed below¹ which have been derived from quality control testing performed by one of Synthetic Industries' GAI-LAP accredited laboratories:

PROPERTY	TEST METHOD	MINIMUM AVERAGE ROLL VALUES ²	
		English	Metric
<u>Mechanical</u>			
Wide Width Tensile Strength	ASTM D4595	175 lbs/in	30.6 kN/m
Grab Tensile Strength	ASTM D4632	315 lbs	1400 N
Grab Elongation	ASTM D4632	15%	15%
Puncture Strength	ASTM D4833	125 lbs	555 N
Mullen Burst	ASTM D3786	650 psi	4475 kPa
Trapezoidal Tear	ASTM D4533	120 lbs	530 N
<u>Hydraulic</u>			
Apparent Opening Size (AOS)	ASTM D4751	70 US Std Sieve	0.212 mm
Permittivity	ASTM D4491	0.06 sec ⁻¹	0.06 sec ⁻¹
Water Flow Rate	ASTM D4491	5 gpm/ft ²	200 l/min/m ²
<u>Endurance</u>			
UV Resistance (% retained after 500 hours)	ASTM D4355	90%	90%

NOTES:

¹ The property values listed above are effective 3/20/98 and are subject to change without notice.

² Values shown are in machine (warp) x cross machine (fill) direction. Minimum average rolls values are calculated as the typical minus two standard deviations. Statistically, it yields a 97.7% degree of confidence that any samples taken from quality assurance testing will exceed the value reported.

SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, CONCERNING THE PRODUCT FURNISHED HEREUNDER OTHER THAN AT THE TIME OF DELIVERY IT SHALL BE OF THE QUALITY AND SPECIFICATION STATED HEREIN. ANY IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS EXPRESSLY EXCLUDED, AND, TO THE EXTENT THAT IT IS CONTRARY TO THE FOREGOING SENTENCE, ANY IMPLIED WARRANTY OF MERCHANTABILITY IS EXPRESSLY EXCLUDED. ANY RECOMMENDATIONS MADE BY SELLER CONCERNING THE USES OR APPLICATIONS OF SAID PRODUCT ARE BELIEVED RELIABLE AND SELLER MAKES NO WARRANTY OF RESULTS TO BE OBTAINED, IF THE PRODUCT DOES NOT MEET SYNTHETIC INDUSTRIES' CURRENT PUBLISHED SPECIFICATIONS, AND THE CUSTOMER GIVES NOTICE TO SYNTHETIC INDUSTRIES BEFORE INSTALLING THE PRODUCT, THEN SYNTHETIC INDUSTRIES WILL REPLACE THE PRODUCT WITHOUT CHARGE OR REFUND THE PURCHASE PRICE.

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 02742-02
Specification Section No. (Only 1 section with each transmittal) <p style="text-align: center;">02742</p>	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-07	12.7	Subbase Material	1	Certificate	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces. Based on approval of VR-004.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	January 20, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
---	--	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	---	--

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority
 NA

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

VARIANCE REQUEST - 004
 ROAD BASE AGGREGATE

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. VR-004		Date: 12-12-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input checked="" type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The Specifications require Crusher Run Aggregate CR-6 per Section 901 and Table 901A of the MD SHA Construction Manual			
Attachment: Section 901 and Table 901A and RC-6 Test Data			
Drawing Ref: C-9		Spec. Ref. 02742	
Explanation/Recommendation: As a cost savings to the project Shaw E & I recommends using RC-6, recycled concrete, instead of CR-6, crusher run, for subbase aggregate for the reconstruction of the Atkins Road Extension.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input checked="" type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input checked="" type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 4.00 per ton	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: _____		Signature _____ Date _____	
Site Representative: _____		Signature <i>[Signature]</i> Date 12-12-02	
Project Manager: _____		Signature <i>[Signature]</i> Date 12-12-02	
Reviewer Comments, Incl RFI Response: Forwarded as acceptable via email from C. Gardner & O. Morris.			
Navy: _____		Signature _____ Date _____	
ROICC: _____			
RPM/EIC: _____			
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

Dec 11 02 09:25a

P. 4

Dec 11 02 09:44a

p. 1



**AGGREGATE INDUSTRY
ECO-ROK, BLADENSBURG TERMINAL**

November 19, 2002

ATT:Ms.Christina Baltzar
Corman Construction, Inc.
12001 Galford Road
Annapolis Junction, Md 20701

RE: Contract #Mo 8365170 ,RT 29 & Randolph Road Interchange

Dear Ms. Baltzar ,

This is to certify that our Crushed Recycled Concrete Aggregate, identified as RC-6 (CR-6), meets the requirements as specified by the Maryland State D.O.T.. These specifications are listed in Section #901 AND TABLE 901A of "Standard Specifications for Construction and Material, JANUARY 2001". A sample from our stockpile was recently tested with the following results:

RC-6			
Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	100 %
1 1/2"	37.5 mm	100 %	90 - 100 %
3/4"	19.0 mm	86 %	60 - 90 %
#4	4.75 mm	48 %	30 - 60 %
#200	0.075 mm	6 %	0 - 15 %

PHYSICAL PROPERTIES

BULK SPECIFIC GRAVITY	2.53
ABSORPTION	4.10%
PLASTICITY INDEX	NON-PLASTIC
L.A.ABRASION	38 % WEAR

PAGE 1

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
Suite 400
Greenbelt, Maryland 20770

Tel: 301 - 982 - 1400

Fax: 301 - 513 - 0014

An AGGREGATE INDUSTRIES PLC Company

www.aggregate-us.com

AGGREGATE INDUSTRY-BLADENSBURG TERMINAL

September 17, 2002

ATT: Mr. YUREK
 CHERRY HILL CONSTRUCTION, INC.
 8211 WASHINGTON BLVD
 JESSUP, MD 20794



RE: WASHINGTON CONVENTION CENTER: STREETScape, WASHINGTON D.C.

DEAR Mr. YUREK

This is to certify that our Crushed Stone Aggregates, identified as CR-6 (GASB) and G.A.B. meets the requirements for their designation as specified by the Maryland State D.O.T.. These specifications are listed in Section #901, Table # 901A of "Standard Specifications for Construction and Materials, January 2001". A sample from our stockpile was recently tested with the following results:

CR-6 (GASB) SIEVE ANALYSIS

Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	100 %
1 1/2"	37.5 mm	100 %	90 - 100 %
3/4"	19.0 mm	86 %	60 - 90 %
#4	4.75 mm	49 %	30 - 60 %
#200	.075 mm	7 %	0 - 15 %

S.H.A. (MD) MIX DESIGN NO. S-P-GA22-1-01

G.A.B. SIEVE ANALYSIS

Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	98 - 100 %
1 1/2"	37.5 mm	100 %	95 - 100 %
3/4"	19.0 mm	85 %	77 - 93 %
3/8"	9.5 mm	65 %	57 - 73 %
#4	4.75 mm	49 %	41 - 57 %
#30	600 micro	15 %	10 - 20 %
#200	75 micro	04 %	02 - 06 %

Maximum Dry Density 149.9 P.C.F. @ 4.3 % Moisture

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
 Suite 400
 Greenbelt, Maryland 20770

Tel: 301 - 982 - 1400
 Fax: 301 - 513 - 0014

An AGGREGATE INDUSTRIES PLC Company

www.aggregate-us.com

Crushed Stone - Sand & Gravel - Ready-Mixed Concrete - Asphalt

12 11 02

THE SHAW GP.

JOEY GUEZARDO

Phone #

Fax # 743 9139

Job Location : INDIAN HEAD

Terms : \$ Not 30 days (pending credit survey)

Bidding :

Product Description

F.O.B.
(\$/ton)

Haul
(\$/ton)

Total
(\$/ton)

(Shipping Plant Name/Location)
LAPLATA SAND AND GRAVEL 301 870 3711

RC6
CR6

\$4.50
\$8.50

\$4.00
\$4.00

\$8.50
\$12.50

Notes : i) Above pricing applicable out of plant(s) denoted. Orders placed at other aggregate plants may result in higher pricing being invoiced.

ii) Minimum of 24 hours of advance notice required for delivery of double-washed products.

Additional Comments :

Pricing good through

Prices do not include applicable taxes.
Above prices based upon 20 ton/trk.
GCE

Quotation Considered Binding for 30 Days.

Quoted By : Tom Miller
Mgr. : LaPlata Plant

Thank You !

Phone # 301-870-3711
Fax # 301-870-2754

Terms, conditions and any additional charges to be sent upon acceptance.

AGGREGATE PHYSICAL

MATERIAL	TEST METHOD				
	SPECIFICATION	T 90	T 104	T 112	T 113
		PI	SODIUM SULFATE SOUNDNESS	CLAY LUMPS and FRIABLE PARTICLES	CHERT; LESS THAN 2.00 Sp Gr
	MAX	% MAX	% MAX	% MAX	
GRADED AGGREGATE—SUBBASE	D 2940	6	12	—	—
BANK RUN GRAVEL—SUBBASE	D 2940	9	12	—	—
GRADED AGGREGATE—BASE	D 2940	6	12	—	—
BANK RUN GRAVEL—BASE	D 2940	9	12	—	—
COARSE AGGREGATE—PORTLAND CEMENT CONCRETE (b)	M 80 CLASS A	—	12	2.0	3.0
FINE AGGREGATE—PORTLAND CEMENT CONCRETE (b)(c)	M 6 CLASS B	—	10	3.0	—
COARSE AGGREGATE—LIGHTWEIGHT PORTLAND CEMENT CONCRETE	M 195	—	—	2.0	—
FINE AGGREGATE—LIGHTWEIGHT PORTLAND CEMENT CONCRETE (f)	M 195	—	—	2.0	—
FINE AGGREGATE/SAND MORTAR & EPOXIES	M 45	—	10	1.0	—
MINERAL FILLER (g)	M 17	NP	—	—	—
CRUSHED GLASS	M 80	—	12	—	—

- (a) Dimensional ratio of calipers shall be 3:1.
- (b) Coarse and fine aggregates for PCC shall be tested for nitric-sulfur reactivity (ASR) as specified in MSMT 212.
- (c) 1.5 if material passing No. 200 sieve is dust or fines, free of clay or shale.
- (d) In areas exposed to traffic manufactured sand, natural sand, or a blend of both shall be used. The sand shall have a minimum ultimate polish value of 8.5.
- (e) 5.0 for concrete not subject to surface abrasion.
- (f) Fine aggregate conforming to M 6 may be used if the lightweight concrete does not exceed the maximum unit weight specified in the Contract Documents.
- (g) Fly ash shall have a maximum of 12 percent loss on ignition.

PROPERTY REQUIREMENTS

TEST METHOD					
T 112 & T 113	T 11	T 113	D 4791 (a)	T 96	T 21
SUM OF CLAY LUMPS, FRIABLE PARTICLES and CHERT	MATERIAL FINER THAN No. 200 SIEVE	COAL and LIGNITE	FLAT and ELONGATED	LOS ANGELES ABRASION	ORGANIC IMPURITIES
% MAX	% MAX	% MAX	% MAX	% MAX	MAX
—	—	—	15	30	—
—	—	—	—	30	—
—	—	—	15	30	—
—	—	—	—	30	—
3.0	1.0 (c)	0.5	12	30	—
—	4.0 (d)	1.0	—	—	3
—	—	—	12	—	—
—	—	—	—	—	3
—	—	0.5	—	—	3
—	—	—	—	—	—
—	—	—	—	45	—

TABLE

901 A

TABLE

AGGREGATE GRADING REQUIREMENTS

MATERIAL	SIEVE SIZE						
	2-1/2"	2"	1-1/2"	1"	3/4"	1/2"	
GRADED AGGREGATE— SUBBASE DESIGN RANGE (a)	—	100	90-100	—	60-85	—	
TOLERANCE (b)	—	-3	±5	—	±10	—	
BANK RUN GRAVEL— SUBBASE	100	—	—	90-100	—	60-100	
GRADED AGGREGATE— BASE DESIGN RANGE (a)	—	100	95-100	—	70-92	—	
TOLERANCE (b)	—	-2	±5	—	±8	—	
BANK RUN GRAVEL—BASE	100	—	—	85-100	—	60-100	
COARSE AGGREGATE— PORTLAND CEMENT CONCRETE	57 and UNDERDRAIN	—	—	100	95-100	—	25-60
	67	—	—	—	100	90-100	—
	7	—	—	—	—	100	90-100
FINE AGGREGATE— PORTLAND CEMENT CONCRETE and UNDERDRAIN (d)	—	—	—	—	—	—	
COARSE AGGREGATE— LIGHTWEIGHT PORTLAND CEMENT CONCRETE	—	—	—	100	90-100	—	
FINE AGGREGATE— LIGHTWEIGHT PORTLAND CEMENT CONCRETE (d)	—	—	—	—	—	—	
FINE AGGREGATE/SAND MORTAR and EPOXIES (d)	—	—	—	—	—	—	
MINERAL FILLER	—	—	—	—	—	—	
CRUSHED GLASS (e)	—	—	—	—	100	—	

- (a) To establish target values for design.
- (b) Production tolerance.
- (c) ±2 for field grading. (omitting T 11)
- (d) Fine aggregate includes natural or manufactured sand.
- (e) Crushed glass shall not contain more than one percent contaminants by weight.

901 A

TEST METHOD T 27

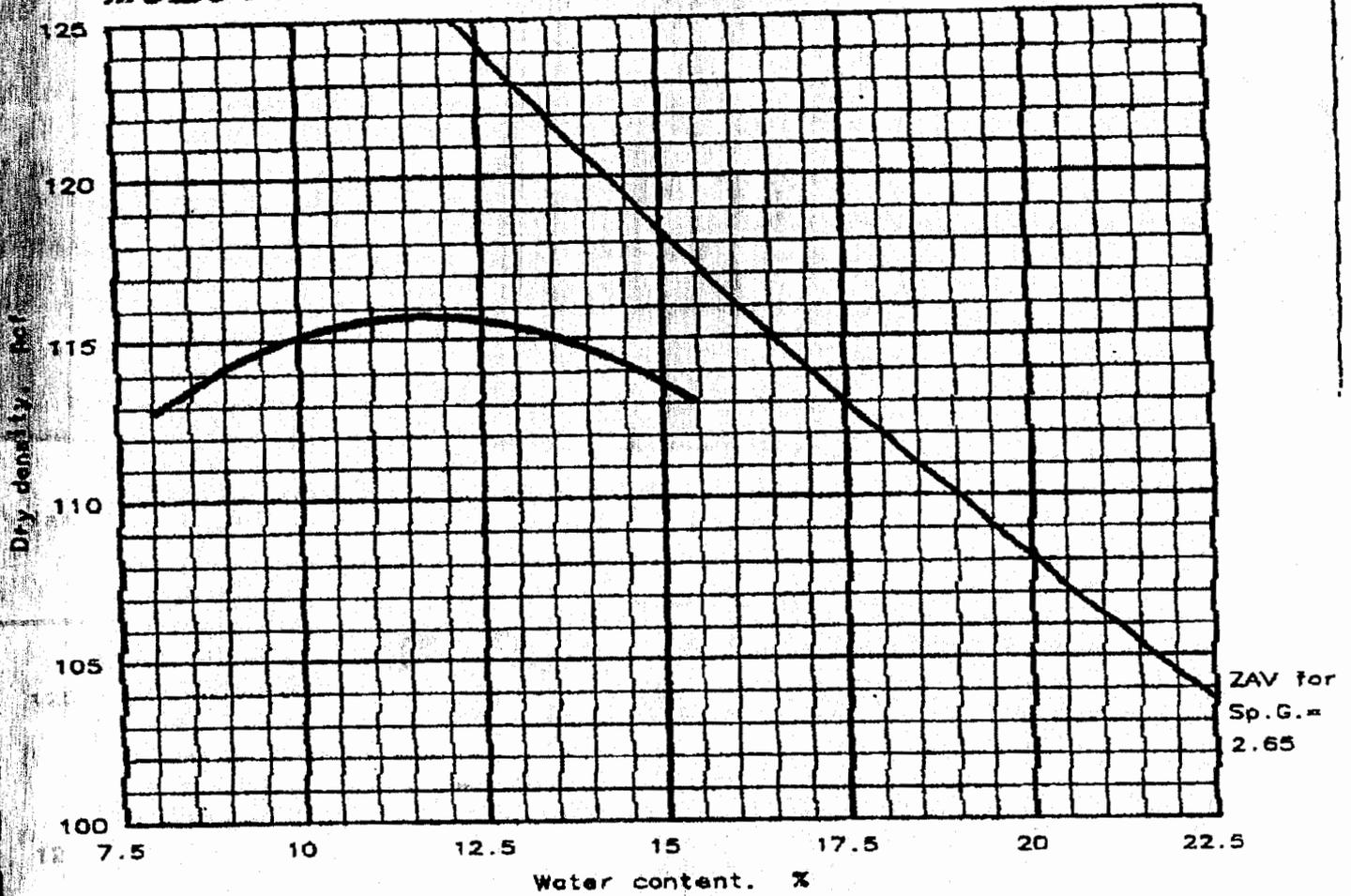
	SIEVE SIZE									
	3/8"	No. 4	No. 8	No. 10	No. 16	No. 30	No. 40	No. 50	No. 100	No. 200
40-70	30-60	—	—	—	—	—	10-25	—	—	0-12
6 10	6 10	—	—	—	—	—	6 5	—	—	6 5
—	—	—	35-90	—	—	—	20-55	—	—	5-25
50-70	35-55	—	—	—	—	12-25	—	—	—	0-8
6 8	6 8	—	—	—	—	6 5	—	—	—	6 3 (c)
—	—	—	35-75	—	—	—	20-50	—	—	3-20
—	0-10	0-5	—	—	—	—	—	—	—	—
20-55	0-10	0-5	—	—	—	—	—	—	—	—
40-70	0-15	0-5	—	—	—	—	—	—	—	—
100	95-100	—	—	—	45-80	—	—	10-30	2-10	—
10-30	0-15	—	—	—	—	—	—	—	—	—
100	85-100	—	—	—	40-80	—	—	10-35	5-25	—
—	100	95-100	—	—	—	—	—	—	0-25	0-10
—	—	—	—	—	—	100	—	95-100	—	70-100
—	0-55	—	—	—	—	—	—	—	—	—

12/11/2002 16:19 FAX 412 380 0899

SHAW E&I MONROEVILLE

2002

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: ASTM D 1557-78 Method C, Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
			8.3 %					

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 115.8 pcf Optimum moisture = 11.7 %	RC-6
Project No.: 02-155 Project: Aggregate Industries Location: Bladensburg Plant Date: 8-01-2002	Remarks:
MOISTURE-DENSITY RELATIONSHIP TEST EARTH ENGINEERING & SCIENCES, INC.	Fig. No. _____

Modified Proctor of RC-6

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02951-01
Specification Section No. (Only 1 section with each transmittal) 02951	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-07	1.3	Nursery Certificate and List of Plants	1	Certificate	E	A

<u>SUBMITTAL CODES</u> D - Forwarded to ROICC FOR ACTION E - Forwarded to ROICC for Record Purposes	<u>APPROVAL CODES</u> A - Approved as Submitted AN - Approved as Noted	RR - Disapproved, Revise and Resubmit NR - Not Reviewed
---	--	--

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature: Ernie Duke Date: April 2, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
--	--	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature: NA Date: _____

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
---	---	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority: NA

**TRA-AGRI, INC.
13021 Beaver Dam Road
Hunt Valley, Maryland 21030**

31 March 2003

Mr. Thomas Sitzler
Shaw E & I, Inc.

Re: Town Gut Wetland Planting

Dear Mr. Sitzler:

This letter is to certify that Tra-Agri, Inc. will furnish all agreed to wetland plants as per specifications. These plants will be supplied to meet or exceed Nurseryman Planting Specifications.

In addition, Tra-Agri, Inc. will guarantee the planting for one (1) year from date of installation. This one-year warrantee can only be enforced upon proper installation of the plants.

If you have any further questions or concerns, please feel free to contact me at your convenience. Thank you for your time and consideration of this matter.

Best regards,

M. Tracy Turley
President

*Signed copy to follow to be incorporated
in FINAL REPORT.*

**Tra-Agri, Inc.
13021 Beaver Dam Road
Hunt Valley, MD. 21030**

2 April 2003

Shaw E & I, Inc.
Dan Pringle

Re: Town Gut Wetland Plant List

The following list is the plants that will be furnished at the Town Gut Site:

Pontederia cordata	Pickereel Rush	935 plants
Polygonum penn.	Smartweed	935 plants
Saururus cernuus	Lizard's Tail	935 plants
Scirpus pungens	Three Square Bulrush	935 plants
Scirpus validus	Soft Stem Bulrush	935 plants

If you have any questions, please feel free to contact me. Thank you for your time and consideration of this matter.

Best regards,

M. Tracy Turley
President

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02223-02
Specification Section No. (Only 1 section with each transmittal) 02223	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.2.2.1 and 1.2.2.2	Hazardous Waste Manifest and Certificate of Receipt for the Disposal of Hazardous Drums (5 Drums)	1	Documentation	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	January 22, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned .
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature		Date
NA		

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management
P.O. Box 8550

Form approved.
OMB No. 2050-0039

2500-FM-LRWM0051 REV. 7/99

Harrisburg, PA 17105-8550

OFFICIAL PENNSYLVANIA MANIFEST FORM

In case of an emergency or spill immediately call the National Response Center (800) 424-8802 and the PA DEP (717) 787-4343

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MD4170024109		Manifest Document No. 57645		2. Page 1 of 1		Information within the bold red border is not required by Federal law but may be required by State law.	
		3. Generator's Name and Mailing Address INDIAN HEAD NAVAL SURFACE WAREFARE 101 STRAUSS AVENUE INDIAN HEAD MD 20640		6. US EPA ID Number MD0000027193		A. State Manifest Document Number PAG 457645		B. State Gen. ID SAME	
4. Generator's Phone 301-744-2283		5. Transporter 1 Company Name CLEAN VENTURE INC		8. US EPA ID Number		C. State Trans. ID PA-AH 0299		D. Transporter's Phone 908-355-5800	
7. Transporter 2 Company Name		9. Designated Facility Name and Site Address CYCLE CHEM INC. 550 INDUSTRIAL DRIVE LANSING PA 17230		10. US EPA ID Number PAD067099822		E. State Trans. ID PA-AH		F. Transporter's Phone	
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM		12. Containers		13. Total Quantity		14. Unit Wt/Vol		15. Waste No.	
a. X RC, WASTE FLAMMABLE SOLIDS, ORGANIC NO6 (CHROMIUM, XYLENE) 4.1		No. 5		Type DM		Quantity 1000		Unit Wt/Vol P	
b.		c.		d.		e.		f.	
J. Additional Descriptions for Materials Listed Above		Note: 1, E, 1 25, 0%		Note:		a. S01		c.	
15. Special Handling Instructions and Additional Information		MD PERMITS 006465-CHS11941		Emergency Response # 908-355-5800		b.		d.	
<p>16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.</p>									
Printed/Typed Name Nebble Lynn Bolin				Signature <i>Nebble Lynn Bolin</i>				MONTH DAY YEAR 12 13 02	
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ATILIO REYES				Signature <i>Atilio Reyes</i>				MONTH DAY YEAR 12 13 02	
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name				Signature				MONTH DAY YEAR	
19. Discrepancy Indication Space									
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19. Printed/Typed Name Annie E. Hied				Signature <i>Annie E. Hied</i>				MONTH DAY YEAR 12 13 02	

December 2, 2002

Mr. Shawn Jorgensen
Indian Head Naval Surface Warefare center
101 Strauss Avenue
Indian Head, MD 20640

Pickup Site:
Indian Head Naval Surface Warefare
101 Strauss Avenue
Indian Head, MD

RE: Notification of Facility Ability and Willingness to Accept Generator's Waste:

Gencode:

CAP027 - A - SSM

Waste Stream Name:

Drum Carcasses cont w/paint

Waste Codes:

D001 D007

Dear Mr. Jorgensen :

As directed by 40 CFR 264.12(b) and Cycle Chem, Inc.'s hazardous waste facility permit, Cycle Chem, Inc. hereby informs you the above referenced waste stream has been granted Pre-Acceptance Approval.

Cycle Chem, Inc. is permitted, is capable, has capacity and is willing to accept your waste via Capitol Environmental Services, provided it conforms to the Material Profile Sheet upon which the Pre-Acceptance Approval was granted.

This document is important. Please file it for safekeeping. A copy is also held at the Cycle Chem, Inc. facility.

Please direct any questions to Capitol Environmental Services at 703-356-3135.

Sincerely,

Todd Meyer
Account Manager

cc: Capitol Environmental Services





PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management

P.O. Box 8550
Harrisburg, PA 17105-8550

Form approved
OMB No. 2050-0039

2500-FM-LRWM0051 REV 7 99

OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MD4170024109	Manifest Document No. 57645	2. Page 1 of 1	Information within the bold red border is not required by Federal law but may be required by State law.		
3. Generator's Name and Mailing Address Attn: INDIAN HEAD NAVAL SURFACE WAREHOUSE 101 STRAUSS AVENUE INDIAN HEAD MD 20640		4. Generator's Phone () 301-714-3269		A. State Manifest Document Number PAG 457645		B. State Gen. ID SAME	
5. Transporter 1 Company Name CLEAN VENTURE INC		6. US EPA ID Number M0000027193		C. State Trans. ID PA-AH 0299		D. Transporter's Phone () 908-355-5800	
7. Transporter 2 Company Name		3. US EPA ID Number		E. State Trans. ID PA-AH		F. Transporter's Phone ()	
9. Designated Facility Name and Site Address CYCLE CHEM INC 650 INDUSTRIAL DRIVE LEWISBURG PA 17033		10. US EPA ID Number PA0067088822		G. State Facility's ID		H. Facility's Phone () 717-938-4700	
11. US DOT Description (including Proper Shipping Name, Hazard Class, and ID Number) HM a. X FLAMMABLE SOLIDS ORGANIC NON-PETROLEUM LIQUID UN3029 b. c. d.		12. Containers No. Type	13. Total Quantity	14. Unit Wt Vol	1. Waste No.		
		5 DM	1000	F	3001 3001		
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above					
G		a. S11 c. b. d.					
15. Special Handling Instructions and Additional Information 11a CAP027-4-38H NO REFILLS 306465-CHS11941 11b 11c 11d		Emergency Response # 908-355-5800					
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.							
Printed/Typed Name Melba Lynn Bolin		Signature Melba Lynn Bolin		MONTH DAY YEAR 12 13 02			
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ATILIO REYES		Signature Atilio Reyes		MONTH DAY YEAR 12 13 02			
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH DAY YEAR			
19. Discrepancy Indication Space							
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.							
Printed/Typed Name		Signature		MONTH DAY YEAR			

GENERATOR

TRANSPORTER

FACILITY

PAG 457645

CC Cycle Chem, Inc.
Voice (908) 355-5800
Fax (908) 355-0562
www.cyclechem.com

ELIZABETH LEWISBERRY
217 South 1st St. 550 Industrial Dr.
Elizabeth, NJ Lewisberry, PA
07206 17339
(717)938-4700, (717)938-3301

Material Profile Sheet
Product Code: SSM
Generator No: CA027-A-

A. GENERATOR INFORMATION

GENERATOR USEPA ID MD4170024109

GENERATOR NAME IHDIV NAV SURF WAR CEN
MAILING ADDRESS Code 044SJ, 101 Strauss Avenue
Indian Head, MD 20640
GENERATOR CONTACT Shawn Jorgensen
GENERATOR PHONE # 301-744-2263
SITE ADDRESS same
NAME OF WASTE Drum carcasses contaminated with
Paint residue

BILLING ADDRESS Capitol Environmental Services, Inc.
8229 Boone Blvd., Suite 310, Vienna, VA 22182
CONTACT Mike Schubert
PHONE# 302-652-8999 FAX # 302-652-5330
PROCESS GENERATING WASTE Rusted drum carcasses containing
paint residues excavated from remedial site, tested, and
placed in overpacks

B. PHYSICAL CHARACTERISTICS OF WASTE

Color, Physical Description: orange/white/varies/metal
STRONG INCIDENTIAL ODOR PRESENT
WASTEWATER
SPECIFIC GRAVITY: 1.0
FLASH POINT
LIQUID/SOLID/SLUDGE
PH

D. REGULATORY INFORMATION

USEPA HAZARDOUS WASTE? YES NO
USEPA CODE(S): D001, D007
APPLICABLE SUBCATEGORIES:
STATE HAZARDOUS WASTE? YES NO
STATE CODE(S): D001, D007
D.O.T. HAZARDOUS WASTE? YES NO
PROPER SHIPPING NAME: RO, Waste Flammable Solids, Organic, n.o.s.
CLASS: 4.1 I.D. NO: UN1325 P.G.: II R. Q.: 100 lbs

C. CHEMICAL COMPOSITION Is MSDS Attached? Yes No
Is Analysis Attached? Yes No

Table with 3 columns: Component, Range Minimum, Range Maximum. Rows include Debris (Drum carcasses) and Paint residue.

E. SHIPPING INFORMATION/SHIPMENT METHOD:

BULK LIQUID BULK SOLID DUMP TRAILER ROLL-OFF
DRUM SIZE 5510P UNITS: drums
PRICE: \$270/55 + 50
FREQUENCY: one time

F. SPECIAL HANDLING CONSIDERATIONS

CERCLA FACILITIES XXX INCINERATE ONLY
NO LANDFILL CCI SALES CODE Ryan
PROJECT CODE
OTHER

G. TRANSPORTATION ARRANGEMENTS

CUSTOMER WILL DELIVER TO CCI CUSTOMER WILL DELIVER TO END FACILITY VIA CCI CCI TO PROVIDE TRANSPORTATION

H. OTHER HAZARDOUS CHARACTERISTICS

INDICATE IF THE WASTE IS: RCRA REACTIVE, WATER REACTIVE, RADI ACTIVE, SUBJECT TO SUBPART FF, HENRIE REGULATIONS, LITHOLOGICAL, ISCA REGULATED, OXIDIZING MATERIAL, PYROPHORIC, EXPL/SIVE/SHOCK SENSITIVE, NONE OF THE ABOVE
Indicate if This Waste Contains Any Of The Following: PCB's, Granules, Phenolics, Sulfides, VOC's

Is this waste characteristically hazardous for metals or organics (EPA Waste Codes D004-D043)? Yes No. If yes, please list the constituents and concentrations in Section D.
Does this waste contain underlying hazardous constituents as defined in 40 CFR 261.22(1) at concentrations exceeding the UTS treatment standards? Yes No. If yes, please list constituents and concentrations in Section D.

GENERATOR CERTIFICATION: I hereby certify that all information submitted in this and all attached documents is complete, contains true and accurate descriptions and is representative of the waste material...
AUTHORIZED SIGNATURE: [Signature] TITLE: Warehouse Worker DATE: 12-13-02



Recycling Treatment & Disposal of Hazardous Waste

550 Industrial Drive, Lewisberry, PA 17339-9537 • 717-938-4700, Fax 717-938-3301

LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM

Generator Name: Indian Head Naval Surface Warehouse

Generator EPA ID #: MD 417 0024109

Manifest #: PA 6457645

This land disposal restriction (LDR) notification must be submitted with the initial shipment of all new waste streams. Due to revised LDR notification requirements effective after August 23, 1998, previously approved waste streams will require re-notification on this form with the first shipment after that date. Subsequent notification is not required unless the waste stream changes.

(1) WASTE STREAM INFORMATION

Box A: Check this box if this LDR certification has been supplied with a previous shipment. Additional information and certification is not required on this form.

Box B: Indicate if waste stream is a wastewater (WW) or non-wastewater (NWW) (aqueous waste streams containing < 1% total organic carbon (TOC) and < 1% total suspended solids (TSS) are wastewaters. All other streams are non-wastewaters).

Box C: List all EPA waste codes and subcategory reference letters (if applicable). Alternatively, attach and reference additional pages (e.g. profiles or lab pack slips) containing required information.

Line #	A Previously shipped LDR on file	B NWW/WW	C EPA Waste Codes and subcategory reference letter (if applicable)
A			D001, B, D007
B			
C			
D			

Subcategory Reference Letters (EPA codes not listed here do not have subcategories)

D001	A	Ignitable characteristic wastes, except high TOC ignitable liquids subcategory
D001	B	High TOC (> 10%) ignitable liquid subcategory
D003	A	Reactive sulfide subcategory
D003	B	Reactive cyanide subcategory
D003	C	Water reactive subcategory
D003	D	Other reactive subcategory
D006	A	Cadmium non-battery subcategory
D006	B	Cadmium containing batteries subcategory
D008	A	Lead non-battery subcategory
D008	B	Lead acid batteries subcategory
D009	A	High mercury organic subcategory (>260 PPM Total Mercury)
D009	B	High mercury inorganic subcategory (> 260 PPM Total Mercury)
D009	C	Low mercury subcategory (< 260 PPM Total Mercury)
D009	D	Mercury wastewater subcategory

(2) SPENT SOLVENT WASTE CONSTITUENTS

Circle applicable waste code(s) and constituent(s) for each manifest line item containing EPA spent solvent waste codes F001-F005.

Table with 5 columns: F001, F002, F003, F004, F005. Each column lists chemical constituents with 'A B C D' checkboxes for selection.

(3) UNDERLYING HAZARDOUS CONSTITUENTS

For characteristically hazardous waste streams (EPA codes D001-D043), please list all underlying hazardous constituents as defined in 40 CFR 268(2)(i) that are present at concentrations exceeding the universal treatment standards listed in 40 CFR 268.48 (F001-F005 constituents identified in section (2) and specific constituents for EPA U-, P-, and D004-D043 codes listed in Section (1) do not need to be listed in this section).

- A. _____ None Present
B. _____ None Present
C. _____ None Present
D. _____ None Present

(4) HOW MUST THESE WASTE STREAMS BE MANAGED?

For each manifest line item, circle applicable treatment/requirement. For contaminated soil, circle applicable choice as indicated.

- A B C D _____ This waste is non-hazardous per 40 CFR 261, and is not restricted from land disposal under 40 CFR 268 subpart D.
A B C D _____ This is an EPA hazardous waste that is not a contaminated soil or hazardous debris. Waste must be treated to the appropriate treatment standard set forth in 40 CFR subpart D prior to land disposal.
A B C D _____ This is a hazardous debris and is subject to the alternative treatment standards of 40 CFR 268.45.
A B C D _____ This is a hazardous waste contaminated soil. This contaminated soil does/does not (circle one) contain listed hazardous wastes and does/does not (circle one) exhibit a characteristic of hazardous waste and is subject to/complies with (circle one) the soil treatment standards as provided by 268.49(c) or the universal treatment standards.
A B C D _____ This is an EPA hazardous waste that meets all applicable treatment standards set forth in 40 CFR 268 subpart D, and can be landfilled without further treatment. I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing or thorough knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(5) CERTIFICATION

I certify that all information on this and all associated documents is complete and accurate to the best of my knowledge.

Signature: [Handwritten Signature]
Printed Name: Debbie Lynn Bolin

Title: Warehouse Worker
Date: 12-13-02



PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION
Bureau of Land Recycling and Waste Management

P.O. Box 8550
Harrisburg, PA 17105-8550

Form approved.
OMB No. 2050-0039

2500-FM-LRWM0051 REV. 7-99

OFFICIAL PENNSYLVANIA MANIFEST FORM

UNIFORM HAZARDOUS WASTE MANIFEST		1. Generator's US EPA ID No. MD4170024109	Manifest Document No. 57645	2. Page 1 of 1	Information within the bold red border is not required by Federal law but may be required by State law.	
3. Generator's Name and Mailing Address ATTN: INDIAN HEAD NAVAL SURFACE WAREHOUSE 101 STPAULUS AVENUE INDIAN HEAD MD 20640		6. US EPA ID Number MD00002793		A. State Manifest Document Number PAG 457645		
4. Generator's Phone () 301-744-3263		7. Transporter 1 Company Name CLEAN VENTURE INC		B. State Gen. ID SAME		
5. Transporter 1 Company Name		6. US EPA ID Number		C. State Trans. ID PA-AH 0299		
7. Transporter 2 Company Name		8. US EPA ID Number		D. Transporter's Phone () 908-355-5800		
9. Designated Facility Name and Site Address CYCLE CHEM INC 550 INDUSTRIAL DRIVE INDIAN HEAD MD 20640		10. US EPA ID Number PA0087098822		E. State Trans. ID PA-AH		
				F. Transporter's Phone ()		
				G. State Facility's ID		
				H. Facility's Phone () 717-939-4700		
11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM a. X FLUORINE FLUORIDE SOLID (ORGANIC) (NON-FLAMMABLE) (TOXIC) (CORROSIVE) UN2819 b. c. d.		12. Containers No. Type 5 DM	13. Total Quantity 1000	14. Unit (Wt/Vol) P	15. Waste No. 3001-3002	
J. Additional Descriptions for Materials Listed Above		K. Handling Codes for Wastes Listed Above				
a. b. c. d.		a. b. c. d.				
15. Special Handling Instructions and Additional Information 11a. CAP027-4-88M NO PERMITS 006465-CHS11941 11b. 11c. 11d. Emergency Response # 308-355-5800						
16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international and national government regulations. If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.						
Printed/Typed Name x <i>Michelle Lynn Bolin</i>		Signature x <i>Michelle Lynn Bolin</i>		MONTH DAY YEAR 12 13 02		
17. Transporter 1 Acknowledgement of Receipt of Materials Printed/Typed Name ATILIO REYES		Signature <i>Atilio Reyes</i>		MONTH DAY YEAR 12 13 02		
18. Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name		Signature		MONTH DAY YEAR		
19. Discrepancy Indication Space						
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.						
Printed/Typed Name		Signature		MONTH DAY YEAR		

GENERATOR

TRANSPORTER

FACILITY

PAG 457645

CC Cycle Chem, Inc.
 Voica (908) 355-5800
 Fax (908) 355-0562
 www.cyclechem.com

ELIZABETH LEWISBERRY
 217 South 1ST St. 550 Industrial Dr.
 Ellzabeth, NJ Lewisberry, PA
 07206 17339
 (717)938-4700, (717)938-3303

Material Profile Sheet
 Product Code: SSM
 Generator No: CA027-A-

A. GENERATOR INFORMATION

GENERATOR USEPA ID MD4170024109

GENERATOR NAME IHDIV NAV SURF WAR CEN
 MAILING ADDRESS Code 044SJ, 101 Strauss Avenue
Indian Head, MD 20640
 GENERATOR CONTACT Shawn Jorgensen
 GENERATOR PHONE # 301-744-2263
 SITE ADDRESS same
 NAME OF WASTE Drum carcasses contaminated with
Paint residue

BILLING ADDRESS Capitol Environmental Services, Inc.
8229 Boone Blvd., Suite 310, Vienna, VA 22182
 CONTACT Mike Schubert
 PHONE # 302-652-8999 FAX # 302-652-5330
 PROCESS GENERATING WASTE Rusted drum carcasses containing
paint residues excavated from remedial site, tested, and
placed in overpacks

B. PHYSICAL CHARACTERISTICS OF WASTE
 Color, Physical Description: orange/white/varies/metal

STRONG INCIDENTIAL ODOR PRESENT
 YES NO Paints

PHYSICAL STATE @ 70°F
 SOLID SINGLE PHASE
 LIQUID RE-LAYERED
 POWDER MULTI-LAYERED
 SEMI SOLID SLUDGE

WAS WASTEWATER SPECIFIC GRAVITY: 2.10
 NON-WASTEWATER

FLASH POINT
 < 70°F
 70°F - 100°F
 100°F - 140°F
 140°F - 200°F
 > 200°F
 NO FLASH
 EXACT No (if solid) No (if liquid)
 Closed Cup Open Cup

LIQUID/SOLID/SLUDGE
 % Sludge 0
 % Suspended Solids 0
 % Solids/Debris 100
 % Free Liquids 0

pH
 < 2.0
 2.01-5
 5.01-9
 9.01-12.4
 > 12.50
 EXACT

Drumable? Yes No
 Pumpable? Yes No
 Pourable? Yes No

C. CHEMICAL COMPOSITION Is MSDS Attached? Yes No
 Is Analysis Attached? Yes No

	RANGE MINIMUM	RANGE MAXIMUM
Debris (Drum carcasses)	95	99%
Paint residue	1	5%

D. REGULATORY INFORMATION

USEPA HAZARDOUS WASTE? YES NO

USEPA CODE(S): D001, D097

APPLICABLE SUBCATEGORIES: _____

STATE HAZARDOUS WASTE? YES NO

STATE CODE(S): D001, D007

D.O.T. HAZARDOUS WASTE? YES NO

PROPER SHIPPING NAME: BO, Waste Flammable Solids, Organic, n.o.s.
 (Paint residue)

CLASS: 4.1 I.D. NO: UN1325 P.G.: II R. Q.: 100 lbs

E. SHIPPING INFORMATION/SHIPMENT METHOD:

BULK LIQUID ANTICIPATED VOLUME: 4-6
 BULK SOLID
 DUMP TRAILER QUANTITY: drums
 ROLL-OFF
 DRUM SIZE 55/10P UNITS: drums
 PALLETS PRICE: \$270/ST + 50¢
 CUBIC YARD BOX FREQUENCY: one time

F. SPECIAL HANDLING CONSIDERATIONS

CERCLA FACILITIES XXX INCINERATE ONLY _____
 NO LANDFILL _____ CCI SALES CODE Ryan
 PROJECT CODE _____
 OTHER _____

G. TRANSPORTATION ARRANGEMENTS
 CUSTOMER WILL DELIVER TO CCI CUSTOMER WILL DELIVER TO END FACILITY VIA CCI CCI TO PROVIDE TRANSPORTATION

H. OTHER HAZARDOUS CHARACTERISTICS

INDICATE IF THE WASTE IS:
 RCRA REACTIVE
 WATER REACTIVE
 RADIOACTIVE
 SUBJECT TO SUBPART FF
 BENZENE REGULATIONS
 LITHOLOGICAL
 TSCA REGULATED
 CRUDDING MATERIAL
 HYDROPHOBIC
 EYE/ SKIN/SHOCK SENSITIVE
 NONE OF THE ABOVE

Indicate If This Waste Contains Any Of The Following:

	None	or Less Than	or Actual
PCB's	<input checked="" type="checkbox"/>	< 50PPM	PPM
Grainees	<input checked="" type="checkbox"/>	< 250PPM	PPM
Phenolics	<input checked="" type="checkbox"/>	< 50 PPM	PPM
Sulfides	<input checked="" type="checkbox"/>	< 500 PPM	PPM
VOC's	<input type="checkbox"/>	< 500 PPM	> 500 PPM

Is this waste characteristically hazardous for metals or organics (EPA Waste Codes D004-D043)? Yes No. If yes, please list the constituents and concentrations in Section D.

Does this waste contain underlying hazardous constituents as defined in 40 CFR 261.22(f) at concentrations exceeding the UTS treatment standards? Yes No. If yes, please list constituents and concentrations in Section D.

GENERATOR CERTIFICATION: I hereby certify that all information submitted in this and all attached documents is complete, contains true and accurate descriptions, and is representative of the waste material, and that all relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. If CCI discovers, after having taken delivery of the waste, that any waste does not conform to the identification and description on this MPS then CCI shall provide notice of such condition to the Generator and coordinate the return of the nonconforming waste to the point of origin as set forth on the manifest or to such other locations designated in writing by the Generator. Generator agrees to reimburse CCI for all handling, packaging, clean-up and transportation costs or charges, damage to equipment, and costs associated with lost time incurred by CCI during the receipt, handling, temporary storage and return of such nonconforming waste to point of origin or to such other location designated by Generator. I hereby authorize CCI to amend and/or correct any information on the MPS with the full understanding that if any amendment or correction is performed, I will be deemed to have authorized such to issue my approval.

AUTHORIZED SIGNATURE: [Signature] TITLE: Warehouse Worker DATE: 12-13-02



Recycling Treatment & Disposal of Hazardous Waste

550 Industrial Drive, Lewisberry, PA 17339-9537 • 717-938-4700, Fax 717-938-3301

LAND DISPOSAL RESTRICTION NOTIFICATION AND CERTIFICATION FORM

Generator Name: Indian Head Naval Surface Warfare
 Generator EPA ID #: MD 417 0024109
 Manifest #: PA 6457045

This land disposal restriction (LDR) notification must be submitted with the initial shipment of all new waste streams. Due to revised LDR notification requirements effective after August 23, 1998, previously approved waste streams will require re-notification on this form with the first shipment after that date. Subsequent notification is not required unless the waste stream changes.

(1) WASTE STREAM INFORMATION

Box A: Check this box if this LDR certification has been supplied with a previous shipment. Additional information and certification is not required on this form.

Box B: Indicate if waste stream is a wastewater (WW) or non-wastewater (NWW) (aqueous waste streams containing < 1% total organic carbon (TOC) and < 1% total suspended solids (TSS) are wastewaters. All other streams are non-wastewaters).

Box C: List all EPA waste codes and subcategory reference letters (if applicable). Alternatively, attach and reference additional pages (e.g. profiles or lab pack slips) containing required information.

Line #	A Previously shipped LDR on file	B NWW/WW	C EPA Waste Codes and subcategory reference letter (if applicable)
A			D001.B D007
B			
C			
D			

Subcategory Reference Letters (EPA codes not listed here do not have subcategories)

D001	A	Ignitable characteristic wastes, except high TOC ignitable liquids subcategory
D001	B	High TOC (> 10%) ignitable liquid subcategory
D003	A	Reactive sulfide subcategory
D003	B	Reactive cyanide subcategory
D003	C	Water reactive subcategory
D003	D	Other reactive subcategory
D006	A	Cadmium non-battery subcategory
D006	B	Cadmium containing batteries subcategory
D008	A	Lead non-battery subcategory
D008	B	Lead acid batteries subcategory
D009	A	High mercury organic subcategory (>260 PPM Total Mercury)
D009	B	High mercury inorganic subcategory (> 260 PPM Total Mercury)
D009	C	Low mercury subcategory (< 260 PPM Total Mercury)
D009	D	Mercury wastewater subcategory

(2) SPENT SOLVENT WASTE CONSTITUENTS

Circle applicable waste code(s) and constituent(s) for each manifest line item containing EPA spent solvent waste codes F001-F005.

Table with 5 columns for waste codes F001-F005 and rows for various chemical constituents like acetone, benzene, alcohols, disulfide, tetrachloride, chlorobenzene, cresols, acids, cyclohexanone, dichlorobenzene, acetate, and ethyl benzene.

(3) UNDERLYING HAZARDOUS CONSTITUENTS

For characteristically hazardous waste streams (EPA codes D001-D043), please list all underlying hazardous constituents as defined in 40 CFR 268(2)(i) that are present at concentrations exceeding the universal treatment standards listed in 40 CFR 268.48 (F001-F005 constituents identified in section (2) and specific constituents for EPA U-, P-, and D004-D043 codes listed in Section (1) do not need to be listed in this section).

A. _____ None Present
B. _____ None Present
C. _____ None Present
D. _____ None Present

(4) HOW MUST THESE WASTE STREAMS BE MANAGED?

For each manifest line item, circle applicable treatment/requirement. For contaminated soil, circle applicable choice as indicated.

- A B C D _____ This waste is non-hazardous per 40 CFR 261, and is not restricted from land disposal under 40 CFR 268 subpart D.
A B C D _____ This is an EPA hazardous waste that is not a contaminated soil or hazardous debris. Waste must be treated to the appropriate treatment standard set forth in 40 CFR subpart D prior to land disposal.
A B C D _____ This is a hazardous debris and is subject to the alternative treatment standards of 40 CFR 268.45.
A B C D _____ This is a hazardous waste contaminated soil. This contaminated soil does/does not (circle one) contain listed hazardous wastes and does/does not (circle one) exhibit a characteristic of hazardous waste and is subject to/complies with (circle one) the soil treatment standards as provided by 268.49(c) or the universal treatment standards.
A B C D _____ This is an EPA hazardous waste that meets all applicable treatment standards set forth in 40 CFR 268 subpart D, and can be landfilled without further treatment. I certify under penalty of law that I have personally examined and am familiar with the waste through analysis and testing or thorough knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D and all applicable prohibitions set forth in 40 CFR 268.32 or RCRA Section 3004(d). I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

(5) CERTIFICATION

I certify that all information on this and all associated documents is complete and accurate to the best of my knowledge.

Signature: [Handwritten Signature]
Printed Name: Debbie Lynn Bolin

Title: Warehouse Worker
Date: 12-13-02

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-10
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.6.1	Solid Waste Facility Permit Permit for Disposal of Non-hazardous Drums of Drill Cuttings and Development Water	1	Documentation	E	A

SUBMITTAL CODES
D - Forwarded to ROICC FOR ACTION
E - Forwarded to ROICC for Record Purposes

APPROVAL CODES
A - Approved as Submitted
AN - Approved as Noted

RR - Disapproved - Revise and Resubmit
NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature

Date

Ernie Duke



September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
--	--	---

This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature

Date

NA

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa. 15146-2972	Copies to: File PM Con Rep No. Returned
---	--	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority

NA

To: DAN PRINGLE

10-22-03

From ERNIE DUKE

4 Pages.

Re: Disposal Facility

ATTACHED is the permit for

C-MAC. This is the facility

that accepted the waste (non-haz

drums from drilling) This is to be

attached to the submittal form that

~~was in the package sent up before.~~

ADEM

ALABAMA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

HAZARDOUS WASTE FACILITY PERMIT

ISSUED TO: FISHER INDUSTRIAL SERVICE, INC.

EPA ID / PERMIT NUMBER: ALD 984 020 894

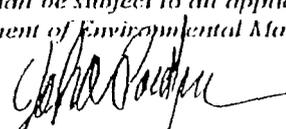
LOCATION: 402 Webster Chapel Road
Glencoe, Alabama

UNITS PERMITTED: Container Storage (3 Units)
Tank Storage/Treatment (10 Units)

ISSUANCE DATE: November 5, 1992
Modification 1 -- May 2, 1994
Modification 2 -- August 15, 1994
Modification 3 -- April 18, 1996
Modification 4 -- February 12, 1997
Modification 5 -- May 15, 1998

EXPIRATION DATE: November 4, 2002

This Permit is issued pursuant with the Code of Alabama 1975, §§ 22-30-1-et. seq., as amended, and regulations adopted thereunder and the Hazardous Wastes Management and Minimization Act and in accordance with the plans and specifications and applications filed with the Department subject to the conditions appended hereto, all of which are considered a part of this Permit. This Permit shall be subject to all applicable laws of the State of Alabama, rules and regulations and orders of the Department of Environmental Management and shall be effective from the date of issuance.


Alabama Department of Environmental Management

July 15, 2003

Don Mangan
Earthcare Services
100113 Windridge Drive
Fredericksburg, VA 22407

**Subject: C-MAC Part B, Storage and Treatment Operating Permit
ALD 981 020 894**

Dear Mr. Mangan:

The purpose of this correspondence is to follow up on your request for information pursuant to our permit renewal.

The Hazardous Waste Facility Permit (ID Number: ALD 981 020 894) was issued November 5, 1992, pursuant with the Code of Alabama 1975 Section 22-30-1 et seq., as amended and regulations adopted thereunder and the Hazardous Wastes Management Act of 1978 and in accordance with the plans and specifications and applications filed with the Alabama Department of Environmental Management (ADEM). The expiration date of the permit is November 5, 2002.

Renewal of the permit is specified in the facility permit (I.E. Duties and Requirements) Paragraph 2. Simply stated the notification for renewal must be submitted 180 days prior to expiration. The application for renewal of the above described permit was submitted May 7, 2002.

Pursuant to subsection 335-14-8-.05 Expiration and Continuation of Permits – Treatment, Storage, and Disposal Facilities: (2) Continuation of expiring permits ... The conditions of an expired permit continue in force until the effective date of a new permit....

In summary, should the state fail to respond to our request for renewal by November 5, 2002 we are required by law to continue operating under our existing permit.

Discussions with ADEM, as recently as January 2003, indicate that our permit is in good standing and that the timing of our review is contingent upon the review of other permits currently under review by the Department. On February 3, 2003, C-MAC received comments pursuant to our permit renewal submittal. These comments are not significant in the context of our operating permit were responded to in March 2003. Mr. David Matthews, EHS Manager for C-MAC Environmental Group, Inc., has identified Mr. Narveen Sharma (334-270-5608) as our assigned permit reviewer.

Should you have any additional questions or comments please contact the undersigned.

Best Regards,

Brett C. Hensley, CHMM, PG
Vice President, C-MAC Environmental Group, Inc.

Dave E. Mathews
EHS Manager

*C-MAC Purchased Fisher Industrial Services, Inc.
And their permit renewal will change the name.*

*RE D. Mangan
10-22-03*

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 02742-03
Specification Section No. (Only 1 section with each transmittal) 02742	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	3.8.1 & 3.8.2	Asphalt Testing conducted by Hillis and Carnes	1	Test Reports	E	A

SUBMITTAL CODES	APPROVAL CODES	
D - Forwarded to ROICC FOR ACTION	A - Approved as Submitted	RR - Disapproved, Revise and Resubmit
F - Forwarded to ROICC for Record Purposes	AN - Approved as Noted	NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces. Based on approval of VR-004.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA	Date	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

HILLIS-CARNES

April 28, 2003

Austin Paving & Sealing
4410 Austin Lane
White Plains, MD 20695

Attn: Mr. Sean Gutman

Re: **Indian Head Naval Surface
Warfare Center
Atkins Road Extension
(+/-) Stations 0+00 to 3+30
Base and Surface Course Asphalt Monitoring
HCEA Job # W-03092**

3641 Leonardtown Road

Waldorf, MD 20601

Metro 301-753-0870

Local 301-392-0760

Fax 301-392-0934

www.hcea.com

ENGINEERING ASSOCIATES, INC.

Dear Mr. Gutman:

Upon your request, Hillis-Carnes Engineering Associates, Inc. (HCEA), performed roadway construction monitoring and material testing for the base and surface course asphalt placement at the above referenced project on April 16, 2003. This letter addresses our observations and test results for this time period.

Our scope of work consisted of monitoring the thickness, temperature, and in-place density testing of the base and surface course to observe compliance with project requirements for the above referenced road. HCEA observed the minimum requirement of 2" of base and 1" of surface course asphalt placed.

HCEA randomly checked the asphalt temperature and asphalt thickness at the time of placement. No discrepancies were noted. HCEA also performed in-place density testing on the base and surface course asphalt using ASTM-D2041 (Nuclear Gauge Method and Theoretical Maximum Specific Gravity) and found all test results met or exceeded the required compaction level of 92-97% of the maximum specific gravity/96% of the Marshall value, or those areas represented by failing tests were rerolled until the desired compaction level was achieved.

Based on our visual observations, review of density test summary documentation, and previous inspection experiences, we hereby confirm the base and surface course at the above referenced project was performed in accordance with the project specifications.

Indian Head Naval Surface
Warfare Center
Atkins Road Extension

Page 2

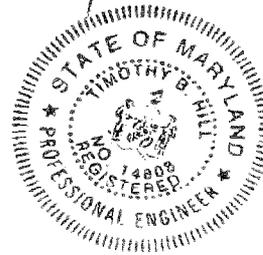
Thank you for this opportunity to assist you. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Hillis-Carnes Engineering Associates, Inc.

Yai Shirley A. Shonberger
Ryan S. Pond

Timothy B. Hill
Timothy B. Hill, PE

Attachments: Density Summaries



HILLIS-CARNES ENGINEERING ASSOCIATES, INC

12011 Guilford Road, Suite 106, Annapolis Junction, MD 20701

Balto:(410)880-4788 - DC:(301)470-4239 - Fax:(410)880-4098

Project: Indian Head Ldfill Rdwy

Job No: W03092

Client: Austin Paving

Date: 04/25/03

Page: _____

FIELD DENSITY TEST SUMMARY

Test #	Location	Soil ID	Percent Moisture	Wet Density	Percent Compaction	Percent Required	Elevation	Remarks
1	Atkins Rd. Ext.; Station 0 + 50; Right of Centerline	1		150.1	93.8%	92-97%	Base Course	04/16/03
2	Atkins Rd. Ext.; Station 1 + 00; Right of Centerline	1		149.7	93.6	92-97%	Base Course	04/16/03
3	Atkins Rd. Ext.; Station 1 + 50; Right of Centerline	1		151.5	94.7	92-97%	Base Course	04/16/03
4	Atkins Rd. Ext.; Station 2 + 00; Right of Centerline	1		150.8	94.3	92-97%	Base Course	04/16/03
5	Atkins Rd. Ext.; Station 2 + 50; Right of Centerline	1		151.3	94.6	92-97%	Base Course	04/16/03
6	Atkins Rd. Ext.; Station 0 + 75; Left of Centerline	1		150.6	94.1	92-97%	Base Course	04/16/03
7	Atkins Rd. Ext.; Station 1 + 25; Left of Centerline	1		150.1	93.8	92-97%	Base Course	04/16/03
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9	Atkins Rd. Ext.; Station 2 + 50; Left of Centerline	1		150.1	93.8	92-97%	Base Course	04/16/03
10	Atkins Rd. Ext.; Station 0 + 75; Right of Centerline	2		152.1	95.1	92-97%	Surface Course	04/16/03
Soil ID	Description	Proctor Method		OMC %	MDD lbs./cu ft.	Remarks		
1	Base Course Asphalt	MSG			159.9			
2	Surface Course Asphalt	MSG			161.1			
Field Technician: Ryan Pond		Reviewed By: Ryan Pond						

HILLIS-CARNES ENGINEERING ASSOCIATES, INC Project: Indian Head Ldfill Rd Client: Austin Paving
 12011 Guilford Road, Suite 106, Annapolis Junction, MD 20701 Job No: W03092 Date: 04/25/03
 Balto:(410)880-4788 - DC:(301)470-4239 - Fax:(410)880-4098 Page:

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11	Atkins Rd. Ext.; Station 1 + 50; Right of Centerline	2		151.7	94.8%	92-97%	Surface Course	04/16/03
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13	Atkins Rd. Ext.; Station 2 + 50; Right of Centerline	2		152.3	94.5	92-97%	Surface Course	04/16/03
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17	Atkins Rd. Ext.; Station 2 + 50; Left of Centerline	2		150.2	93.2	92-97%	Surface Course	04/16/03
18								
19								
20								

Soil ID	Description	Proctor Method	OMC %	MDD lbs./cu. ft.	Remarks
2	Surface Course Asphalt	MSG		161.1	

Field Technician: Ryan Pond Reviewed By: Ryan Pond



INDIAN HEAD DIVISION
 NAVAL SURFACE WARFARE CENTER
 INDIAN HEAD, MARYLAND
 SITE 12, DELIVERY ORDER 0062
 SHAW PROJECT NO. 809401

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
 OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

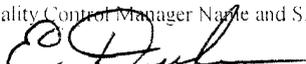
From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02742-03
Specification Section No. (Only 1 section with each transmittal) <p style="text-align: center;">02742</p>	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
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I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces. Based on approval of VR-004.

Contractor Quality Control Manager Name and Signature: Ernie Duke  Date: September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUIS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

HILLIS-CARNES

April 28, 2003

Austin Paving & Sealing
4410 Austin Lane
White Plains, MD 20695

Attn: Mr. Sean Gutman

Re: **Indian Head Naval Surface
Warfare Center
Atkins Road Extension
(+/-) Stations 0+00 to 3+30
Base and Surface Course Asphalt Monitoring
HCEA Job # W-03092**

3641 Leonardtown Road
Waldorf, MD 20601
Metro 301-753-0870
Local 301-392-0760
Fax 301-392-0934
www.hcea.com

ENGINEERING ASSOCIATES, INC.

Dear Mr. Gutman:

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Indian Head Naval Surface
Warfare Center
Atkins Road Extension

Page 2

Thank you for this opportunity to assist you. Should you have any questions or require additional information, please do not hesitate to contact our office.

Sincerely,
Hillis-Carnes Engineering Associates, Inc.

Yai Shirley A. Honger
Ryan S. Pond

Timothy B. Hill
Timothy B. Hill, PE

Attachments: Density Summaries



HILLIS-CARNES ENGINEERING ASSOCIATES, INC
 12011 Guilford Road, Suite 106, Annapolis Junction, MD 20701
 Balto:(410)880-4788 - DC:(301)470-4239 - Fax:(410)880-4098

Project: Indian Head Ldfill Rdwy Client: Austin Paving
 Job No: W03092 Date: 04/25/03
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FIELD DENSITY TEST SUMMARY

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Soil ID	Description	Proctor Method	OMC %	MDD lbs./cu. ft.	Remarks
1	Base Course Asphalt	MSG		159.9	
2	Surface Course Asphalt	MSG		161.1	

Field Technician: Ryan Pond Reviewed By: Ryan Pond



HILLIS-CARNES ENGINEERING ASSOCIATES, INC
 12011 Guilford Road, Suite 106, Annapolis Junction, MD 20701
 Balto:(410)880-4788 - DC:(301)470-4239 - Fax:(410)880-4098

Project: Indian Head Ldfill Rd. Client: Austin Paving
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INDIAN HEAD DIVISION
 NAVAL SURFACE WARFARE CENTER
 INDIAN HEAD, MARYLAND
 SITE 12, DELIVERY ORDER 0062
 SHAW PROJECT NO. 809401

SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
 OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 02525-04
Specification Section No. (Only 1 section with each transmittal) 02525	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-07	3.7	Monitoring Well Survey Report	1	Certificate	E	A

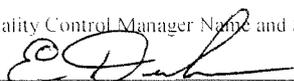
<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D - Forwarded to ROICC FOR ACTION	A - Approved as Submitted	RR - Disapproved, Revise and Resubmit
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I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature

Date

Ernie Duke



September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

MONITORING WELL SCHEDULE
SITE 12 INDIANHEAD NSWC
JULY 29, 2003
NGVD 29

PT#	NORTH	EAST	ELEVATION	DESCRIPTION
1260	333890.19	1260000.48	30.26 30.71 28.33	S12MW007 PVC TOC GR
1328	333723.72	1259748.46	9.14 9.80 6.18	S12MW008 PVC TOC GR
1256	333605.29	1259913.89	9.00 9.36 6.30	S12MW009 PVC TOC GR
1232	333485.81	1259854.20	9.25 9.79 6.97	S12MW010 PVC TOC GR
1088	333263.73	1259593.20	9.26 9.75 6.54	S12MW011 PVC TOC GR
1144	333163.35	1259885.12	32.28 32.75 30.20	S12MW012 PVC TOC GR
1065	332883.52	1259767.63	8.86 9.25 6.08	S12MW013 PVC TOC CONC

SURVEY REPORT

On July 29, 2003 K.L.S. Consultants, Inc. performed a field run topographical survey to establish the as-built conditions of the remedial action for site 12, Town Gut Landfill located at the Naval Surface Warfare Center, Indianhead, Maryland.

All work was supervised by John Staley, a Maryland licensed surveyor, and principal of K.L.S. Consultants, Inc.

Field work was done using a Sokkia Set 4 Total Station with SDR33 Data Collector. This information was downloaded to an Auto Cadd 2000 file to generate the final as-build drawing.

Field crew personnel were John Staley and Michael West.
CADD draftperson was Julie Campbell.

A hard copy of the field notes and final drawing are enclosed along with an electronic file.

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 02525-04
Specification Section No. (Only 1 section with each transmittal) 02525	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-07	3.7	Monitoring Well Survey Report	1	Certificate	E	A

SUBMITTAL CODES	APPROVAL CODES	
D - Forwarded to ROICC FOR ACTION	A - Approved as Submitted	RR - Disapproved, Revise and Resubmit
F - Forwarded to ROICC for Record Purposes	AN - Approved as Noted	NR - Not Reviewed

I hereby certify that the equipment/material/artefice shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature		Date
NA		

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

MONITORING WELL SCHEDULE
SITE 12 INDIANHEAD NSWC
JULY 29, 2003
NGVD 29

PT#	NORTH	EAST	ELEVATION	DESCRIPTION
1260	333890.19	1260000.48	30.26 30.71 28.33	S12MW007 PVC TOC GR
1328	333723.72	1259748.46	9.14 9.80 6.18	S12MW008 PVC TOC GR
1256	333605.29	1259913.89	9.00 9.36 6.30	S12MW009 PVC TOC GR
1232	333485.81	1259854.20	9.25 9.79 6.97	S12MW010 PVC TOC GR
1088	333263.73	1259593.20	9.26 9.75 6.54	S12MW011 PVC TOC GR
1144	333163.35	1259885.12	32.28 32.75 30.20	S12MW012 PVC TOC GR
1065	332883.52	1259767.63	8.86 9.25 6.08	S12MW013 PVC TOC CONC

SURVEY REPORT

On July 29, 2003 K.L.S. Consultants, Inc. performed a field run topographical survey to establish the as-built conditions of the remedial action for site 12, Town Gut Landfill located at the Naval Surface Warfare Center, Indianhead, Maryland.

All work was supervised by John Staley, a Maryland licensed surveyor, and principal of K.L.S. Consultants, Inc.

Field work was done using a Sokkia Set 4 Total Station with SDR33 Data Collector. This information was downloaded to an Auto Cadd 2000 file to generate the final as-build drawing.

Field crew personnel were John Staley and Michael West.

CADD draftperson was Julie Campbell.

A hard copy of the field notes and final drawing are enclosed along with an electronic file.

INDIAN HEAD DIVISION
 NAVAL SURFACE WARFARE CENTER
 INDIAN HEAD, MARYLAND
 SITE 12, DELIVERY ORDER 0062
 SHAW PROJECT NO. 809401

SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
 OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill – Site 12
		Submittal No: 01575N-09
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para. No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.6.2	Laboratory Analysis of Monitoring Well Development Water (IH-GW-008) and Drill Cuttings (IH-DS-009)	1	Test Reports	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D - Forwarded to ROICC FOR ACTION	A - Approved as Submitted	RR - Disapproved, Revise and Resubmit
E - Forwarded to ROICC for Record Purposes	AN - Approved as Noted	NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
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This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):

Name and Signature	Date
NA	

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
--	--	---

Enclosures are returned (See Approval Code in Part 1). The following comments are also made:

Signature and Title of Approving Authority
NA

LabLink Analytical Data Report
 Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	TCLP Limit	DF	Client ID	Collected	Time
F18741-1	2,4-D	94-75-7	SW846 8151	ND		mg/l	0.01	10	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND		mg/l	0.002	1	1	IH-GW-008	24-Jul-03	8:00
F18741-1	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND		mg/l	0.0005	0.4	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Chlordane	12789-03-6	SW846 8081A	ND		mg/l	0.005	0.03	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Endrin	72-20-8	SW846 8081A	ND		mg/l	0.001	0.02	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Heptachlor	76-44-8	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Heptachlor epoxide	1024-57-3	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Methoxychlor	72-43-5	SW846 8081A	ND		mg/l	0.001	10	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Toxaphene	8001-35-2	SW846 8081A	ND		mg/l	0.025	0.5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1016	12674-11-2	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1221	11104-28-2	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1232	11141-16-5	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1242	53469-21-9	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1248 (a)	12672-29-6	SW846 8082	0.51	J	ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1254	11097-69-1	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1260	11096-82-5	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	TPH (C10-C28) (b)		SW846 8015 M	1.13		mg/l	0.27		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Total PCBs		SW846 8082	0.51	J	ug/l	1.1		1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4-DCAA	19719-28-9	SW846 8151	66		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Tetrachloro-m-xylene	877-09-8	SW846 8082	87		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	o-Terphenyl	84-15-1	SW846 8015 M	76		%	0.54		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Tetrachloro-m-xylene	877-09-8	SW846 8081A	100		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Decachlorobiphenyl	2051-24-3	SW846 8081A	120		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Decachlorobiphenyl	2051-24-3	SW846 8082	53		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	TPH-GRO (C6-C10)		SW846 8015	0.35		mg/l	0.1		1	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8015	105		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	aaa-Trifluorotoluene	98-08-8	SW846 8015	99		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Total Organic Halides (c)		SW846 9020	<0.20	<	mg/l	0.2		4	IH-GW-008	24-Jul-03	8:00
F18741-1	Cyanide Reactivity		SW846 CHAP7	<1.5	<	mg/l	1.5		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Sulfide Reactivity		SW846 CHAP7	<50	<	mg/l	50		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Corrosivity as pH		SW846 CHAP7	6.6					1	IH-GW-008	24-Jul-03	8:00
F18741-1	Ignitability (Flashpoint)		SW846 1010	>200	>	Deg. F			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Arsenic	7440-38-2	SW846 6010B	0.0028	U	mg/l	0.01	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Barium	7440-39-3	SW846 6010B	0.15	B	mg/l	1	100	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Cadmium	7440-43-9	SW846 6010B	0.00026	U	mg/l	0.005	1	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Chromium	7440-47-3	SW846 6010B	0.00043	U	mg/l	0.01	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Lead	7439-92-1	SW846 6010B	0.0012	U	mg/l	0.05	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Mercury	7439-97-6	SW846 7470A	0.00022	U	mg/l	0.01	0.2	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Selenium	7782-49-2	SW846 6010B	0.0045	B	mg/l	0.05	1	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Silver	7440-22-4	SW846 6010B	0.00055	U	mg/l	0.01	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2-Methylphenol	95-48-7	SW846 8270C	ND		mg/l	0.05	200	1	IH-GW-008	24-Jul-03	8:00
F18741-1	3&4-Methylphenol		SW846 8270C	ND		mg/l	0.05	200	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Pentachlorophenol	87-86-5	SW846 8270C	ND		mg/l	0.25	100	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND		mg/l	0.05	400	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND		mg/l	0.05	2	1	IH-GW-008	24-Jul-03	8:00
F18741-1	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	0.05	7.5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	0.05	0.5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	0.05	3	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	0.05	2	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Pyridine	110-86-1	SW846 8270C	ND		mg/l	0.05	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2-Fluorophenol	367-12-4	SW846 8270C	60		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Phenol-d5	4165-62-2	SW846 8270C	41		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,6-Tribromophenol	118-79-6	SW846 8270C	95		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Nitrobenzene-d5	4165-60-0	SW846 8270C	84		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	2-Fluorobiphenyl	321-60-8	SW846 8270C	85		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Terphenyl-d14	1718-51-0	SW846 8270C	88		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Benzene	71-43-2	SW846 8260B	105		ug/l	2.5	500	2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene	108-88-3	SW846 8260B	10.2		ug/l	2		1	IH-GW-008	24-Jul-03	8:00

LabLink Analytical Data Report
Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261.6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	TCLP Limit	DF	Client ID	Collected	Time
F18741-1	Ethylbenzene	100-41-4	SW846 8260B	1.4	J	ug/l	2		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Xylene (total)	1330-20-7	SW846 8260B	9.4		ug/l	6		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Benzene	71-43-2	SW846 8260B	ND		mg/l	0.01	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Chlorobenzene	108-90-7	SW846 8260B	ND		mg/l	0.02	100	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Chloroform	67-66-3	SW846 8260B	ND		mg/l	0.02	6	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Carbon tetrachloride	56-23-5	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane	107-06-2	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	p-Dichlorobenzene	106-46-7	SW846 8260B	ND		mg/l	0.02	7.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Methyl ethyl ketone	78-93-3	SW846 8260B	ND		mg/l	0.1	200	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Tetrachloroethylene	127-18-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Trichloroethylene	79-01-6	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Vinyl chloride	75-01-4	SW846 8260B	ND		mg/l	0.01	0.2	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Dibromofluoromethane	1868-53-7	SW846 8260B	91		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	Dibromofluoromethane	1868-53-7	SW846 8260B	106		%			10	IH-GW-008	24-Jul-03	8:00
F18741-1	Dibromofluoromethane	1868-53-7	SW846 8260B	90		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	96		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	96		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene-D8	2037-26-5	SW846 8260B	107		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene-D8	2037-26-5	SW846 8260B	106		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene-D8	2037-26-5	SW846 8260B	99		%			10	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	96		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	95		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	107		%			10	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	106		%			10	IH-GW-008	24-Jul-03	8:00
F18741-2	2,4-D	94-75-7	SW846 8151	ND		mg/l	0.01	10	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND		mg/l	0.002	1	1	IH-DS-009	24-Jul-03	9:20
F18741-2	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND		mg/l	0.0005	0.4	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Chlordane	12789-03-6	SW846 8081A	ND		mg/l	0.005	0.03	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Endrin	72-20-8	SW846 8081A	ND		mg/l	0.001	0.02	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Heptachlor	76-44-8	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Heptachlor epoxide	1024-57-3	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Methoxychlor	72-43-5	SW846 8081A	ND		mg/l	0.001	10	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Toxaphene	8001-35-2	SW846 8081A	ND		mg/l	0.025	0.5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1016	12674-11-2	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1221	11104-28-2	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1232	11141-16-5	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1242	53469-21-9	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1248	12672-29-6	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1254	11097-69-1	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1260	11096-82-5	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	TPH (C10-C28)		SW846 8015 M	36.4		mg/kg	21		2	IH-DS-009	24-Jul-03	9:20
F18741-2	Total PCBs		SW846 8082	ND		ug/kg	43		1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4-DCAA	19719-28-9	SW846 8151	71		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Tetrachloro-m-xylene	877-09-8	SW846 8081A	97		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Tetrachloro-m-xylene	877-09-8	SW846 8082	97		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	o-Terphenyl	84-15-1	SW846 8015 M	96		%	43		2	IH-DS-009	24-Jul-03	9:20
F18741-2	Decachlorobiphenyl	2051-24-3	SW846 8081A	120		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Decachlorobiphenyl	2051-24-3	SW846 8082	109		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.9		1	IH-DS-009	24-Jul-03	9:20
F18741-2	4-Bromofluorobenzene	460-00-4	SW846 8015	94		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	aaa-Trifluorotoluene	98-08-8	SW846 8015	85		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Ignitability (Flashpoint)		SW846 1010	>200	>	Deg. F			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Corrosivity as pH		SW846 CHAP7	5.6					1	IH-DS-009	24-Jul-03	9:20
F18741-2	Cyanide Reactivity		SW846 CHAP7	<1.9	<	mg/kg	1.9		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Sulfide Reactivity		SW846 CHAP7	<63	<	mg/kg	63		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Total Organic Halides		SW846 9023	<10	<	mg/kg	10		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Solids, Percent		EPA 160.3 M	79		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Arsenic	7440-38-2	SW846 6010B	0.0028	U	mg/l	0.01	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Barium	7440-39-3	SW846 6010B	0.73	B	mg/l	1	100	1	IH-DS-009	24-Jul-03	9:20

LabLink Analytical Data Report
 Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261.6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	TCLP Limit	DF	Client ID	Collected	Time
F18741-2	Cadmium	7440-43-9	SW846 6010B	0.00026	U	mg/l	0.005	1	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Chromium	7440-47-3	SW846 6010B	0.00043	U	mg/l	0.01	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Lead	7439-92-1	SW846 6010B	0.015	B	mg/l	0.05	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Mercury	7439-97-6	SW846 7470A	0.00022	U	mg/l	0.01	0.2	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Selenium	7782-49-2	SW846 6010B	0.021	B	mg/l	0.05	1	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Silver	7440-22-4	SW846 6010B	0.00055	U	mg/l	0.01	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2-Methylphenol	95-48-7	SW846 8270C	ND		mg/l	0.05	200	1	IH-DS-009	24-Jul-03	9:20
F18741-2	3&4-Methylphenol		SW846 8270C	ND		mg/l	0.05	200	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Pentachlorophenol	87-86-5	SW846 8270C	ND		mg/l	0.25	100	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND		mg/l	0.05	400	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND		mg/l	0.05	2	1	IH-DS-009	24-Jul-03	9:20
F18741-2	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	0.05	7.5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	0.05	0.5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	0.05	3	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	0.05	2	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Pyridine	110-86-1	SW846 8270C	ND		mg/l	0.05	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2-Fluorophenol	367-12-4	SW846 8270C	56		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Phenol-d5	4165-62-2	SW846 8270C	39		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,6-Tribromophenol	118-79-6	SW846 8270C	88		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Nitrobenzene-d5	4165-60-0	SW846 8270C	78		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	2-Fluorobiphenyl	321-60-8	SW846 8270C	79		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Terphenyl-d14	1718-51-0	SW846 8270C	82		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Benzene	71-43-2	SW846 8260B	ND		ug/kg	7.4		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Toluene	108-88-3	SW846 8260B	ND		ug/kg	7.4		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Ethylbenzene	100-41-4	SW846 8260B	ND		ug/kg	7.4		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Xylene (total)	1330-20-7	SW846 8260B	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Benzene	71-43-2	SW846 8260B	ND		mg/l	0.01	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Chlorobenzene	108-90-7	SW846 8260B	ND		mg/l	0.02	100	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Chloroform	67-66-3	SW846 8260B	ND		mg/l	0.02	6	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Carbon tetrachloride	56-23-5	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-DS-009	24-Jul-03	9:20
F18741-2	1,2-Dichloroethane	107-06-2	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	p-Dichlorobenzene	106-46-7	SW846 8260B	ND		mg/l	0.02	7.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Methyl ethyl ketone	78-93-3	SW846 8260B	ND		mg/l	0.1	200	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Tetrachloroethylene	127-18-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Trichloroethylene	79-01-6	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Vinyl chloride	75-01-4	SW846 8260B	ND		mg/l	0.01	0.2	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Dibromofluoromethane	1868-53-7	SW846 8260B	99		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	Dibromofluoromethane	1868-53-7	SW846 8260B	100		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Toluene-D8	2037-26-5	SW846 8260B	97		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	Toluene-D8	2037-26-5	SW846 8260B	114		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	4-Bromofluorobenzene	460-00-4	SW846 8260B	117		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	4-Bromofluorobenzene	460-00-4	SW846 8260B	114		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	95		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	100		%			1	IH-DS-009	24-Jul-03	9:20

- (a) Best match available.
 - (b) Petroleum hydrocarbon pattern extends beyond C28.
 - (c) Dilution required due to matrix interference.
- Found 0 results exceeding regulatory limits.

** Indicates result outside regulatory limits.

* Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. Accutest assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.

Sample Summary

Shaw E & I, Inc.

Job No: F18741

Indian Head

Project No: 809401

Sample Number	Collected		Time By	Received	Matrix		Client Sample ID
	Date				Code	Type	
F18741-1	07/24/03	08:00	ED	07/25/03	AQ	Ground Water	IH-GW-008
F18741-2	07/24/03	09:20	ED	07/25/03	SO	Soil	IH-DS-009

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Page 1 of 1

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0017514.D	1	08/05/03	KW	n/a	n/a	VC772
Run #2	C0017528.D	2.5	08/06/03	KW	n/a	n/a	VC773

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	105 ^a	2.5	1.3	ug/l	
108-88-3	Toluene	10.2	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.4	2.0	0.50	ug/l	J
1330-20-7	Xylene (total)	9.4	6.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%	91%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	96%	78-125%
2037-26-5	Toluene-D8	106%	107%	87-113%
460-00-4	4-Bromofluorobenzene	95%	96%	84-117%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016854.D	10	08/05/03	KW	07/29/03	OP8089	VB745
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		86-115%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	107%		84-117%
17060-07-0	1,2-Dichloroethane-D4	106%		78-125%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018151.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		19-90%
4165-62-2	Phenol-d5	41%		10-68%
118-79-6	2,4,6-Tribromophenol	95%		36-137%
4165-60-0	Nitrobenzene-d5	84%		49-119%
321-60-8	2-Fluorobiphenyl	85%		45-118%
1718-51-0	Terphenyl-d14	88%		46-135%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261.6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015		
Project:	Indian Head		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003329.D	1	07/29/03	JG	n/a	n/a	GHH175
Run #2							

	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	0.350	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	105%		64-130%	
98-08-8	aaa-Trifluorotoluene	99%		59-136%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8081A SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09768.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		52-131%
2051-24-3	Decachlorobiphenyl	116%		16-153%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008		Date Sampled:	07/24/03
Lab Sample ID:	F18741-1		Date Received:	07/25/03
Matrix:	AQ - Ground Water		Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AB26567.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963
Run #2							

Run #	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.42	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.42	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.26	ug/l	
12672-29-6	Aroclor 1248 ^b	0.51	0.53	0.26	ug/l	J
11097-69-1	Aroclor 1254	ND	0.53	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.26	ug/l	
	Total PCBs	0.51	1.1		ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		51-129%
2051-24-3	Decachlorobiphenyl	53%		21-148%

(a) All hits confirmed by dual column analysis.

(b) Best match available.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015 M SW846 3510C		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF09478.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448
Run #2							

Run #	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28) ^a	1.13	0.27	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	76%		62-118%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8151 SW846 3510C	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14505.D	1	08/01/03	ATX	07/26/03	T:OP2358	T:GGG431
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		10-143%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96)	B = Indicates analyte found in associated method blank	
E = Indicates value exceeds calibration range	N = Indicates presumptive evidence of a compound	

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Indian Head		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.15 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.0012 U	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.0045 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	<1.5	1.5	mg/l	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	>200		Deg. F	1	07/30/03	LL	SW846 1010
Sulfide Reactivity	<50	50	mg/l	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides ^a	<0.20	0.20	mg/l	4	08/06/03	ANJ	SW846 9020

(a) Dilution required due to matrix interference.

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8260B SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016722.D	10	07/29/03	KW	07/28/03	OP8082	VB740
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	117%		84-117%
17060-07-0	1,2-Dichloroethane-D4	95%		78-125%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261.6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Method: SW846 8260B	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H021619.D	1	07/29/03	NAF	n/a	n/a	VH784
Run #2							

Run #	Initial Weight
Run #1	4.29 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.4	3.0	ug/kg	
108-88-3	Toluene	ND	7.4	3.0	ug/kg	
100-41-4	Ethylbenzene	ND	7.4	3.0	ug/kg	
1330-20-7	Xylene (total)	ND	22	6.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	114%		79-121%
460-00-4	4-Bromofluorobenzene	114%		77-133%
17060-07-0	1,2-Dichloroethane-D4	100%		72-133%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018153.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		19-90%
4165-62-2	Phenol-d5	39%		10-68%
118-79-6	2,4,6-Tribromophenol	88%		36-137%
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	79%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8015		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003292.D	1	07/26/03	RM	n/a	n/a	GHH172
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.61 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	94%		57-144%	
98-08-8	aaa-Trifluorotoluene	85%		65-132%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009

Lab Sample ID: F18741-2

Date Sampled: 07/24/03

Matrix: SO - Soil

Date Received: 07/25/03

Method: SW846 8081A SW846 1311

Percent Solids: 79.0

Project: Indian Head

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09770.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		52-131%
2051-24-3	Decachlorobiphenyl	118%		16-153%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Method:	SW846 8082 SW846 3550B
Project:	Indian Head	Percent Solids:	79.0

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB26533.D	1	07/31/03	NJ	07/29/03	OP8088	GAB962
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	22	11	ug/kg	
11104-28-2	Aroclor 1221	ND	22	17	ug/kg	
11141-16-5	Aroclor 1232	ND	22	17	ug/kg	
53469-21-9	Aroclor 1242	ND	22	11	ug/kg	
12672-29-6	Aroclor 1248	ND	22	11	ug/kg	
11097-69-1	Aroclor 1254	ND	22	11	ug/kg	
11096-82-5	Aroclor 1260	ND	22	11	ug/kg	
	Total PCBs	ND	43		ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		50-134%
2051-24-3	Decachlorobiphenyl	109%		48-147%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	
Lab Sample ID:	F18741-2	Date Sampled: 07/24/03
Matrix:	SO - Soil	Date Received: 07/25/03
Method:	SW846 8015 M SW846 3550B	Percent Solids: 79.0
Project:	Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	ZF09406.D	2	07/29/03	SM	07/28/03	OP8071	GZF445
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	36.4	21	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	96%		64-121%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8151 SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14689.D	1	08/07/03	ATX	07/30/03	T:OP2376	T:GGG437
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	71%		10-143%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261.6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Project: Indian Head	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.73 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.015 B	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.021 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	5.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	< 1.9	1.9	mg/kg	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	07/30/03	LL	SW846 1010
Solids, Percent	79		%	1	07/29/03	LE	EPA 160.3 M
Sulfide Reactivity	< 63	63	mg/kg	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides	< 10	10	mg/kg	1	07/29/03	ANJ	SW846 9023

INDIAN HEAD DIVISION
 NAVAL SURFACE WARFARE CENTER
 INDIAN HEAD, MARYLAND
 SITE 12, DELIVERY ORDER 0062
 SHAW PROJECT NO. 809401

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
 OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 – FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000 Project Title: Town Gut Landfill – Site 12 Submittal No: 01575N-09
Specification Section No. (Only 1 section with each transmittal) 01575N	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-06	1.6.2	Laboratory Analysis of Monitoring Well Development Water (IH-GW-008) and Drill Cuttings (IH-DS-009)	1	Test Reports	E	A

<u>SUBMITTAL CODES</u>	<u>APPROVAL CODES</u>	
D – Forwarded to ROICC FOR ACTION	A – Approved as Submitted	RR – Disapproved, Revise and Resubmit
E – Forwarded to ROICC for Record Purposes	AN – Approved as Noted	NR – Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature	Date
Ernie Duke	September 16, 2003

PART 2 – FOR DESIGNER'S USE

FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 – FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

LabLink Analytical Data Report
 Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	TCLP Limit	DF	Client ID	Collected	Time
F18741-1	2,4-D	94-75-7	SW846 8151	ND		mg/l	0.01	10	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND		mg/l	0.002	1	1	IH-GW-008	24-Jul-03	8:00
F18741-1	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND		mg/l	0.0005	0.4	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Chlordane	12789-03-6	SW846 8081A	ND		mg/l	0.005	0.03	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Endrin	72-20-8	SW846 8081A	ND		mg/l	0.001	0.02	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Heptachlor	76-44-8	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Heptachlor epoxide	1024-57-3	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Methoxychlor	72-43-5	SW846 8081A	ND		mg/l	0.001	10	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Toxaphene	8001-35-2	SW846 8081A	ND		mg/l	0.025	0.5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1016	12674-11-2	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1221	11104-28-2	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1232	11141-16-5	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1242	53469-21-9	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1248 (a)	12672-29-6	SW846 8082	0.51	J	ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1254	11097-69-1	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Aroclor 1260	11096-82-5	SW846 8082	ND		ug/l	0.53		1	IH-GW-008	24-Jul-03	8:00
F18741-1	TPH (C10-C28) (b)		SW846 8015 M	1.13		mg/l	0.27		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Total PCBs		SW846 8082	0.51	J	ug/l	1.1		1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4-DCAA	19719-28-9	SW846 8151	66		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Tetrachloro-m-xylene	877-09-8	SW846 8082	87		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	o-Terphenyl	84-15-1	SW846 8015 M	76		%	0.54		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Tetrachloro-m-xylene	877-09-8	SW846 8081A	100		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Decachlorobiphenyl	2051-24-3	SW846 8081A	120		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Decachlorobiphenyl	2051-24-3	SW846 8082	53		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	TPH-GRO (C6-C10)		SW846 8015	0.35		mg/l	0.1		1	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8015	105		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	aaa-Trifluorotoluene	98-08-8	SW846 8015	99		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Total Organic Halides (c)		SW846 9020	<0.20	<	mg/l	0.2		4	IH-GW-008	24-Jul-03	8:00
F18741-1	Cyanide Reactivity		SW846 CHAP7	<1.5	<	mg/l	1.5		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Sulfide Reactivity		SW846 CHAP7	<50	<	mg/l	50		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Corrosivity as pH		SW846 CHAP7	6.6					1	IH-GW-008	24-Jul-03	8:00
F18741-1	Ignitability (Flashpoint)		SW846 1010	>200	>	Deg. F			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Arsenic	7440-38-2	SW846 6010B	0.0028 U	U	mg/l	0.01	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Barium	7440-39-3	SW846 6010B	0.15 B	B	mg/l	1	100	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Cadmium	7440-43-9	SW846 6010B	0.00026 U	U	mg/l	0.005	1	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Chromium	7440-47-3	SW846 6010B	0.00043 U	U	mg/l	0.01	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Lead	7439-92-1	SW846 6010B	0.0012 U	U	mg/l	0.05	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Mercury	7439-97-6	SW846 7470A	0.00022 U	U	mg/l	0.01	0.2	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Selenium	7782-49-2	SW846 6010B	0.0045 B	B	mg/l	0.05	1	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Silver	7440-22-4	SW846 6010B	0.00055 U	U	mg/l	0.01	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2-Methylphenol	95-48-7	SW846 8270C	ND		mg/l	0.05	200	1	IH-GW-008	24-Jul-03	8:00
F18741-1	3&4-Methylphenol		SW846 8270C	ND		mg/l	0.05	200	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Pentachlorophenol	87-86-5	SW846 8270C	ND		mg/l	0.25	100	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND		mg/l	0.05	400	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND		mg/l	0.05	2	1	IH-GW-008	24-Jul-03	8:00
F18741-1	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	0.05	7.5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	0.05	0.5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	0.05	3	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	0.05	2	1	IH-GW-008	24-Jul-03	8:00
F18741-1	Pyridine	110-86-1	SW846 8270C	ND		mg/l	0.05	5	1	IH-GW-008	24-Jul-03	8:00
F18741-1	2-Fluorophenol	367-12-4	SW846 8270C	60		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Phenol-d5	4165-62-2	SW846 8270C	41		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	2,4,6-Tribromophenol	118-79-6	SW846 8270C	95		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Nitrobenzene-d5	4165-60-0	SW846 8270C	84		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	2-Fluorobiphenyl	321-60-8	SW846 8270C	85		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Terphenyl-d14	1718-51-0	SW846 8270C	88		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Benzene	71-43-2	SW846 8260B	105		ug/l	2.5	500	2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene	108-88-3	SW846 8260B	10.2		ug/l	2		1	IH-GW-008	24-Jul-03	8:00

LabLink Analytical Data Report
Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	TCLP Limit	DF	Client ID	Collected	Time
F18741-1	Ethylbenzene	100-41-4	SW846 8260B	1.4	J	ug/l	2		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Xylene (total)	1330-20-7	SW846 8260B	9.4		ug/l	6		1	IH-GW-008	24-Jul-03	8:00
F18741-1	Benzene	71-43-2	SW846 8260B	ND		mg/l	0.01	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Chlorobenzene	108-90-7	SW846 8260B	ND		mg/l	0.02	100	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Chloroform	67-66-3	SW846 8260B	ND		mg/l	0.02	6	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Carbon tetrachloride	56-23-5	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane	107-06-2	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	p-Dichlorobenzene	106-46-7	SW846 8260B	ND		mg/l	0.02	7.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Methyl ethyl ketone	78-93-3	SW846 8260B	ND		mg/l	0.1	200	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Tetrachloroethylene	127-18-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Trichloroethylene	79-01-6	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Vinyl chloride	75-01-4	SW846 8260B	ND		mg/l	0.01	0.2	10	IH-GW-008	24-Jul-03	8:00
F18741-1	Dibromofluoromethane	1868-53-7	SW846 8260B	91		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	Dibromofluoromethane	1868-53-7	SW846 8260B	106		%			10	IH-GW-008	24-Jul-03	8:00
F18741-1	Dibromofluoromethane	1868-53-7	SW846 8260B	90		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	96		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	96		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene-D8	2037-26-5	SW846 8260B	107		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene-D8	2037-26-5	SW846 8260B	106		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	Toluene-D8	2037-26-5	SW846 8260B	99		%			10	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	96		%			2.5	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	95		%			1	IH-GW-008	24-Jul-03	8:00
F18741-1	4-Bromofluorobenzene	460-00-4	SW846 8260B	107		%			10	IH-GW-008	24-Jul-03	8:00
F18741-1	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	106		%			10	IH-GW-008	24-Jul-03	8:00
F18741-2	2,4-D	94-75-7	SW846 8151	ND		mg/l	0.01	10	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,5-TP (Silvex)	93-72-1	SW846 8151	ND		mg/l	0.002	1	1	IH-DS-009	24-Jul-03	9:20
F18741-2	gamma-BHC (Lindane)	58-89-9	SW846 8081A	ND		mg/l	0.0005	0.4	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Chlordane	12789-03-6	SW846 8081A	ND		mg/l	0.005	0.03	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Endrin	72-20-8	SW846 8081A	ND		mg/l	0.001	0.02	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Heptachlor	76-44-8	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Heptachlor epoxide	1024-57-3	SW846 8081A	ND		mg/l	0.0005	0.008	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Methoxychlor	72-43-5	SW846 8081A	ND		mg/l	0.001	10	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Toxaphene	8001-35-2	SW846 8081A	ND		mg/l	0.025	0.5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1016	12674-11-2	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1221	11104-28-2	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1232	11141-16-5	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1242	53469-21-9	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1248	12672-29-6	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1254	11097-69-1	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Aroclor 1260	11096-82-5	SW846 8082	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	TPH (C10-C28)		SW846 8015 M	36.4		mg/kg	21		2	IH-DS-009	24-Jul-03	9:20
F18741-2	Total PCBs		SW846 8082	ND		ug/kg	43		1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4-DCAA	19719-28-9	SW846 8151	71		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Tetrachloro-m-xylene	877-09-8	SW846 8081A	97		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Tetrachloro-m-xylene	877-09-8	SW846 8082	97		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	o-Terphenyl	84-15-1	SW846 8015 M	96		%	43		2	IH-DS-009	24-Jul-03	9:20
F18741-2	Decachlorobiphenyl	2051-24-3	SW846 8081A	120		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Decachlorobiphenyl	2051-24-3	SW846 8082	109		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	TPH-GRO (C6-C10)		SW846 8015	ND		mg/kg	6.9		1	IH-DS-009	24-Jul-03	9:20
F18741-2	4-Bromofluorobenzene	460-00-4	SW846 8015	94		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	aaa-Trifluorotoluene	98-08-8	SW846 8015	85		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Ignitability (Flashpoint)		SW846 1010	>200	>	Deg. F			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Corrosivity as pH		SW846 CHAP7	5.6					1	IH-DS-009	24-Jul-03	9:20
F18741-2	Cyanide Reactivity		SW846 CHAP7	<1.9	<	mg/kg	1.9		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Sulfide Reactivity		SW846 CHAP7	<63	<	mg/kg	63		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Total Organic Halides		SW846 9023	<10	<	mg/kg	10		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Solids, Percent		EPA 160.3 M	79		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Arsenic	7440-38-2	SW846 6010B	0.0028 U	U	mg/l	0.01	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Barium	7440-39-3	SW846 6010B	0.73	B	mg/l	1	100	1	IH-DS-009	24-Jul-03	9:20

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 Indian Head 809401

Including: TCLP Maximum Contaminant Concentrations (40 CFR 261 6/96)*

Sample	Parameter	Cas No.	Method	Result	Qual	Units	RL	TCLP Limit	DF	Client ID	Collected	Time
F18741-2	Cadmium	7440-43-9	SW846 6010B	0.00026 U	U	mg/l	0.005	1	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Chromium	7440-47-3	SW846 6010B	0.00043 U	U	mg/l	0.01	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Lead	7439-92-1	SW846 6010B	0.015	B	mg/l	0.05	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Mercury	7439-97-6	SW846 7470A	0.00022 U	U	mg/l	0.01	0.2	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Selenium	7782-49-2	SW846 6010B	0.021	B	mg/l	0.05	1	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Silver	7440-22-4	SW846 6010B	0.00055 U	U	mg/l	0.01	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2-Methylphenol	95-48-7	SW846 8270C	ND		mg/l	0.05	200	1	IH-DS-009	24-Jul-03	9:20
F18741-2	3&4-Methylphenol		SW846 8270C	ND		mg/l	0.05	200	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Pentachlorophenol	87-86-5	SW846 8270C	ND		mg/l	0.25	100	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,5-Trichlorophenol	95-95-4	SW846 8270C	ND		mg/l	0.05	400	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,6-Trichlorophenol	88-06-2	SW846 8270C	ND		mg/l	0.05	2	1	IH-DS-009	24-Jul-03	9:20
F18741-2	1,4-Dichlorobenzene	106-46-7	SW846 8270C	ND		mg/l	0.05	7.5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4-Dinitrotoluene	121-14-2	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Hexachlorobenzene	118-74-1	SW846 8270C	ND		mg/l	0.05	0.13	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Hexachlorobutadiene	87-68-3	SW846 8270C	ND		mg/l	0.05	0.5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Hexachloroethane	67-72-1	SW846 8270C	ND		mg/l	0.05	3	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Nitrobenzene	98-95-3	SW846 8270C	ND		mg/l	0.05	2	1	IH-DS-009	24-Jul-03	9:20
F18741-2	Pyridine	110-86-1	SW846 8270C	ND		mg/l	0.05	5	1	IH-DS-009	24-Jul-03	9:20
F18741-2	2-Fluorophenol	367-12-4	SW846 8270C	56		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Phenol-d5	4165-62-2	SW846 8270C	39		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	2,4,6-Tribromophenol	118-79-6	SW846 8270C	88		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Nitrobenzene-d5	4165-60-0	SW846 8270C	78		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	2-Fluorobiphenyl	321-60-8	SW846 8270C	79		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Terphenyl-d14	1718-51-0	SW846 8270C	82		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Benzene	71-43-2	SW846 8260B	ND		ug/kg	7.4		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Toluene	108-88-3	SW846 8260B	ND		ug/kg	7.4		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Ethylbenzene	100-41-4	SW846 8260B	ND		ug/kg	7.4		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Xylene (total)	1330-20-7	SW846 8260B	ND		ug/kg	22		1	IH-DS-009	24-Jul-03	9:20
F18741-2	Benzene	71-43-2	SW846 8260B	ND		mg/l	0.01	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Chlorobenzene	108-90-7	SW846 8260B	ND		mg/l	0.02	100	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Chloroform	67-66-3	SW846 8260B	ND		mg/l	0.02	6	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Carbon tetrachloride	56-23-5	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	1,1-Dichloroethylene	75-35-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-DS-009	24-Jul-03	9:20
F18741-2	1,2-Dichloroethane	107-06-2	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	p-Dichlorobenzene	106-46-7	SW846 8260B	ND		mg/l	0.02	7.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Methyl ethyl ketone	78-93-3	SW846 8260B	ND		mg/l	0.1	200	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Tetrachloroethylene	127-18-4	SW846 8260B	ND		mg/l	0.02	0.7	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Trichloroethylene	79-01-6	SW846 8260B	ND		mg/l	0.02	0.5	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Vinyl chloride	75-01-4	SW846 8260B	ND		mg/l	0.01	0.2	10	IH-DS-009	24-Jul-03	9:20
F18741-2	Dibromofluoromethane	1868-53-7	SW846 8260B	99		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	Dibromofluoromethane	1868-53-7	SW846 8260B	100		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	Toluene-D8	2037-26-5	SW846 8260B	97		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	Toluene-D8	2037-26-5	SW846 8260B	114		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	4-Bromofluorobenzene	460-00-4	SW846 8260B	117		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	4-Bromofluorobenzene	460-00-4	SW846 8260B	114		%			1	IH-DS-009	24-Jul-03	9:20
F18741-2	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	95		%			10	IH-DS-009	24-Jul-03	9:20
F18741-2	1,2-Dichloroethane-D4	17060-07-0	SW846 8260B	100		%			1	IH-DS-009	24-Jul-03	9:20

- (a) Best match available.
- (b) Petroleum hydrocarbon pattern extends beyond C28.
- (c) Dilution required due to matrix interference.

Found 0 results exceeding regulatory limits.

** Indicates result outside regulatory limits.

* Regulatory limits listed in this document have been obtained from the latest version of the regulations cited and are used for advisory purposes only. Accutest assumes no responsibility for errors in regulatory documents or changes to criteria detailed in later versions of the referenced regulation. It is the responsibility of the user to verify these limits before using or reporting any data.

Sample Summary

Shaw E & I, Inc.

Job No: F18741

Indian Head

Project No: 809401

Sample Number	Collected		Received	Matrix		Client Sample ID
	Date	Time By		Code	Type	
F18741-1	07/24/03	08:00 ED	07/25/03	AQ	Ground Water	IH-GW-008
F18741-2	07/24/03	09:20 ED	07/25/03	SO	Soil	IH-DS-009

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0017514.D	1	08/05/03	KW	n/a	n/a	VC772
Run #2	C0017528.D	2.5	08/06/03	KW	n/a	n/a	VC773

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	105 ^a	2.5	1.3	ug/l	
108-88-3	Toluene	10.2	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.4	2.0	0.50	ug/l	J
1330-20-7	Xylene (total)	9.4	6.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%	91%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	96%	78-125%
2037-26-5	Toluene-D8	106%	107%	87-113%
460-00-4	4-Bromofluorobenzene	95%	96%	84-117%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8260B SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016854.D	10	08/05/03	KW	07/29/03	OP8089	VB745
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		86-115%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	107%		84-117%
17060-07-0	1,2-Dichloroethane-D4	106%		78-125%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

J = Indicates an estimated value

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018151.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		19-90%
4165-62-2	Phenol-d5	41%		10-68%
118-79-6	2,4,6-Tribromophenol	95%		36-137%
4165-60-0	Nitrobenzene-d5	84%		49-119%
321-60-8	2-Fluorobiphenyl	85%		45-118%
1718-51-0	Terphenyl-d14	88%		46-135%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

J = Indicates an estimated value

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003329.D	1	07/29/03	JG	n/a	n/a	GHH175
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	0.350	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	105%		64-130%	
98-08-8	aaa-Trifluorotoluene	99%		59-136%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8081A SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09768.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		52-131%
2051-24-3	Decachlorobiphenyl	116%		16-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AB26567.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963
Run #2							

Run #	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.42	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.42	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.26	ug/l	
12672-29-6	Aroclor 1248 ^b	0.51	0.53	0.26	ug/l	J
11097-69-1	Aroclor 1254	ND	0.53	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.26	ug/l	
	Total PCBs	0.51	1.1		ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		51-129%
2051-24-3	Decachlorobiphenyl	53%		21-148%

(a) All hits confirmed by dual column analysis.

(b) Best match available.

ND = Not detected MDL - Method Detection Limit

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Method:	SW846 8015 M SW846 3510C		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF09478.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448
Run #2							

Run #	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28) ^a	1.13	0.27	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	76%		62-118%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008		Date Sampled: 07/24/03
Lab Sample ID: F18741-1		Date Received: 07/25/03
Matrix: AQ - Ground Water		Percent Solids: n/a
Method: SW846 8151 SW846 3510C		
Project: Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14505.D	1	08/01/03	ATX	07/26/03	T:OP2358	T:GGG431
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		10-143%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96)	B = Indicates analyte found in associated method blank	N = Indicates presumptive evidence of a compound
E = Indicates value exceeds calibration range		

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Indian Head		

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.15 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.0012 U	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.0045 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261.6/96)

U = Indicates a result < IDL
B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	IH-GW-008	Date Sampled:	07/24/03
Lab Sample ID:	F18741-1	Date Received:	07/25/03
Matrix:	AQ - Ground Water	Percent Solids:	n/a
Project:	Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	< 1.5	1.5	mg/l	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	07/30/03	LL	SW846 1010
Sulfide Reactivity	< 50	50	mg/l	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides ^a	< 0.20	0.20	mg/l	4	08/06/03	ANJ	SW846 9020

(a) Dilution required due to matrix interference.

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8260B SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016722.D	10	07/29/03	KW	07/28/03	OP8082	VB740
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	117%		84-117%
17060-07-0	1,2-Dichloroethane-D4	95%		78-125%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009
 Lab Sample ID: F18741-2
 Matrix: SO - Soil
 Method: SW846 8260B
 Project: Indian Head

Date Sampled: 07/24/03
 Date Received: 07/25/03
 Percent Solids: 79.0

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H021619.D	1	07/29/03	NAF	n/a	n/a	VH784
Run #2							

Run #	Initial Weight
Run #1	4.29 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.4	3.0	ug/kg	
108-88-3	Toluene	ND	7.4	3.0	ug/kg	
100-41-4	Ethylbenzene	ND	7.4	3.0	ug/kg	
1330-20-7	Xylene (total)	ND	22	6.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	114%		79-121%
460-00-4	4-Bromofluorobenzene	114%		77-133%
17060-07-0	1,2-Dichloroethane-D4	100%		72-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018153.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		19-90%
4165-62-2	Phenol-d5	39%		10-68%
118-79-6	2,4,6-Tribromophenol	88%		36-137%
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	79%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8015		
Project:	Indian Head		

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003292.D	1	07/26/03	RM	n/a	n/a	GHH172
Run #2							

	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.61 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	94%		57-144%	
98-08-8	aaa-Trifluorotoluene	85%		65-132%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Method: SW846 8081A SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09770.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		52-131%
2051-24-3	Decachlorobiphenyl	118%		16-153%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261.6/96)	B = Indicates analyte found in associated method blank	N = Indicates presumptive evidence of a compound
E = Indicates value exceeds calibration range		

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8082 SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB26533.D	1	07/31/03	NJ	07/29/03	OP8088	GAB962
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	22	11	ug/kg	
11104-28-2	Aroclor 1221	ND	22	17	ug/kg	
11141-16-5	Aroclor 1232	ND	22	17	ug/kg	
53469-21-9	Aroclor 1242	ND	22	11	ug/kg	
12672-29-6	Aroclor 1248	ND	22	11	ug/kg	
11097-69-1	Aroclor 1254	ND	22	11	ug/kg	
11096-82-5	Aroclor 1260	ND	22	11	ug/kg	
	Total PCBs	ND	43		ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		50-134%
2051-24-3	Decachlorobiphenyl	109%		48-147%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8015 M SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	ZF09406.D	2	07/29/03	SM	07/28/03	OP8071	GZF445
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	36.4	21	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	96%		64-121%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Method: SW846 8151 SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14689.D	1	08/07/03	ATX	07/30/03	T:OP2376	T:GGG437
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	71%		10-143%

ND = Not detected MDL - Method Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009

Lab Sample ID: F18741-2

Matrix: SO - Soil

Date Sampled: 07/24/03

Date Received: 07/25/03

Percent Solids: 79.0

Project: Indian Head

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.73 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.015 B	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.021 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit

IDL = Instrument Detection Limit

MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL

B = Indicates a result >= IDL but < RL

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Project:	Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	5.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	<1.9	1.9	mg/kg	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	>200		Deg. F	1	07/30/03	LL	SW846 1010
Solids, Percent	79		%	1	07/29/03	LE	EPA 160.3 M
Sulfide Reactivity	<63	63	mg/kg	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides	<10	10	mg/kg	1	07/29/03	ANJ	SW846 9023

RL = Reporting Limit

**INDIAN HEAD DIVISION
NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND
SITE 12, DELIVERY ORDER 0062
SHAW PROJECT NO. 809401**

**SUBMITTAL OF SHOP DRAWINGS, EQUIPMENT DATA, MATERIAL SAMPLES,
OR MANUFACTURER'S CERTIFICATE OF COMPLIANCE**

PART 1 - FOR CONTRACTOR'S USE

From: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146	To: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Contract No: N62470-97-D-5000
		Project Title: Town Gut Landfill - Site 12
		Submittal No: 02224-01
Specification Section No. (Only 1 section with each transmittal) 02224	Submittals, which are variations from the requirements, must be submitted under separate cover.	If Resubmittal, Previous Transmittal #

Item No.	Para No.	Description of Item Submitted	No. of Copies	Shop Dwg. Catalog Data, Sample, Cert.	Submittal Code	Approval Code
SD-11	1.3	Survey Report	1	Certificate	E	A
		GIS CADD File	1			
		Full Size plot of the CADD File	1			

SUBMITTAL CODES

D - Forwarded to ROICC FOR ACTION
 E - Forwarded to ROICC for Record Purposes

APPROVAL CODES

A - Approved as Submitted
 AN - Approved as Noted

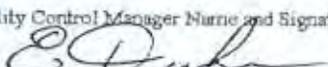
RR - Disapproved, Revise and Resubmit
 NR - Not Reviewed

I hereby certify that the equipment/material/article shown and marked in this submittal is that proposed to be incorporated into this contract, is in compliance with the contract drawings and specifications, and can be installed in the allocated spaces.

Contractor Quality Control Manager Name and Signature

Date

Eric Duke



December 5, 2003

PART 2 - FOR DESIGNER'S USE

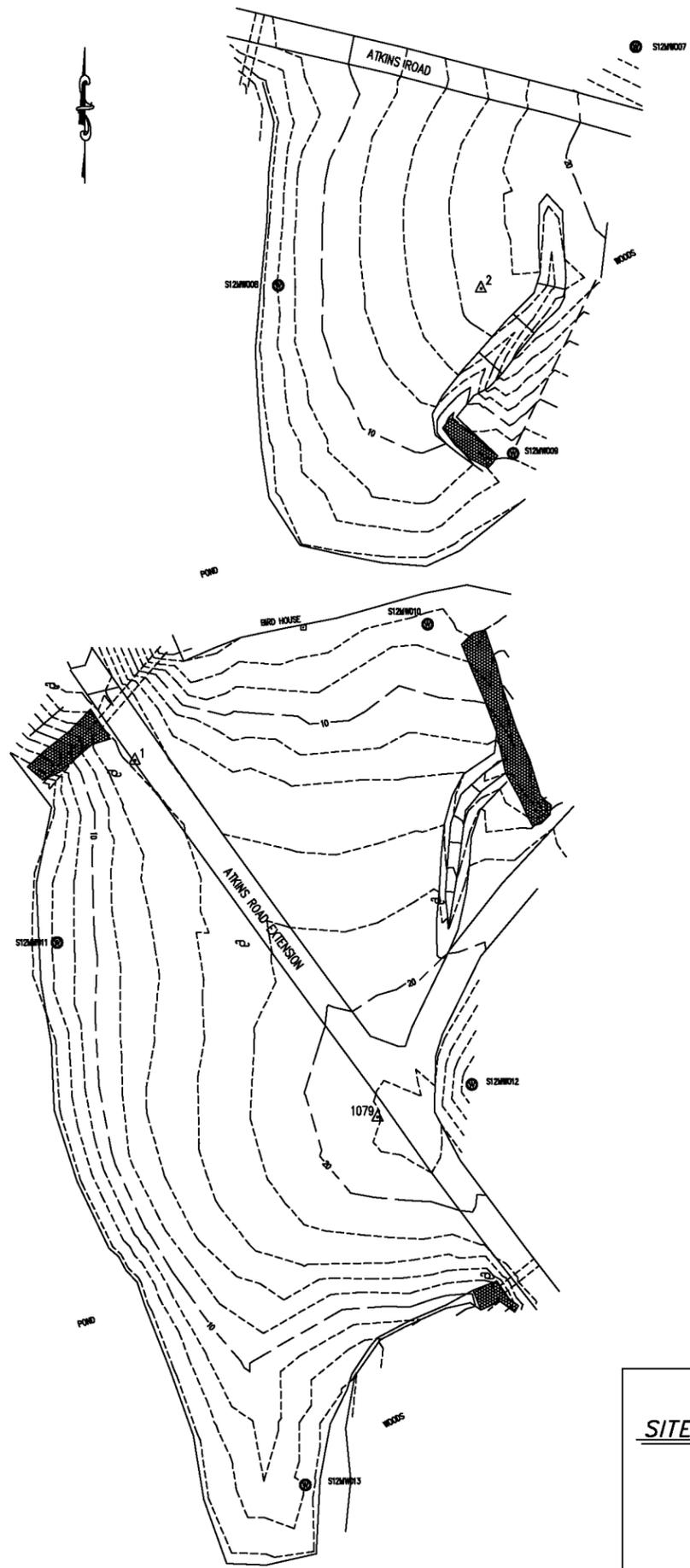
FROM: Tetra Tech NUS, Inc. 600 Clark Ave, Suite 3 King of Prussia, Pa.	TO: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	Retain (1) Copy No. of copies returned
This submittal has been reviewed and Approval Codes completed. Comments (attached) (below) (none):		
Name and Signature NA		Date

PART 3 - FOR ROICC USE

FROM: ROICC Indian Head Division Naval Surface Warfare Center Indian Head, Maryland	TO: Shaw E & I, Inc. 2790 Mosside Boulevard Monroeville, Pa 15146-2972	Copies to: File PM Con Rep No. Returned
Enclosures are returned (See Approval Code in Part 1). The following comments are also made:		
Signature and Title of Approving Authority NA		

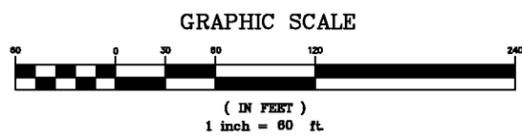
MONITORING WELL SCHEDULE			
WELL	NORTHING	EASTING	PVC ELEVATION (FT NGVD 29)
S12MWD07	333890.19	1260000.48	30.26
S12MWD08	333723.72	1259748.46	9.14
S12MWD09	333605.29	1259913.89	9.00
S12MWD10	333485.81	1259854.20	9.25
S12MWD11	333263.73	1259593.20	9.26
S12MWD12	333163.35	1259885.12	32.28
S12MWD13	332883.52	1259767.63	8.86

TRAVERSE POINTS				
NO.	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	333390.89	1259647.88	16.22	PKNAIL
2	333721.22	1259891.15	17.06	BCS
1079	333141.08	1259818.54	21.84	BCF



LEGEND	
	GROUNDWATER MONITORING WELL
	EXISTING ELEVATION - MINOR
	EXISTING ELEVATION - MAJOR
	RIPRAP

NOTE:
 ORIGINAL HARD COPY IN PROJECT FILE THAT WAS PROVIDED BY KLS CONSULTANTS CONTAINS STATE OF MARYLAND LICENSED SURVEYORS SIGNATURE AND CERTIFYING SEAL.



AS-BUILT		K.L.S. CONSULTANTS, INC. ENGINEERS AND SURVEYORS
SITE 12 - TOWN GUT LANDFILL		
CONTRACT NO. N62470-97-D-5000 TASK ORDER 0062		4401 PHILADELPHIA ROAD BEL AIR, MARYLAND 21015 (410) 734-0445
PREPARED FOR: SHAW ENVIRONMENTAL, INC. 2790 MOSSIDE BOULEVARD MONROEVILLE, PENNSYLVANIA 15146		
INDIAN HEAD DIVISION NAVAL SURFACE WARFARE CENTER		DRAWN: JULIE CAMPBELL
		CHECKED: JOHN A. STALEY
DATE	SCALE	FILE NO.
8/22/03	1"=60'	IH-12

K.L.S. CONSULTANTS, INC.

Telephones
410-734-0445
410-989-0445
410-734-0447 FAX

ENGINEERS & SURVEYORS

4401 Philadelphia Road, Bel Air, MD 21015

Daniel Pringle
Project Manager
Shaw Environmental, Inc.
2790 Mosside Boulevard
Monroeville, Pennsylvania 15146-2792

September 4, 2003

Reference: Indian Head Site 12

Dear Mr. Pringle:

Enclosed herewith is the survey report for the above referenced project. I have included copies of the final drawing for your use.

If you have any comments on the drawing please call me at 410-989-0445. If everything is satisfactory we can run a mylar as specified on the specs.

Sincerely,

A handwritten signature in cursive script, appearing to read "John A. Staley".

John A. Staley,
Vice President

SURVEY REPORT
REMEDIAL ACTION SITE 12-TOWN GUT LANDFILL
INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER
INDIAN HEAD, MARYLAND

CONTRACT NO. N62470-97-D-5000
TASK ORDER 0062

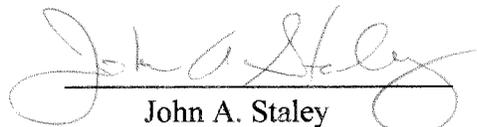
Prepared for:

Shaw Environmental, Inc
2790 Mosside Boulevard
Monroeville, Pennsylvania 15146-2792

Prepared by:

K.L.S. Consultants, Inc.
4401 Philadelphia Road
Bel Air, Maryland 21015

Reviewed by:


John A. Staley
Property Line Surveyor

September 4, 2003

SURVEY REPORT

On July 29, 2003 K.L.S. Consultants, Inc. performed a field run topographical survey to establish the as-built conditions of the remedial action for site 12, Town Gut Landfill located at the Naval Surface Warfare Center, Indianhead, Maryland.

All work was supervised by John Staley, a Maryland licensed surveyor, and principal of K.L.S. Consultants, Inc.

Field work was done using a Sokkia Set 4 Total Station with SDR33 Data Collector. This information was downloaded to an Auto Cadd 2000 file to generate the final as-build drawing.

Field crew personnel were John Staley and Michael West.
CADD draftperson was Julie Campbell.

A hard copy of the field notes and final drawing are enclosed along with an electronic file.

MONITORING WELL SCHEDULE
 SITE 12 INDIANHEAD NSWC
 JULY 29, 2003
 NGVD 29

PT#	NORTH	EAST	ELEVATION	DESCRIPTION
1260	333890.19	1260000.48	30.26 30.71 28.33	S12MW007 PVC TOC GR
1328	333723.72	1259748.46	9.14 9.80 6.18	S12MW008 PVC TOC GR
1256	333605.29	1259913.89	9.00 9.36 6.30	S12MW009 PVC TOC GR
1232	333485.81	1259854.20	9.25 9.79 6.97	S12MW010 PVC TOC GR
1088	333263.73	1259593.20	9.26 9.75 6.54	S12MW011 PVC TOC GR
1144	333163.35	1259885.12	32.28 32.75 30.20	S12MW012 PVC TOC GR
1065	332883.52	1259767.63	8.86 9.25 6.08	S12MW013 PVC TOC CONC

al # 022229

THEODOLITE
 <No Text> Serial # 000000 M
 ount: Not Applic
 VA: ZENITH off <Null>
 Ref off <Null>
 Prism constant: 0.00000000
 17 NOTE ==> P.C. mm Applied: 0.000
 18 STN TP 1079 N 333141.079 E 1259818.54 Z
 21.8400000
 Theo 5.83000000 Code: BCF
 19 NOTE ==> Jul-29-03 09:37
 20 NOTE ==> EDM tol. error: Pt: 1078 0.2684
 21 NOTE ==> V.obs tol. error: Pt: 1078 0-28'41"
 22 BKB TP 1079-1078 AZ 323.959428 HA 0.00000000
 23 TARGET HT. NM 7.00000000
 24 OBS F1 1079-1078 D 482.220000 VA 89.1463888 HA
 0.00000000
 Code: 0000BCF
 25 OBS F1 1079-1000 D 482.170000 VA 89.1461111 HA
 0.00000000
 Code: 0000BCF
 26 TARGET HT. NM 5.17000000
 27 OBS F1 1079-1001 D 380.230000 VA 90.3916666 HA
 1.41305556
 Code: 5556ER
 28 OBS F1 1079-1002 D 317.830000 VA 91.0925000 HA
 1.42944444
 Code: 4444ER
 29 OBS F1 1079-1003 D 256.370000 VA 91.4894444 HA
 1.70388889
 Code: 8889ER
 30 OBS F1 1079-1004 D 194.120000 VA 91.7713888 HA
 2.26000000
 Code: 0000ER
 31 OBS F1 1079-1005 D 132.700000 VA 91.8952777 HA
 3.27361111
 Code: 1111ER
 32 OBS F1 1079-1006 D 71.1900000 VA 91.9341666 HA
 6.27194444
 Code: 4444ER
 33 OBS F1 1079-1007 D 10.7100000 VA 91.3691666 HA
 52.6052777
 Code: 2777ER NMAC

34	OBS	F1	1079-1008	D	53.5900000	VA	90.4900000	HA
171.805555								
Code: 5555ER								
35	OBS	F1	1079-1009	D	115.700000	VA	92.0808333	HA
175.686666								
Code: 6666ER								
36	OBS	F1	1079-1010	D	145.650000	VA	91.9105555	HA
176.164444								
Code: 4444ER LOW								
37	OBS	F1	1079-1011	D	17.5200000	VA	91.1844444	HA
176.448333								
Code: 8333ER								
38	OBS	F1	1079-1012	D	174.350000	VA	90.9991666	HA
173.114444								
Code: 4444CL								
39	NOTE	===>	Jul-29-03	09:47				
40	OBS	F1	1079-1013	D	155.670000	VA	91.4216666	HA
172.543333								
Code: 3333CL								
41	OBS	F1	1079-1014	D	118.300000	VA	91.8019444	HA
170.716111								
Code: 6111CL								
42	OBS	F1	1079-1015	D	29.4300000	VA	88.5569444	HA
140.347222								
Code: 7222CL								
43	OBS	F1	1079-1016	D	98.3800000	VA	91.6844444	HA
10.5216666								
Code: 6666CL								
44	OBS	F1	1079-1017	D	215.210000	VA	91.6075000	HA
4.73222222								
Code: 2222CL								
45	OBS	F1	1079-1018	D	355.610000	VA	90.7008333	HA
3.08111111								
Code: 1111CL N MAC								
46	OBS	F1	1079-1019	D	389.730000	VA	90.2141666	HA
2.97722222								
Code: 2222CL								
47	TARGET	HT.	NM		11.0000000			
48	OBS	F1	1079-1020	D	482.150000	VA	89.1463888	HA
359.998333								
Code: 8333BCF 1078								
49	NOTE	===>	BAD ROD ON BS					
50	TARGET	HT.	NM		5.17000000			
51	OBS	F1	1079-1021	D	385.480000	VA	90.3652777	HA
4.59472222								
Code: 2222ER								
52	OBS	F1	1079-1022	D	351.910000	VA	90.8502777	HA

4.92583333

53 OBS F1 1079-1023 Code: 3333ER NM
 D 288.160000 VA 91.3113888 HA
 5.78555556

54 OBS F1 1079-1024 Code: 5556ER
 D 226.470000 VA 91.6450000 HA
 7.19666667

55 OBS F1 1079-1025 Code: 6667ER
 D 164.260000 VA 91.7413888 HA
 9.94388889

56 OBS F1 1079-1026 Code: 8889ER
 D 104.390000 VA 91.8375000 HA
 15.8688888

Code: 8888ER
 57 NOTE ==> Jul-29-03 09:57

58 OBS F1 1079-1027 D 57.0200000 VA 91.9130555 HA
 30.7255555

Code: 5555ER
 59 OBS F1 1079-1028 D 51.5800000 VA 91.0325000 HA
 52.0938888

Code: 8888ER NM
 60 OBS F1 1079-1029 D 53.4500000 VA 90.7547222 HA
 57.3711111

Code: 1111ER
 61 OBS F1 1079-1030 D 67.0000000 VA 90.9338888 HA
 56.9213888

Code: 3888ER
 62 OBS F1 1079-1031 D 126.840000 VA 91.1538888 HA
 59.3791666

Code: 1666ER
 63 OBS F1 1079-1032 D 185.650000 VA 90.9491666 HA
 64.1886111

Code: 6111ER
 64 OBS F1 1079-1033 D 257.290000 VA 91.1269444 HA
 68.3652777

Code: 2777ER
 65 OBS F1 1079-1034 D 253.840000 VA 91.1616666 HA
 72.8019444

Code: 9444ER
 66 OBS F1 1079-1035 D 195.250000 VA 91.1222222 HA
 71.0902777

Code: 2777ER
 67 OBS F1 1079-1036 D 133.650000 VA 91.0119444 HA
 68.7538888

Code: 8888ER
 68 OBS F1 1079-1037 D 73.6600000 VA 90.9172222 HA
 74.1655555

Code: 5555ER

69	OBS	F1	1079-1038	D	59.4500000	VA	90.9172222	HA
79.4336111								
				Code: 6111ER				
70	OBS	F1	1079-1039	D	39.9900000	VA	90.1863888	HA
120.263333								
				Code: 3333ER				
71	OBS	F1	1079-1040	D	65.2400000	VA	91.2941666	HA
153.597500								
				Code: 7500ER				
72	OBS	F1	1079-1041	D	142.520000	VA	91.6783333	HA
167.786111								
				Code: 6111ER				
73	OBS	F1	1079-1042	D	176.540000	VA	91.0250000	HA
169.748888								
				Code: 8888ER				
74	OBS	F1	1079-1043	D	165.150000	VA	92.4763888	HA
179.218055								
				Code: 8055RR				
75	OBS	F1	1079-1044	D	167.130000	VA	92.5263888	HA
180.808611								
				Code: 8611RR				
76	OBS	F1	1079-1045	D	156.430000	VA	93.7027777	HA
180.241111								
				Code: 1111RR HW				
77	OBS	F1	1079-1046	D	142.150000	VA	92.9952777	HA
180.170555								
				Code: 0555RR HW				
78	TARGET	HT.	NM		8.00000000			
79	OBS	F1	1079-1047	D	153.440000	VA	93.1986111	HA
187.841666								
				Code: 1666RR				
80	NOTE	===>	1046 R8.0					
81	OBS	F1	1079-1048	D	138.890000	VA	93.8158333	HA
187.144166								
				Code: 4166RR				
82	NOTE	===>	Jul-29-03 10:07					
83	OBS	F1	1079-1049	D	145.830000	VA	94.2213888	HA
189.532777								
				Code: 2777BB				
84	OBS	F1	1079-1050	D	142.660000	VA	94.4827777	HA
196.367500								
				Code: 7500BB				
85	OBS	F1	1079-1051	D	148.550000	VA	94.6419444	HA
208.674722								
				Code: 4722BB				
86	OBS	F1	1079-1052	D	156.710000	VA	94.9602777	HA
215.391388								

87	OBS	F1	1079-1053	Code: 1388BB			
221.144722				D 182.820000	VA 94.9616666	HA	
88	OBS	F1	1079-1054	Code: 4722BB			
221.973055				D 219.760000	VA 94.2119444	HA	
89	OBS	F1	1079-1055	Code: 3055BB			
220.313611				D 255.410000	VA 93.6133333	HA	
90	OBS	F1	1079-1056	Code: 3611BB			
220.502777				D 291.410000	VA 93.2213888	HA	
91	OBS	F1	1079-1057	Code: 2777BB			
10.0000000				D 142.860000	VA 93.6750000	HA	
92	OBS	F1	1079-1058	Code: 0000BB			
195.961944				D 140.380000	VA 93.7488888	HA	
93	OBS	F1	1079-1059	Code: 1944BB			
207.062500				D 144.540000	VA 93.8336111	HA	
94	OBS	F1	1079-1060	Code: 2500BB			
217.950555				D 161.310000	VA 94.4650000	HA	
95	OBS	F1	1079-1061	Code: 0555BB			
222.519166				D 192.920000	VA 94.1680555	HA	
96	TARGET	HT.	NM	Code: 9166BB			
97	NOTE	===>	Jul-29-03 10:17	10.0000000			
98	OBS	F1	1079-1062	D 218.050000	VA 93.8600000	HA	
224.856388							
99	NOTE	===>	THISSIDE	Code: 6388BB			
			BB	10.00			
100	OBS	F1	1079-1063	D 257.300000	VA 93.2383333	HA	
225.113055							
101	TARGET	HT.	NM	Code: 3055BB			
102	OBS	F1	1079-1064	5.17000000			
227.362222				D 263.090000	VA 93.5786111	HA	
103	OBS	F1	1079-1065	Code: 2222WELL CONC			
227.220277				D 262.890000	VA 92.9750000	HA	
104	OBS	F1	1079-1066	Code: 0277WELL PVC			
227.203611				D 262.760000	VA 92.8894444	HA	
				Code: 3611WELL TC			

105	TARGET	HT. NM	10.0000000			
106	OBS	F1 1079-1067	D 309.160000	VA 92.5819444	HA	
224.091388						
			Code: 1388POND			
107	OBS	F1 1079-1068	D 323.720000	VA 92.5297222	HA	
230.081388						
			Code: 1388POND			
108	OBS	F1 1079-1069	D 330.410000	VA 92.4750000	HA	
234.808055						
			Code: 8055POND			
109	NOTE	====> 292 LIMIT				
110	OBS	F1 1079-1070	D 294.740000	VA 92.7247222	HA	
240.580555						
			Code: 0555POND			
111	OBS	F1 1079-1071	D 258.230000	VA 93.1277777	HA	
246.199722						
			Code: 9722POND			
112	OBS	F1 1079-1072	D 229.920000	VA 93.5188888	HA	
255.597222						
			Code: 7222POND			
113	OBS	F1 1079-1073	D 210.820000	VA 93.8697222	HA	
267.238333						
			Code: 8333POND			
114	OBS	F1 1079-1074	D 205.370000	VA 93.9844444	HA	
271.666388						
			Code: 6388POND			
115	OBS	F1 1079-1075	D 207.580000	VA 93.9247222	HA	
274.785000						
			Code: 5000POND			
116	OBS	F1 1079-1076	D 207.210000	VA 93.9363888	HA	
277.834166						
			Code: 4166POND			
117	OBS	F1 1079-1077	D 210.690000	VA 93.9044444	HA	
280.050000						
			Code: 0000POND			
118	OBS	F1 1079-1080	D 216.540000	VA 93.7688888	HA	
294.010000						
			Code: 0000POND			
119	OBS	F1 1079-1081	D 228.000000	VA 93.6391666	HA	
307.275000						
			Code: 5000POND			
120	OBS	F1 1079-1082	D 235.580000	VA 93.5013888	HA	
318.588888						
			Code: 8888POND			
121	OBS	F1 1079-1083	D 255.560000	VA 92.9000000	HA	
327.901666						
			Code: 1666POND			
122	NOTE	====> Jul-29-03 10:28				

123	TARGET HT. NM	5.17000000			
124	OBS F1 1079-1084	D 256.880000	VA 93.4661111	HA	
334.513888					
		Code: 3888WELL			
125	OBS F1 1079-1085	D 256.890000	VA 92.8827777	HA	
334.595833					
		Code: 5833WELL PVC			
126	OBS F1 1079-1086	D 257.060000	VA 92.7697222	HA	
334.595833					
		Code: 5833WELL TC			
127	NOTE ==> DELETE LAST 3				
128	OBS F1 1079-1087	D 256.870000	VA 93.5633333	HA	
334.495000					
		Code: 5000WELL GR			
129	OBS F1 1079-1088	D 256.900000	VA 92.9533333	HA	
334.600555					
		Code: 0555WELL PVC			
130	OBS F1 1079-1089	D 257.010000	VA 92.8441666	HA	
334.587500					
		Code: 7500WELL TC			
131	TARGET HT. NM	10.0000000			
132	OBS F1 1079-1090	D 290.800000	VA 92.6088888	HA	
340.300000					
		Code: 0000POND			
133	OBS F1 1079-1091	D 315.840000	VA 92.5616666	HA	
349.446111					
		Code: 6111POND			
134	NOTE ==> Jul-29-03 10:41				
135	OBS F1 1079-1092	D 323.910000	VA 91.5950000	HA	
354.280000					
		Code: 0000G			
136	OBS F1 1079-1093	D 296.530000	VA 91.8616666	HA	
351.362222					
		Code: 2222G			
137	OBS F1 1079-1094	D 269.450000	VA 92.0194444	HA	
344.016944					
		Code: 6944G			
138	OBS F1 1079-1095	D 237.820000	VA 92.1288888	HA	
335.632222					
		Code: 2222G			
139	OBS F1 1079-1096	D 213.070000	VA 92.1250000	HA	
325.538611					
		Code: 8611G			
140	OBS F1 1079-1097	D 199.190000	VA 92.2472222	HA	
313.367777					
		Code: 7777G			

141	OBS	F1	1079-1098	D	180.640000	VA	91.9344444	HA
296.143333								
				Code: 3333G				
142	OBS	F1	1079-1099	D	176.020000	VA	92.1113888	HA
280.527777								
				Code: 7777G				
143	OBS	F1	1079-1100	D	184.250000	VA	92.5241666	HA
265.148055								
				Code: 8055G				
144	OBS	F1	1079-1101	D	204.840000	VA	92.6977777	HA
252.260555								
				Code: 0555G				
145	OBS	F1	1079-1102	D	236.940000	VA	92.5016666	HA
242.459444								
				Code: 9444G				
146	OBS	F1	1079-1103	D	267.770000	VA	92.0708333	HA
233.452222								
				Code: 2222G				
147	OBS	F1	1079-1104	D	298.180000	VA	92.2958333	HA
226.848611								
				Code: 8611G				
148	OBS	F1	1079-1105	D	256.110000	VA	92.7991666	HA
227.167222								
				Code: 7222G				
149	OBS	F1	1079-1106	D	225.800000	VA	92.3150000	HA
235.114722								
				Code: 4722G				
150	OBS	F1	1079-1107	D	195.370000	VA	92.1688888	HA
244.440833								
				Code: 0833G				
151	OBS	F1	1079-1108	D	171.190000	VA	91.8819444	HA
256.777777								
				Code: 7777G				
152	TARGET	HT.	NM		5.17000000			
153	OBS	F1	1079-1109	D	155.130000	VA	93.2036111	HA
271.811388								
				Code: 1388G				
154	OBS	F1	1079-1110	D	151.270000	VA	93.0480555	HA
289.387500								
				Code: 7500G				
155	OBS	F1	1079-1111	D	160.590000	VA	92.9283333	HA
308.151111								
				Code: 1111G				
156	OBS	F1	1079-1112	D	178.040000	VA	92.9741666	HA
323.337500								
				Code: 7500G				
157	OBS	F1	1079-1113	D	203.510000	VA	92.8002777	HA
336.046111								
				Code: 6111G				

158	OBS	F1	1079-1114	D	237.020000	VA	92.3897222	HA
345.394166								
Code: 4166G								
159	NOTE	===>	Jul-29-03	10:51				
160	OBS	F1	1079-1115	D	276.950000	VA	92.3333333	HA
351.726944								
Code: 6944G								
161	OBS	F1	1079-1116	D	329.860000	VA	92.0486111	HA
355.871388								
Code: 1388G								
162	OBS	F1	1079-1117	D	327.850000	VA	91.5072222	HA
358.178611								
Code: 8611G								
163	OBS	F1	1079-1118	D	281.940000	VA	91.6530555	HA
357.068333								
Code: 8333G								
164	OBS	F1	1079-1119	D	236.240000	VA	91.8294444	HA
355.088333								
Code: 8333G								
165	OBS	F1	1079-1120	D	190.810000	VA	92.0172222	HA
352.125000								
Code: 5000G								
166	OBS	F1	1079-1121	D	143.620000	VA	92.2225000	HA
347.368333								
Code: 8333G								
167	OBS	F1	1079-1122	D	100.270000	VA	92.4547222	HA
340.059444								
Code: 9444G								
168	OBS	F1	1079-1123	D	61.6700000	VA	92.6030555	HA
322.665000								
Code: 5000G								
169	OBS	F1	1079-1124	D	59.0900000	VA	92.9416666	HA
275.476388								
Code: 6388G								
170	OBS	F1	1079-1125	D	69.4500000	VA	92.6683333	HA
238.798611								
Code: 8611G								
171	OBS	F1	1079-1126	D	96.4400000	VA	93.2233333	HA
214.002777								
Code: 2777G								
172	OBS	F1	1079-1127	D	123.130000	VA	94.6188888	HA
205.453333								
Code: 3333G								
173	OBS	F1	1079-1128	D	114.760000	VA	93.7897222	HA
190.893055								
Code: 3055G								
174	TARGET	HT.	NM		8.20000000			
175	OBS	F1	1079-1129	D	135.460000	VA	92.8844444	HA

181.303333

		Code: 3333POLE		
176	TARGET HT. NM	5.17000000		
177	OBS F1 1079-1130	D 113.420000	VA 93.1622222	HA
242.187222				
		Code: 7222G		
178	OBS F1 1079-1131	D 122.710000	VA 92.8497222	HA
258.809722				
		Code: 9722G		
179	OBS F1 1079-1132	D 125.190000	VA 92.8716666	HA
277.144722				
		Code: 4722G		
180	OBS F1 1079-1133	D 131.470000	VA 92.9105555	HA
295.382222				
		Code: 2222G		
181	NOTE ==> Jul-29-03 11:01			
182	OBS F1 1079-1134	D 93.9100000	VA 92.3075000	HA
181.396111				
		Code: 6111G		
183	OBS F1 1079-1135	D 53.8000000	VA 91.7072222	HA
186.427222				
		Code: 7222G		
184	OBS F1 1079-1136	D 17.1100000	VA 89.3747222	HA
181.700833				
		Code: 0833SIGN		
185	OBS F1 1079-1137	D <Null>	VA 0.00000000	HA
308.367777				
		Code: 7777SIGN		
186	NOTE ==> POLE			
187	OBS F1 1079-1138	D 117.490000	VA 92.1650000	HA
359.664166				
		Code: 4166SIGN		
188	OBS F1 1079-1139	D 154.520000	VA 91.9238888	HA
357.973888				
		Code: 3888POLE		
189	OBS F1 1079-1140	D 158.120000	VA 92.2677777	HA
355.165833				
		Code: 5833GUY		
190	OBS F1 1079-1141	D 214.710000	VA 91.7886111	HA
358.357222				
		Code: 7222G		
191	OBS F1 1079-1142	D 303.810000	VA 91.4691666	HA
358.478611				
		Code: 8611POLE		
192	NOTE ==> Jul-29-03 11:16			
193	OBS F1 1079-0001	D 302.610000	VA 91.1766666	HA

1.70222222
 194 OBS F1 1079-1143 Code: 2222PK
 107.016666 D 70.3700000 VA 83.7161111 HA

195 OBS F1 1079-1144 Code: 6666WELL GR
 107.546666 D 70.8900000 VA 82.0700000 HA

196 OBS F1 1079-1145 Code: 6666WELL PVC
 107.444722 D 70.9600000 VA 81.6922222 HA

197 STN TP 0001 Code: 4722WELL TC
 16.2858238 N 333390.898 E 1259647.88 Z

Theo 5.68000000 Code: PK

198 NOTE ==> EDM tol. error: Pt: 1079 0.0218

199 NOTE ==> V.obs tol. error: Pt: 1079 0-01'09"

200 BKB TP 0001-1079 AZ 145.661650 HA 0.00000000
 201 OBS F1 0001-1079 D 302.610000 VA 89.0255555 HA
 0.00000000

Code: 0000BCF
 202 NOTE ==> Jul-29-03 11:27

203 OBS F1 0001-1146 D 23.0200000 VA 92.9388888 HA
 164.873888

Code: 3888RR
 204 OBS F1 0001-1147 D 32.3500000 VA 95.1344444 HA
 144.509166

Code: 9166RR
 205 OBS F1 0001-1148 D 54.4400000 VA 99.7494444 HA
 115.468333

Code: 8333RR TP
 206 TARGET HT. NM 8.40000000
 207 OBS F1 0001-1149 D 65.9800000 VA 100.796111 HA
 108.271388

Code: 1388INV 60 STL P
 208 TARGET HT. NM 5.17000000
 209 OBS F1 0001-1150 D 67.7100000 VA 101.665277 HA
 112.377777

Code: 7777RR
 210 OBS F1 0001-1151 D 76.7500000 VA 100.114444 HA
 120.801666

Code: 1666RR
 211 OBS F1 0001-1152 D 65.1200000 VA 98.8272222 HA
 129.878888

Code: 8888RR
 212 OBS F1 0001-1153 D 57.8900000 VA 100.023055 HA

126.106666

213	OBS	F1	0001-1154	Code: 6666RR CL			
148.596111				D 50.2700000	VA 94.6477777		HA
214	OBS	F1	0001-1155	Code: 6111RR			
173.092777				D 47.4700000	VA 90.2238888		HA
215	OBS	F1	0001-1156	Code: 2777RR			
159.479444				D 36.9800000	VA 94.0152777		HA
216	OBS	F1	0001-1157	Code: 9444RR CL			
127.481111				D 88.6900000	VA 98.3375000		HA
217	OBS	F1	0001-1158	Code: 1111POND			
137.452500				D 76.1600000	VA 96.0858333		HA
218	OBS	F1	0001-1159	Code: 2500EW			
160.592777				D 62.7100000	VA 90.0205555		HA
219	OBS	F1	0001-1160	Code: 2777EW			
166.340277				D 78.1100000	VA 89.1597222		HA
220	TARGET	HT.	NM	Code: 0277POLE			
				11.0000000			
221	OBS	F1	0001-1161	D 180.470000	VA 85.9044444		HA
175.381388							
222	NOTE	==>	Jul-29-03 11:38	Code: 13881078			
223	TARGET	HT.	NM	5.17000000			
224	OBS	F1	0001-1162	D 62.5900000	VA 96.3497222		HA
228.673611							
225	TARGET	HT.	NM	Code: 3611POS			
				8.70000000			
226	OBS	F1	0001-1163	D 77.8400000	VA 96.7561111		HA
240.663611							
227	TARGET	HT.	NM	Code: 3611C-POND			
				5.17000000			
228	OBS	F1	0001-1164	D 97.9800000	VA 97.7861111		HA
249.968611							
229	OBS	F1	0001-1165	Code: 8611POND			
255.426111				D 114.970000	VA 96.3327777		HA
230	OBS	F1	0001-1166	Code: 6111POND			
262.905000				D 140.120000	VA 95.0863888		HA
231	OBS	F1	0001-1167	Code: 5000POND			
266.167500				D 150.820000	VA 94.2983333		HA

232	OBS	F1	0001-1168	Code: 7500BIRDHSE			
269.252222				D 173.450000	VA	94.1161111	HA
233	OBS	F1	0001-1169	Code: 2222POND			
272.181944				D 203.210000	VA	93.5486111	HA
234	OBS	F1	0001-1170	Code: 1944POND			
274.452500				D 234.630000	VA	93.0211111	HA
235	OBS	F1	0001-1171	Code: 2500POND			
276.591944				D 263.830000	VA	92.6586111	HA
236	OBS	F1	0001-1172	Code: 1944POND			
278.714444				D 274.580000	VA	92.6358333	HA
237	OBS	F1	0001-1173	Code: 4444DITCH .5			
280.715277				D 270.720000	VA	92.6197222	HA
238	OBS	F1	0001-1174	Code: 5277DITCH .5			
282.668888				D 261.540000	VA	92.5669444	HA
239	OBS	F1	0001-1175	Code: 8888DITCH .5			
283.987500				D 262.610000	VA	92.3375000	HA
240	OBS	F1	0001-1176	Code: 7500CRR			
283.811111				D 254.240000	VA	92.5472222	HA
241	OBS	F1	0001-1177	Code: 1111RRCL			
284.885555				D 243.660000	VA	92.2150000	HA
242	OBS	F1	0001-1178	Code: 5555CRR			
289.230833				D 245.130000	VA	91.9719444	HA
243	OBS	F1	0001-1179	Code: 0833RR			
289.354166				D 254.470000	VA	92.2197222	HA
244	OBS	F1	0001-1180	Code: 4166RR CL			
289.354444				D 262.980000	VA	91.7597222	HA
245	OBS	F1	0001-1181	Code: 4444RR			
293.645833				D 263.610000	VA	91.4063888	HA
246	OBS	F1	0001-1182	Code: 5833RR			
294.000555				D 256.480000	VA	91.8413888	HA
247	OBS	F1	0001-1183	Code: 0555RRCL			
294.271111				D 249.000000	VA	91.5969444	HA
				Code: 1111RR			

248	OBS	F1	0001-1184	D	255.190000	VA	91.2458333	HA
299.969444								
				Code: 9444RR				
249	OBS	F1	0001-1185	D	263.550000	VA	91.5511111	HA
299.791111								
				Code: 1111RRCL				
250	NOTE	===>	Jul-29-03	11:48				
251	OBS	F1	0001-1186	D	268.870000	VA	91.1313888	HA
299.669444								
				Code: 9444RR				
252	OBS	F1	0001-1187	D	277.620000	VA	90.9352777	HA
304.354166								
				Code: 4166RR				
253	OBS	F1	0001-1188	D	270.530000	VA	91.3327777	HA
305.132777								
				Code: 2777RR CL				
254	OBS	F1	0001-1189	D	260.700000	VA	91.0386111	HA
306.319166								
				Code: 9166RR				
255	OBS	F1	0001-1190	D	257.050000	VA	91.3147222	HA
305.784444								
				Code: 4444CL SW				
256	OBS	F1	0001-1191	D	244.930000	VA	90.9480555	HA
309.376388								
				Code: 6388BB				
257	OBS	F1	0001-1192	D	240.050000	VA	90.9647222	HA
308.998888								
				Code: 8888CL ST				
258	OBS	F1	0001-1193	D	235.050000	VA	90.7930555	HA
312.994722								
				Code: 4722BB				
259	OBS	F1	0001-1194	D	232.680000	VA	90.3972222	HA
318.692777								
				Code: 2777CL ST				
260	OBS	F1	0001-1195	D	239.470000	VA	90.2761111	HA
322.555000								
				Code: 5000BB				
261	OBS	F1	0001-1196	D	240.520000	VA	89.9675000	HA
326.877500								
				Code: 7500CL ST				
262	OBS	F1	0001-1197	D	249.280000	VA	89.7422222	HA
332.113333								
				Code: 3333BB				
263	OBS	F1	0001-1198	D	255.780000	VA	89.3533333	HA
336.621666								
				Code: 1666CL SW				
264	OBS	F1	0001-1199	D	245.620000	VA	89.6447222	HA
333.075833								

265	OBS	F1	0001-1200	Code: 5833BB			
327.924444				D 237.940000	VA 89.9411111	HA	
266	OBS	F1	0001-1201	Code: 4444BB			
322.286666				D 230.980000	VA 90.2661111	HA	
267	OBS	F1	0001-1202	Code: 6666BB			
315.596944				D 226.350000	VA 90.5744444	HA	
268	OBS	F1	0001-1203	Code: 6944BB			
310.288055				D 230.580000	VA 90.9761111	HA	
269	OBS	F1	0001-1204	Code: 8055BB			
306.398611				D 245.980000	VA 91.0922222	HA	
270	OBS	F1	0001-1205	Code: 8611BB			
309.989722				D 271.700000	VA 90.8308333	HA	
271	OBS	F1	0001-1206	Code: 9722RR			
309.817777				D 280.880000	VA 91.0477777	HA	
272	OBS	F1	0001-1207	Code: 7777CL			
309.329444				D 286.200000	VA 90.6883333	HA	
273	OBS	F1	0001-1208	Code: 9444RR			
310.033888				D 290.460000	VA 90.4072222	HA	
274	OBS	F1	0001-1209	Code: 3888RR			
310.490833				D 294.230000	VA 90.2194444	HA	
275	OBS	F1	0001-1210	Code: 0833RR			
311.787222				D 294.160000	VA 90.0608333	HA	
276	OBS	F1	0001-1211	Code: 7222RR			
313.095833				D 289.150000	VA 90.0611111	HA	
277	OBS	F1	0001-1212	Code: 5833RR			
313.682777				D 283.240000	VA 90.1780555	HA	
278	NOTE	===>	Jul-29-03 11:58	Code: 2777RR			
279	OBS	F1	0001-1213	D 279.420000	VA 90.5530555	HA	
312.621944							
280	TARGET	HT.	NM	Code: 1944RR			
281	OBS	F1	0001-1214	7.40000000			
311.357777				D 286.510000	VA 90.6822222	HA	
				Code: 777724	CSP		

HA	VA 90.7611111	D 261.830000	5.17000000	282	TARGET HT. NM	283	OBS FI 0001-1215	307.631944
HA	VA 90.1197222	D 245.000000	Code: 1944TB	284	OBS FI 0001-1216	312.563333	285	OBS FI 0001-1217
HA	VA 90.0050000	D 242.470000	Code: 3333TB	286	OBS FI 0001-1218	317.177777	287	OBS FI 0001-1219
HA	VA 89.7230555	D 246.010000	Code: 7777TB	288	OBS FI 0001-1220	321.482777	289	OBS FI 0001-1221
HA	VA 89.5169444	D 250.440000	Code: 2777TB	290	OBS FI 0001-1222	325.926666	291	OBS FI 0001-1223
HA	VA 89.4894444	D 240.600000	Code: 6944TB	292	OBS FI 0001-1224	332.597777	293	OBS FI 0001-1225
HA	VA 89.3041666	D 252.650000	Code: 3611TB	294	OBS FI 0001-1226	337.096944	295	OBS FI 0001-1227
HA	VA 89.4894444	D 240.600000	Code: 6944TB	296	OBS FI 0001-1228	332.597777	297	OBS FI 0001-1229
HA	VA 89.7027777	D 232.340000	Code: 7777TB	298	OBS FI 0001-1229	327.365555	299	OBS FI 0001-1230
HA	VA 89.9700000	D 225.560000	Code: 5555TB	303	OBS FI 0001-1228	321.821388		
HA	VA 90.1897222	D 221.950000	Code: 1388TB	306	OBS FI 0001-1227	316.036944		
HA	VA 90.5152777	D 224.430000	Code: 6944TB	310	OBS FI 0001-1226	310.646666		
HA	VA 90.6613888	D 231.330000	Code: 6666TB	306	OBS FI 0001-1227	306.683611		
HA	VA 90.7500000	D 252.790000	Code: 3611TB	303	OBS FI 0001-1228	303.171666		
HA	VA 92.4022222	D 288.720000	Code: 1666TB	297	NOTE ==> Jul-29-03 12:10			
HA	VA 92.1536111	D 277.940000	Code: 8055EWT	298	OBS FI 0001-1229	280.578055		
HA				299	OBS FI 0001-1230			

283.697222

Code: 7222G
 300 OBS F1 0001-1231 D 226.860000 VA 92.4641666 HA
 279.492777

Code: 2777WELL GR
 301 OBS F1 0001-1232 D 227.230000 VA 91.8850000 HA
 279.634166

Code: 4166WELL PVC
 302 OBS F1 0001-1233 D 227.280000 VA 91.7494444 HA
 279.634166

Code: 4166WELL TC
 303 OBS F1 0001-1234 D 198.810000 VA 92.6325000 HA
 279.080555

Code: 0555G
 304 OBS F1 0001-1235 D 193.150000 VA 92.0644444 HA
 287.470833

Code: 0833G
 305 OBS F1 0001-1236 D 192.850000 VA 91.4761111 HA
 297.558055

Code: 8055G
 306 OBS F1 0001-1237 D 192.910000 VA 90.8472222 HA
 307.165555

Code: 5555G
 307 OBS F1 0001-1238 D 199.920000 VA 90.3272222 HA
 316.390000

Code: 0000G
 308 OBS F1 0001-1239 D 216.430000 VA 89.8636111 HA
 323.920833

Code: 0833G
 309 OBS F1 0001-1240 D 234.510000 VA 89.6027777 HA
 329.166666

Code: 6666POLE
 310 OBS F1 0001-1241 D 217.670000 VA 89.4900000 HA
 339.668611

Code: 8611G
 311 OBS F1 0001-1242 D 191.960000 VA 89.8272222 HA
 336.096111

Code: 6111G
 312 OBS F1 0001-1243 D 164.540000 VA 90.1108333 HA
 331.315277

Code: 5277G
 313 OBS F1 0001-1244 D 136.290000 VA 90.7008333 HA
 324.453611

Code: 3611G
 314 OBS F1 0001-1245 D 111.220000 VA 91.2986111 HA
 314.891388

Code: 1388G
 315 OBS F1 0001-1246 D 89.7800000 VA 92.2116666 HA
 301.525833

316	OBS F1 0001-1247	Code: 5833G			
282.898888		D 73.8800000	VA 94.5847222	HA	
317	OBS F1 0001-1248	Code: 8888G			
253.225555		D 65.5400000	VA 98.9344444	HA	
318	TARGET HT. NM	Code: 5555G			
		11.6000000			
319	OBS F1 0001-1249	D 80.7200000	VA 96.9019444	HA	
228.802777					
320	NOTE ==> ROD 11.9	Code: 2777INV 6 ST-P			
321	NOTE ==> Jul-29-03 12:20				
322	TARGET HT. NM	5.17000000			
323	OBS F1 0001-1250	D 40.6600000	VA 95.7322222	HA	
257.211944					
324	OBS F1 0001-1251	Code: 1944G			
320.774444		D 72.0000000	VA 91.3063888	HA	
325	OBS F1 0001-1252	Code: 4444G			
336.836666		D 129.860000	VA 90.1877777	HA	
326	OBS F1 0001-1253	Code: 6666G			
343.266944		D 190.370000	VA 89.6225000	HA	
327	OBS F1 0001-1254	Code: 6944G			
346.819444		D 251.330000	VA 89.1730555	HA	
328	NOTE ==> Jul-29-03 12:33	Code: 9444G			
329	OBS F1 0001-0002	D 410.230000	VA 89.9322222	HA	
250.708333					
330	OBS F1 0001-1255	Code: 8333BCS			
265.395555		D 341.970000	VA 91.7466666	HA	
331	OBS F1 0001-1256	Code: 5555WELL GR			
265.471111		D 341.740000	VA 91.2952777	HA	
332	OBS F1 0001-1257	Code: 1111MW-09			
265.471111		D 342.020000	VA 91.2347222	HA	
333	STN TP 0002	Code: 1111MW-09 TC			
17.2811033		N 333721.217	E 1259891.15	Z	
		Theo 5.50000000	Code: BCS		

334 NOTE ==> Jul-29-03 12:44

335 NOTE ==> EDM tol. error: Pt: 0001 0.0519

336 NOTE ==> V.obs tol. error: Pt: 0001 0-01'23"

337 BKB TP 0002-0001 AZ 216.369983 HA 0.00472222
 338 OBS F1 0002-0001 D 410.180000 VA 90.1619444 HA
 0.00472222
 Code: 2222PK

339 OBS F1 0002-1258 D 584.480000 VA 89.5611111 HA
 330.761111
 Code: 11111079

340 RED IN 1258-1258 AZ 207.251117 D 0.21340186 VD
 -0.2482092

341 OBS F1 0002-1259 D 201.490000 VA 86.8886111 HA
 176.376666
 Code: 6666WELL GR

342 OBS F1 0002-1260 D 201.680000 VA 86.3427777 HA
 176.541111
 Code: 1111WELL PVC

343 OBS F1 0002-1261 D 201.760000 VA 86.2136111 HA
 176.541111
 Code: 1111WELL TC

344 OBS F1 0002-1262 D 149.270000 VA 88.4494444 HA
 188.211388
 Code: 1388ER

345 NOTE ==> Jul-29-03 12:54

346 OBS F1 0002-1263 D 131.510000 VA 89.2352777 HA
 165.449722
 Code: 9722ER

347 OBS F1 0002-1264 D 135.850000 VA 90.9791666 HA
 140.516111
 Code: 6111ER

348 OBS F1 0002-1265 D 164.520000 VA 92.0769444 HA
 120.103888
 Code: 3888ER

349 OBS F1 0002-1266 D 205.220000 VA 92.5008333 HA
 106.668888
 Code: 8888ER

350 OBS F1 0002-1267 D 251.080000 VA 92.3086111 HA
 98.3130555
 Code: 0555ER

351 OBS F1 0002-1268 D 261.120000 VA 92.1822222 HA
 102.367222
 Code: 7222ER

352 OBS F1 0002-1269 D 216.070000 VA 92.3102777 HA
 111.507500

353	OBS	F1	0002-1270	Code: 7500ER D 177.840000	VA 91.8158333	HA
125.495833						
354	OBS	F1	0002-1271	Code: 5833ER D 153.880000	VA 90.4697222	HA
144.930000						
355	OBS	F1	0002-1272	Code: 0000ER D 152.320000	VA 89.0813888	HA
168.362777						
356	OBS	F1	0002-1273	Code: 2777ER D 168.670000	VA 88.5791666	HA
185.841944						
357	OBS	F1	0002-1274	Code: 1944ER D 80.5600000	VA 89.0705555	HA
178.759166						
358	OBS	F1	0002-1275	Code: 9166CL SW D 78.9800000	VA 88.9011111	HA
190.030555						
359	OBS	F1	0002-1276	Code: 0555TB D 65.3900000	VA 89.2338888	HA
206.591388						
360	OBS	F1	0002-1277	Code: 1388TB D 60.1900000	VA 89.7722222	HA
226.418888						
361	OBS	F1	0002-1278	Code: 8888TB D 59.0100000	VA 89.1500000	HA
239.967222						
362	OBS	F1	0002-1279	Code: 7222TB D 56.7900000	VA 87.5536111	HA
247.281388						
363	OBS	F1	0002-1280	Code: 1388TB D 48.9900000	VA 88.1147222	HA
268.629166						
364	OBS	F1	0002-1281	Code: 9166TB D 51.6500000	VA 88.6772222	HA
293.003611						
365	OBS	F1	0002-1282	Code: 3611TB D 61.1100000	VA 90.3652777	HA
309.149166						
366	OBS	F1	0002-1283	Code: 9166TB D 69.9400000	VA 91.9986111	HA
319.482222						
367	OBS	F1	0002-1284	Code: 2222TB D 75.2700000	VA 95.0130555	HA
327.374444						
368	OBS	F1	0002-1285	Code: 4444TB D 91.9900000	VA 95.2925000	HA
334.476111						
				Code: 6111TB		

369 NOTE ==> Jul-29-03 13:04

370	OBS	F1	0002-1286	D	93.6000000	VA	95.6441666	HA
335.245833								
					Code: 5833CRR			
371	OBS	F1	0002-1287	D	101.890000	VA	95.3347222	HA
327.642222								
					Code: 2222RR			
372	OBS	F1	0002-1288	D	111.860000	VA	95.3613888	HA
321.716388								
					Code: 6388RR			
373	OBS	F1	0002-1289	D	118.120000	VA	95.3825000	HA
317.957500								
					Code: 7500CRR			
374	TARGET	HT.	NM		6.40000000			
375	OBS	F1	0002-1290	D	123.720000	VA	94.9191666	HA
320.152777								
					Code: 2777CLRR			
376	OBS	F1	0002-1291	D	126.250000	VA	94.6700000	HA
321.463333								
					Code: 3333CRR			
377	TARGET	HT.	NM		5.17000000			
378	OBS	F1	0002-1292	D	119.380000	VA	94.6113888	HA
327.609722								
					Code: 9722RR			
379	OBS	F1	0002-1293	D	110.970000	VA	94.7269444	HA
333.358333								
					Code: 8333RR			
380	OBS	F1	0002-1294	D	101.760000	VA	95.1569444	HA
339.121111								
					Code: 1111CRR			
381	OBS	F1	0002-1295	D	128.250000	VA	94.5463888	HA
323.167500								
					Code: 7500TB			
382	OBS	F1	0002-1296	D	116.740000	VA	93.9744444	HA
331.755555								
					Code: 5555TB			
383	OBS	F1	0002-1297	D	107.740000	VA	93.5894444	HA
341.138888								
					Code: 8888TB			
384	OBS	F1	0002-1298	D	94.7000000	VA	93.4919444	HA
344.986111								
					Code: 6111TB			
385	OBS	F1	0002-1299	D	80.0400000	VA	93.4433333	HA
343.525000								
					Code: 5000TB			
386	OBS	F1	0002-1300	D	58.2200000	VA	92.9425000	HA
336.284722								
					Code: 4722TB			

387	OBS	F1	0002-1301	D	39.5400000	VA	92.5875000	HA
319.396944								
				Code: 6944TB				
388	OBS	F1	0002-1302	D	28.6500000	VA	91.1291666	HA
284.116666								
				Code: 6666TB				
389	OBS	F1	0002-1303	D	37.2500000	VA	89.8238888	HA
238.403055								
				Code: 3055TB				
390	OBS	F1	0002-1304	D	42.9200000	VA	89.2236111	HA
219.348055								
				Code: 8055TB				
391	OBS	F1	0002-1305	D	51.0500000	VA	88.5908333	HA
196.266111								
				Code: 6111TB				
392	OBS	F1	0002-1306	D	71.8800000	VA	88.7336111	HA
178.337222								
				Code: 7222TB				
393	OBS	F1	0002-1307	D	63.1900000	VA	90.9386111	HA
195.831111								
				Code: 1111CL				
394	OBS	F1	0002-1308	D	48.9200000	VA	92.3927777	HA
231.699166								
				Code: 9166CL ST				
395	OBS	F1	0002-1309	D	37.8200000	VA	94.5141666	HA
273.054444								
				Code: 4444CL ST				
396	OBS	F1	0002-1310	D	52.5500000	VA	95.1058333	HA
316.625833								
				Code: 5833CL ST				
397	OBS	F1	0002-1311	D	61.6200000	VA	95.8238888	HA
324.650555								
				Code: 0555CL				
398	NOTE	===>	Jul-29-03	13:14				
399	OBS	F1	0002-1312	D	77.7000000	VA	96.1888888	HA
333.329722								
				Code: 9722CL				
400	OBS	F1	0002-1313	D	94.2400000	VA	95.9700000	HA
336.953333								
				Code: 3333CL RR				
401	OBS	F1	0002-1314	D	108.600000	VA	95.8194444	HA
328.873888								
				Code: 3888CL RR				
402	OBS	F1	0002-1315	D	85.5100000	VA	95.3836111	HA
322.731111								
				Code: 1111G				
403	OBS	F1	0002-1316	D	151.390000	VA	95.0497222	HA
311.864722								

404	OBS	F1	0002-1317	Code: 4722WL D 184.560000	VA 94.3858333	HA
328.246111						
405	OBS	F1	0002-1318	Code: 6111POND D 198.740000	VA 94.0597222	HA
334.859166						
406	OBS	F1	0002-1319	Code: 9166POND D 204.770000	VA 93.8761111	HA
343.508611						
407	OBS	F1	0002-1320	Code: 8611POND D 211.160000	VA 93.6963888	HA
351.370833						
408	OBS	F1	0002-1321	Code: 0833POND D 220.700000	VA 93.5005555	HA
358.918611						
409	OBS	F1	0002-1322	Code: 8611POND D 209.400000	VA 93.8066666	HA
9.12472222						
410	OBS	F1	0002-1323	Code: 2222POND D 191.290000	VA 94.2622222	HA
17.5997222						
411	OBS	F1	0002-1324	Code: 7222POND D 176.010000	VA 94.5286111	HA
26.8277777						
412	OBS	F1	0002-1325	Code: 7777POND D 165.080000	VA 94.8191666	HA
38.2972222						
413	OBS	F1	0002-1326	Code: 2222POND D 156.140000	VA 95.1227777	HA
52.1511111						
414	OBS	F1	0002-1327	Code: 1111POND D 143.070000	VA 94.4952777	HA
54.4752777						
415	OBS	F1	0002-1328	Code: 2777WELL GR D 142.940000	VA 93.3111111	HA
54.6416666						
416	OBS	F1	0002-1329	Code: 6666WELL PVC D 142.920000	VA 93.0427777	HA
54.6416666						
417	NOTE	===>	Jul-29-03 13:25	Code: 6666WELL TC		
418	OBS	F1	0002-1330	D 158.390000	VA 94.9883333	HA
71.1755555						
419	OBS	F1	0002-1331	Code: 5555POND D 170.880000	VA 94.7238888	HA
82.4633333						
420	OBS	F1	0002-1332	Code: 3333POND D 186.750000	VA 94.2938888	HA

92.2275000

421 OBS F1 0002-1333 Code: 5000POND
 D 211.100000 VA 93.7408333 HA
 96.8005555

422 TARGET HT. NM Code: 5555POND
 8.70000000
 423 OBS F1 0002-1334 D 219.480000 VA 93.7111111 HA
 94.0344444

424 TARGET HT. NM Code: 4444INV 6 STL PI
 5.17000000
 425 OBS F1 0002-1335 D 205.160000 VA 92.8647222 HA
 103.465000

426 OBS F1 0002-1336 Code: 5000G
 D 171.250000 VA 93.4402777 HA
 96.4366666

427 OBS F1 0002-1337 Code: 6666G
 D 149.130000 VA 93.3333333 HA
 86.0397222

428 OBS F1 0002-1338 Code: 7222G
 D 133.920000 VA 93.6313888 HA
 73.0016666

429 OBS F1 0002-1339 Code: 6666G
 D 123.020000 VA 93.8200000 HA
 53.7400000

430 OBS F1 0002-1340 Code: 0000G
 D 128.590000 VA 93.6341666 HA
 37.6936111

431 OBS F1 0002-1341 Code: 6111G
 D 134.220000 VA 93.4891666 HA
 20.8041666

432 OBS F1 0002-1342 Code: 1666G
 D 141.360000 VA 93.2597222 HA
 6.04472222

433 OBS F1 0002-1343 Code: 2222G
 D 155.700000 VA 93.1933333 HA
 349.491944

434 OBS F1 0002-1344 Code: 1944G
 D 159.040000 VA 93.4769444 HA
 336.699722

435 OBS F1 0002-1345 Code: 9722G
 D 128.680000 VA 93.4158333 HA
 343.834722

436 OBS F1 0002-1346 Code: 4722G
 D 101.700000 VA 93.3486111 HA
 357.209444

437 OBS F1 0002-1347 Code: 9444G
 D 79.5400000 VA 93.6627777 HA
 17.7527777

Code: 7777G

438	OBS	F1	0002-1348	D	72.1400000	VA	93.7377777	HA
47.0847222								
				Code: 7222G				
439	OBS	F1	0002-1349	D	84.0100000	VA	93.3063888	HA
74.6961111								
				Code: 1111G				
440	OBS	F1	0002-1350	D	103.6800000	VA	92.7538888	HA
93.9669444								
				Code: 9444G				
441	OBS	F1	0002-1351	D	130.3200000	VA	92.3502777	HA
108.0111111								
				Code: 1111G				
442	OBS	F1	0002-1352	D	159.8800000	VA	92.3286111	HA
116.4305555								
				Code: 0555G				
443	OBS	F1	0002-1353	D	134.8100000	VA	91.5919444	HA
127.0708333								
				Code: 0833G				
444	NOTE	===>	Jul-29-03	13:35				
445	OBS	F1	0002-1354	D	101.2500000	VA	91.4430555	HA
123.8033333								
				Code: 3333G				
446	OBS	F1	0002-1355	D	64.8700000	VA	91.4588888	HA
119.1097222								
				Code: 9722G				
447	OBS	F1	0002-1356	D	30.9100000	VA	92.6291666	HA
101.8811111								
				Code: 1111G				
448	OBS	F1	0002-1357	D	18.1900000	VA	93.3327777	HA
346.4133333								
				Code: 3333G				
449	OBS	F1	0002-1358	D	22.6900000	VA	88.5597222	HA
211.5622222								
				Code: 2222G				
450	OBS	F1	0002-1359	D	37.6200000	VA	90.0755555	HA
144.0166666								
				Code: 6666G				
451	OBS	F1	0002-1360	D	70.4600000	VA	89.9841666	HA
144.4333333								
				Code: 3333G				
452	OBS	F1	0002-1361	D	107.4600000	VA	90.1216666	HA
147.3036111								
				Code: 3611G				
453	OBS	F1	0002-1362	D	107.8600000	VA	89.1983333	HA
163.8750000								
				Code: 5000G				
454	OBS	F1	0002-1363	D	112.6700000	VA	88.4163888	HA
181.9816666								

455	OBS	F1	0002-1364	Code: 1666G		
206.352222				D 99.9100000	VA 88.1313888	HA
456	OBS	F1	0002-1365	Code: 2222EW		
228.364722				D 84.8000000	VA 89.3525000	HA
				Code: 4722EW		

BFI OLD DOMINION
2001 CHARLES CITY RD
RICHMOND VA
23231

001179
REDBONE TRUCKING
P.O. BOX 2155

TAPPAHANNOCK, VA 22560-
Contract: TIRES

SITE 01	TICKET 156314	GRID
SUSAN		WEIGHMASTER
DATE IN 22 October 2002	TIME IN 10:31 am	
DATE OUT 22 October 2002	TIME OUT 10:45 am	
VEHICLE REDBONE	ROLL OFF	
REFERENCE INDAIN HEAD	ORIGIN NAVSEA	

01 Gross Weight 28,860.00 LB
Tare Weight 25,040.00 LB
Net Weight 3,820.00 LB 1.91 TN

Inbound - SCALE TICKET

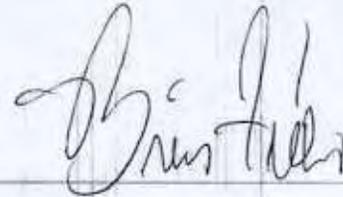
QTY.	UNIT	DESCRIPTION	RATE	EXTENSION	TAX	TOTAL
1.91	TN	27 T TIRES (Out)				

REDBONE TRUCKING

HAVE A GREAT DAY !!!

AJ & BRIAN

SIGNATURE



NET AMOUNT

TENDERED

CHANGE

CHECK NO.

DAVE ROBERTS
P.O. BOX 1521
SPOTSYLVANIA, VA 22553
540-842-7926 (CELL)
540-785-5846 (FAX)

YOUR LOCATOR

Fax

For: SHAW ENVIRONMENTAL **From:** DAVE ROBERTS

PO BOX 867

Pages: 1

INDIANHEAD MD 20640

Fax to: BEST WESTERN, 301-934-5389 (ATTN: MR. DUKE)

Phone: SHAW ENVIRON, 757-318-5137 **Date:** September 18, 2002

Subj: BUSINESS SERVICE DESCRIPTION

AS PER YOUR TELEPHONE REQUEST, SEPTEMBER 16, 2002, SUBJECT DESCRIPTION FOLLOWS

MARKED WATER LINES FOR TOWN GUT PROJECT. SWEPT ENTIRE AREA OF PROJECT FOR OTHER POSSIBLE UTILITIES. NOTHING FOUND. INDUSTRIAL DRAIN ON CREEK-SIDE, AS WELL AS FRESH WATER LINE TO "POISON" BUILDING NOT IN CONFLICT

DATE OF SERVICE: SEPTEMBER 13, 2002

REPLY ATTENTION TO:
Your Locator
Dave Roberts, Owner/Operator
P.O. Box 1621
Spotylvania VA 22553
(540) 842-7925
(540) 785-5846 (Fax)

Your Locator

Computer Mark When You Need It

Date: September 15, 2003

Statement of Work

To: ATTN: JANNA STASUAIG

Address: THE SHAW GROUP, INC.

2790 MOSSIDE BOULEVARD

MONROEVILLE PA 15148

Phone: 412-372-7701

Fax: 412-858-3979

Project POC: JOEY GUZZARDO

Project Date(s): SEP 13, 2002 & FEB 5, 2003

Project Location: INDIAN HEAD, MARYLAND (TOWN GUT AREA)

SUMMARY OF PROVIDED SERVICES: SWEEP FOR UNDERGROUND UTILITIES USING A METROTEC 810 SINGLE FREQUENCY AND/OR DYNATELL 5120 MULTI-FREQUENCY LOCATING DEVICE(S) TO DETECT THE FOLLOWING CHECKED UTILITIES:

Electric Fiber Fire Protection Gas Phone Phone/Fiber

Sanitary Steam Storm TV Water Other (Unidentified)

On Request: Drain Dye Test Records Review Records Update Leak Detection

MARKED AND/OR FLAGGED FOUND UTILITIES USING STANDARD COLOR PAINT AND/OR FLAGS

STATEMENT: MARKED WATER MAIN. SWEEP ENTIRE AREA FOR POWER, SANITARY AND INDUSTRIAL WASTE LINES NOT FOUND. VERIFIED WATER AND EXISTING RECORDS AT SANITARY OFFICE.

"YOUR LOCATOR" IS NOT RESPONSIBLE FOR DAMAGE, DESTRUCTION, INJURY, OR DEATH DUE TO UNKNOWN, UNFOUND, OR MASONRY UTILITIES, FAILURE ON THE PART OF THE COMPANY WHICH HIRED "YOUR LOCATOR," OR OTHER PROJECT CONTRACTORS OR SUB-CONTRACTORS TO HEED "YOUR LOCATOR" MARKS, OR FOR LOSS OF MARKS DUE TO WEATHER OR DISTURBANCE OF THE GROUND DUE TO CONSTRUCTION.

DATE: 04/07/03
BLDG/AREA: TOWN-GUT

POST PERMIT ON WORKSITE
SAFETY WORK PERMIT FOR EXPLOSIVE AREA
INDIAN HEAD DIVISION, NAVAL SURFACE WARFARE CENTER

EXPIRES: 06/30/03

WORK PERFORMED BY: ACTIVITY FORCES-CODE () / CONTRACTOR-NAME: SHAW ECI Inc ADHERE TO SPECS OF CONTRACT # 97-D-5000

YES NO RE-INSPECTION OF AREA BY SAFETY INSPECTOR REQUIRED PRIOR TO BEGINNING WORK CODE/INITIAL/DATE _____

DESCRIPTION OF WORK AUTHORIZED: Pave within road at Town-Gut, to place plants in the wet lands and to install monitoring wells

1. DECONTAMINATION OF AREA REQUIRED AS FOLLOWS:

- YES NO **PRIOR TO START CLEAR WORK THROUGH BLDG/AREA SUPERVISOR DAILY**
- A. REMOVE ALL EXPLOSIVES FROM (SPECIFY) _____
 - B. REMOVE HAZARDOUS MATERIALS (SPECIFY) _____
 - C. WASH AREA DOWN (SPECIFY) _____
 - D. TREAT WITH DESENSITIZING AGENT (SPECIFY) _____
 - E. SECURE EXPLOSIVE OPERATIONS IN _____
 - F. OTHER (SPECIFY) _____

2. OPEN FLAME (HOT) OR SPARK-PRODUCING WORK (WELDING, TORCH, SOLDERING, GRINDING, ETC.) AUTHORIZED _____ NOT AUTHORIZED _____

- YES NO
- A. HAVE FIRE EXTING. ON-SITE DURING HOT WORK (TYPE: _____)
 - B. HAVE FIRE WATCH ON-SITE DURING HOT WORK
 - C. STAY ON-SITE 30 MINUTES AFTER HOT WORK IS COMPLETE
 - D. REMOVE FLAMM./COMBUST. MATERIAL FROM HOT-WORK SITE
 - E. BUFFER BAY(S) REQUIRED (SPECIFY) _____
 - F. HOT WORK AREA TO REMAIN WET DURING WORK
 - G. OTHER (SPECIFY) _____

3. EQUIPMENT AUTHORIZED FOR USE

- YES NO
- A. TORCH/WELDER
 - B. POWER TOOLS (GRINDER, DRILL, SKILSAW, BACKHOE, GENERATOR, AIR COMPRESSOR)/POWER EQUIPMENT (SPECIFY) heavy equip
 - C. HAND TOOLS
 - D. NON-SPARKING TOOLS
 - E. OTHER (SPECIFY) _____

4. PERSONAL PROTECTIVE EQUIPMENT REQUIRED as per safety plan.

- YES NO
- EYE PROTECTION (SAFETY GLASSES, GOGGLES, FACE SHIELD)
 - HEARING PROTECTION
 - POWDER UNIFORM (COVERALLS & CAP)
 - CONDUCTIVE SHOES OR NO-STATS
 - RESPIRATORY PROTECTION (SPECIFY) _____
 - HAND/FOOT/HEAD PROTECTION (SPECIFY) _____
 - FALL PROTECTION REQUIRED (SPECIFY) _____
 - OTHER (SPECIFY) _____

5. ADDITIONAL REQUIREMENTS

- YES NO
- NOTIFY BLDG/AREA SUPERVISOR WHEN WORK IS COMPLETE
 - EXPLOSIVES TRANSFERS ALLOWED IN AREA DURING WORK
 - NOTIFY FIRE DEPT / PUBLIC WORKS UTILITIES OF WORK
 - LOCKOUT/TAGOUT HAZARDOUS ENERGY SOURCES (SPECIFY) _____
 - RE-INSP OF AREA REQ'D BY SAFETY INSP UPON COMPLETION OF WORK
 - OTHER (SPECIFY) _____

6. OTHER:

SUPERVISOR IN IMMEDIATE AREA/DATE: [Signature] 4-7-03
SAFETY DEPARTMENT OFFICIAL/DATE: Frank James 04/07/03
CONTRACT REPRESENTATIVE/DATE: [Signature] 4.7.03
PUBLIC WORKS REPRESENTATIVE/DATE: _____
NDW-IHDIVNAVSURFWARCEN-5100/3 (Rev. 8-98)

This permit is issued for the protection of all workers and equipment. No deviation from requirements of this permit is authorized without permission of the issuing agent. If method of work, or conditions of immediate area change, or other hazardous conditions arise during work, work will be stopped immediately and the Safety Department and/or the Fire Department will be notified. Notify the Safety Department when job is completed. All permits issued are good ONLY for the day issued and new permits will be issued daily if work is to continue over a period of time unless otherwise stated.

C1	8332	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		FILL IN THIS FORM COMPLETELY PLEASE TYPE		
ST/CO USE ONLY DATE Received MM DD YY		DATE WELL COMPLETED MM DD YY		PERMIT NO. FROM "PERMIT TO DRILL WELL"
8 13		15 25 03		CH 94 5177
		22 19 26 (TO NEAREST FOOT)		28 29 30 31 32 33 34 35 36 37

OWNER Naval Surface Warfare Center
 STREET OR RFD last name first name TOWN Indian Head, MD 20640
 SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Sod / Organic Silty LOAM	0	2	
Yellow Silty Clay Tight	2	19	✓

GROUTING RECORD yes no
 WELL HAS BEEN GROUTED (Circle Appropriate Box) 44 44
 TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT BENTONITE CLAY
 NO. OF BAGS 2 NO. OF POUNDS 451
 GALLONS OF WATER _____
 DEPTH OF GROUT SEAL (to nearest foot) 17
 from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
 (enter 0 if from surface)

CASING RECORD
 casing types insert appropriate code below
 ST STEEL CO CONCRETE
 PL PLASTIC OT OTHER
 MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 2 Total depth of main casing (nearest foot) 19
 60 .61 63 64 66 68 70

OTHER CASING (if used)
 diameter inch _____ depth (feet) from _____ to _____
 E A C H I N G

SCREEN RECORD
 screen type or open hole insert appropriate code below
 ST STEEL BR BRASS HO OPEN HOLE
 PL PLASTIC OT OTHER

C3 Monitor Well Only

PUMPING TEST

HOURS PUMPED (nearest hour) 6 9
 PUMPING RATE (gal. per min.) 11 15
 METHOD USED TO MEASURE PUMPING RATE _____
 WATER LEVEL (distance from land surface)
 BEFORE PUMPING 17 20 ft.
 WHEN PUMPING 22 25 ft.
 TYPE OF PUMP USED (for test)
 A air P piston T turbine
 C centrifugal R rotary O other (describe below)
 J jet S submersible

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES NO

CIRCLE APPROPRIATE LETTER
A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M 8p 051
 DRILLERS SIGNATURE [Signature]
 LIC. NO. 116D 051

C2 DEPTH (nearest ft.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44
45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66

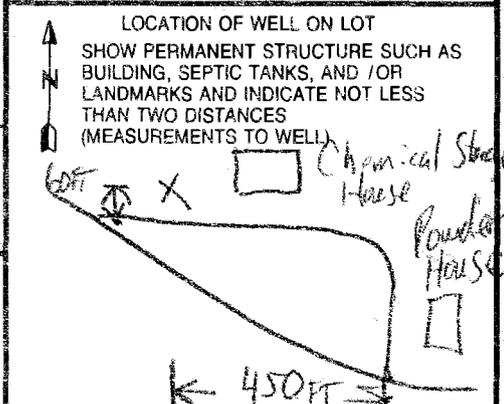
SLOT SIZE 1 0 2 2 3 0
 DIAMETER OF SCREEN 2 (NEAREST INCH)
 from 8 to 19

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 _____

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
 T _____ (E.R.O.S.) W Q _____

70 _____ 72 _____ 74 75 76 _____

PUMP INSTALLED
 DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO
 IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
 TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 _____
 CAPACITY: GALLONS PER MINUTE (to nearest gallon) _____
 PUMP HORSE POWER _____
 PUMP COLUMN LENGTH (nearest ft.) _____
 CASING HEIGHT (circle appropriate box and enter casing height)
 + above } LAND SURFACE 0 (nearest foot)
 - below }



C 1	8332	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		FILL IN THIS FORM COMPLETELY PLEASE TYPE		
ST/CO USE ONLY DATE Received MM DD YY 6 13		DATE WELL COMPLETED MM DD YY 05 15 03	Depth of Well 22 19 26 (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL" CH 94 5177 28 29 30 31 32 33 34 35 36 37

OWNER Naval Surface Warfare Center
 STREET OR RFD last name TOWN Indian Head, MD 20640
 SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG			
Not required for driven wells			
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING			
DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Sed / Organic Silty LOAM	0	2	
Yellow Silty Clay TIGHT	2	19	✓

GROUTING RECORD	
WELL HAS BEEN GROUTED (Circle Appropriate Box)	<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
TYPE OF GROUTING MATERIAL (Circle one)	
CEMENT <input checked="" type="checkbox"/> CM	BENTONITE CLAY <input type="checkbox"/> BC
NO. OF BAGS _____	NO. OF POUNDS _____
GALLONS OF WATER _____	
DEPTH OF GROUT SEAL (to nearest foot)	
from _____ ft. to _____ ft.	(enter 0 if from surface)

CASING RECORD			
casing types insert appropriate code below	<input checked="" type="checkbox"/> ST STEEL	<input type="checkbox"/> CO CONCRETE	
	<input type="checkbox"/> PL PLASTIC	<input type="checkbox"/> OT OTHER	
	MAIN CASING TYPE PI	Nominal diameter top (main) casing (nearest inch) 2	Total depth of main casing (nearest foot) 19
	_____	_____	_____

OTHER CASING (if used)		
EACH CASING	diameter inch	depth (feet) from to
_____	_____	_____

SCREEN RECORD			
screen type or open hole insert appropriate code below	<input checked="" type="checkbox"/> ST STEEL	<input type="checkbox"/> BR BRASS	<input type="checkbox"/> HO OPEN HOLE
	<input type="checkbox"/> PL PLASTIC	<input type="checkbox"/> OT OTHER	

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES NO

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M 8 D 051

DRILLERS SIGNATURE _____

LIC. NO. 116 D 051

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

DEPTH (nearest ft.)	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51	19 8 19
SLOT SIZE 1 <u>0.25</u> 2 <u>0.25</u> 3 <u>0.25</u>	
DIAMETER OF SCREEN <u>2</u> (NEAREST INCH)	
from <u>8</u> to <u>19</u>	

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

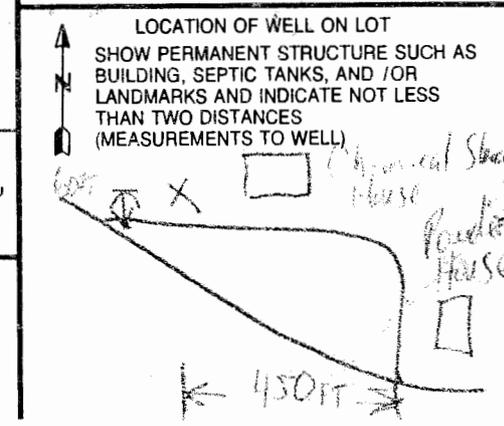
T (E.R.O.S.) _____ W Q _____

70 _____ 72 _____ 74 75 76 _____

TELESCOPE LOG INDICATOR _____ OTHER DATA _____

PUMPING TEST		
HOURS PUMPED (nearest hour)	8 9	
PUMPING RATE (gal. per min.)	11 15	
METHOD USED TO MEASURE PUMPING RATE _____		
WATER LEVEL (distance from land surface)		
BEFORE PUMPING	17 20 ft.	
WHEN PUMPING	22 25 ft.	
TYPE OF PUMP USED (for test)		
<input checked="" type="checkbox"/> A air	<input type="checkbox"/> P piston	<input type="checkbox"/> T turbine
<input type="checkbox"/> C centrifugal	<input type="checkbox"/> R rotary	<input type="checkbox"/> O other (describe below)
<input type="checkbox"/> J jet	<input type="checkbox"/> S submersible	

PUMP INSTALLED	
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO)	YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.	
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29	29
CAPACITY: GALLONS PER MINUTE (to nearest gallon)	31 35
PUMP HORSE POWER	37 41
PUMP COLUMN LENGTH (nearest ft.)	43 47
CASING HEIGHT (circle appropriate box and enter casing height)	
<input checked="" type="checkbox"/> above	LAND SURFACE <u>0</u> (nearest foot)
<input type="checkbox"/> below	



C 1	8333	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)				
ST/CO USE ONLY DATE Received MM DD YY 8 13		DATE WELL COMPLETED 05 19 03 15 20		Depth of Well 22 19 26 (TO NEAREST FOOT)
				PERMIT NO. FROM "PERMIT TO DRILL WELL" CH - 94 - 5177 28 29 30 31 32 33 34 35 36 37

OWNER Naval Surface Warfare Center TOWN Indian Head, MD 20640

STREET OR RFD _____

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Organic Silty LOAM GRASS	0	1	
Yellow Silty Clay Tight	1	19	✓

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT C M BENTONITE CLAY B C

NO. OF BAGS 45 46 NO. OF POUNDS 140 46

GALLONS OF WATER _____

DEPTH OF GROUT SEAL (to nearest foot)
from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

<input checked="" type="radio"/> S T STEEL	<input type="radio"/> C O CONCRETE
<input type="radio"/> P L PLASTIC	<input type="radio"/> O T OTHER

MAIN CASING TYPE _____

Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
<u>2</u>	<u>19</u>

OTHER CASING (if used)

diameter inch	depth (feet) from	to
_____	_____	_____

SCREEN RECORD

screen type or open hole insert appropriate code below

<input checked="" type="radio"/> S T STEEL	<input type="radio"/> B R BRASS BRONZE	<input type="radio"/> H O OPEN HOLE
<input type="radio"/> P L PLASTIC	<input type="radio"/> O T OTHER	

NUMBER OF UNSUCCESSFUL WELLS: 3

WELL HYDROFRACTURED Y N

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC NO. M 6 D 051

DRILLERS SIGNATURE _____

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 M 6 D 051

C 2 DEPTH (nearest ft.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 2 (NEAREST INCH)

from 8 to 19

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T _____ (E.R.O.S.) W Q _____

C 3

PUMPING TEST

HOURS PUMPED (nearest hour) 1

PUMPING RATE (gal. per min.) N/A

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.

WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)

<input checked="" type="radio"/> A air	<input type="radio"/> P piston	<input type="radio"/> T turbine
<input type="radio"/> C centrifugal	<input type="radio"/> R rotary	<input type="radio"/> O other (describe below)
<input type="radio"/> J jet	<input type="radio"/> S submersible	

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 _____

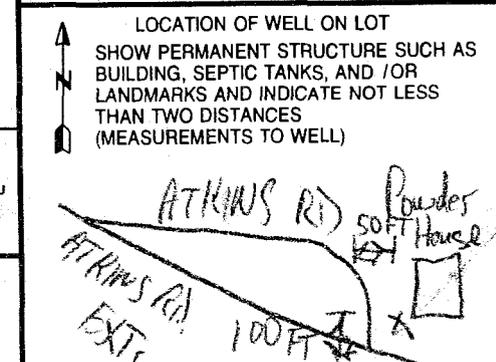
CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

<input checked="" type="radio"/> + above	LAND SURFACE (nearest foot)
<input type="radio"/> - below	



C 1	8333	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)				
ST/CO USE ONLY DATE Received MM DD YY		DATE WELL COMPLETED		PERMIT NO. FROM "PERMIT TO DRILL WELL"
8 13		03 15 03		CR - 94 - 5177
		Depth of Well 22 17 26 (TO NEAREST FOOT)		28 29 30 31 32 33 34 35 36 37

OWNER Naval Surface Warfare Center TOWN Indian Head, MD 20640

STREET OR RFD _____

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG			
Not required for driven wells			
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING			
DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Organic Silty Loam/Boss	0	1	
Yellow Silty Clay Tight	1	19	✓

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 45 NO. OF POUNDS 46

GALLONS OF WATER _____

DEPTH OF GROUT SEAL (to nearest foot)

from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

ST STEEL **CO** CONCRETE
PL PLASTIC **OT** OTHER

MAIN CASING TYPE

Nominal diameter top (main) casing (nearest inch): 60 Total depth of main casing (nearest foot): 70

OTHER CASING (if used)

diameter inch _____ depth (feet) from _____ to _____

SCREEN RECORD

screen type or open hole (insert appropriate code below)

ST STEEL **BR** BRASS **HO** OPEN HOLE
PL PLASTIC **OT** OTHER

C 3 Monitor Well

PUMPING TEST Only

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) N/A 15

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.

WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)

A air **P** piston **T** turbine
C centrifugal **R** rotary **O** other (describe below)
J jet **S** submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

above } LAND SURFACE 0 (nearest foot)
 below }

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes no

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. 1 M 6051

DRILLERS SIGNATURE _____
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 1 D 16051

C 2 DEPTH (nearest ft.)

1	2	3	4	5	6	7	8	9	11	15	17	21
8	9	11	15	17	21	23	24	26	30	32	36	38
39	41	45	47	51								

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN (NEAREST INCH)

from 56 to 60

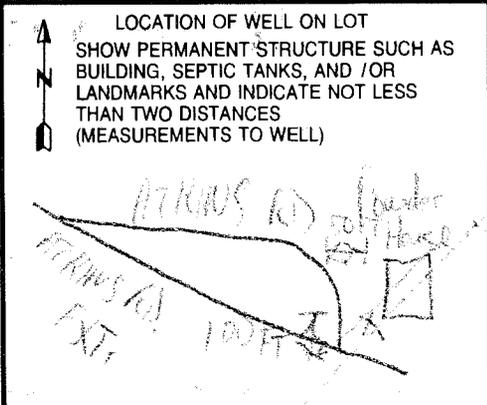
GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T _____ (E.R.O.S.) W Q _____

70 _____ 72 _____ 74 75 76 _____

TELESCOPE _____ LOG _____



C 1	8334	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)				
ST/CO USE ONLY DATE Received MM DD YY 8 13		DATE WELL COMPLETED MM DD YY 07 17 03		PERMIT NO. FROM "PERMIT TO DRILL WELL" CH - 94 - 5176
		Depth of Well 22 12 26 (TO NEAREST FOOT)		28 29 30 31 32 33 34 35 36 37
OWNER <u>Naval Surface Warfare Center</u>				
STREET OR RFD <u>Indian Head, MD 20640</u> TOWN _____				
SUBDIVISION _____ SECTION _____ LOT _____				
WELL LOG Not required for driven wells			GROUTING RECORD	
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING			WELL HAS BEEN GROUTED (Circle Appropriate Box) Y N	
DESCRIPTION (Use additional sheets if needed)			TYPE OF GROUTING MATERIAL (Circle one) CEMENT CM BENTONITE CLAY BC	
FEET FROM TO check if water bearing			NO. OF BAGS <u>45 45/A</u> NO. OF POUNDS <u>45 45</u>	
Reddish Brown Clay/ Fill Mottled Dense Silty Clay			GALLONS OF WATER <u>Hydrated</u>	
			DEPTH OF GROUT SEAL (to nearest foot) from 48 TOP 52 ft. to 54 BOTTOM 58 ft. (enter 0 if from surface)	
			CASING RECORD	
			casing types insert appropriate code below	
			ST CO STEEL CONCRETE	
			PL OT PLASTIC OTHER	
			MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) <u>2</u> Total depth of main casing (nearest foot) <u>2</u>	
			60 61 63 64 66 70	
			OTHER CASING (if used)	
			EACH CASING diameter inch depth (feet) from to	
			SCREEN RECORD	
			screen type or open hole insert appropriate code below	
			ST BR HO STEEL BRASS OPEN HOLE	
			PL OT PLASTIC OTHER	
NUMBER OF UNSUCCESSFUL WELLS: <u>0</u>			C 2 DEPTH (nearest ft.)	
WELL HYDROFRACTURED Y N			1 ST 2 12	
CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL			E 8 9 11 15 17 21	
			C 23 24 26 30 32 36	
I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.			S 38 39 41 45 47 51	
			R 38 39 41 45 47 51	
DRILLERS LIC. NO. 1 <u>M 60 051</u>			SLOT SIZE 1 _____ 2 _____ 3 _____	
DRILLER'S SIGNATURE <u>[Signature]</u> (MUST MATCH SIGNATURE ON APPLICATION)			DIAMETER OF SCREEN _____ (NEAREST INCH)	
LIC. NO. 1 <u>M 60 051</u>			56 _____ 60 _____	
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)			from _____ to _____	
			GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 88 _____ 68 _____	
			MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)	
			T _____ (E.R.O.S.) W O _____	
			70 _____ 72 _____ 74 75 76 _____	
			TELESCOPE CASING LOG INDICATOR OTHER DATA	
			C 3 <u>Mon for well Only</u>	
			PUMPING TEST <u>N/A</u>	
			HOURS PUMPED (nearest hour) <u>8 9</u>	
			PUMPING RATE (gal. per min.) _____ 11 _____ 15	
			METHOD USED TO MEASURE PUMPING RATE _____	
			WATER LEVEL (distance from land surface)	
			BEFORE PUMPING _____ 17 _____ 20 ft.	
			WHEN PUMPING _____ 22 _____ 25 ft.	
			TYPE OF PUMP USED (for test)	
			A air P piston T turbine	
			C centrifugal R rotary O other (describe below)	
			J jet S submersible	
			PUMP INSTALLED	
			DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO	
			IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.	
			TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. _____ 29	
			CAPACITY: GALLONS PER MINUTE (to nearest gallon) _____ 31 _____ 35	
			PUMP HORSE POWER _____ 37 _____ 41	
			PUMP COLUMN LENGTH (nearest ft.) _____ 43 _____ 47	
			CASING HEIGHT (circle appropriate box and enter casing height)	
			+ above } LAND SURFACE _____ (nearest) foot	
			- below } _____ 50 51	
			LOCATION OF WELL ON LOT	
			SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)	

C1	8334	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		COUNTY NUMBER		

ST/CO USE ONLY DATE Received MM DD YY 8 13	DATE WELL COMPLETED MM DD YY 07 17 03	Depth of Well 22 12 26 (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL" CH - 94 - 5176
---	---	--	---

OWNER Naval Surface Warfare Center
 STREET OR RFD Indian Head, MD 20640 TOWN _____
 SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Reddish Brown Clay F. 11 NOTED Dark Silty Clay	0	2	✓
	2	12	✓

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**

TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 46 NO. OF POUNDS Hydrated
 GALLONS OF WATER _____

DEPTH OF GROUT SEAL (to nearest foot)
 from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
 (enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

ST STEEL **CO** CONCRETE
PL PLASTIC **OT** OTHER

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 2 Total depth of main casing (nearest foot) 2

60 61 63 64 66 70

OTHER CASING (if used)

EACH CASING diameter inch depth (feet) from to

SCREEN RECORD

screen type or open hole (insert appropriate code below)

ST STEEL **BR** BRASS **HO** OPEN HOLE
PL PLASTIC **OT** OTHER

C 3 Mon. for well Only

PUMPING TEST N/A

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) 11 15

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.
 WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)

A air **P** piston **T** turbine
C centrifugal **R** rotary **O** other (describe below)
J jet **S** submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE 0 (nearest foot)
- below }

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED **Y** **N**

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M 6D 051

DRILLERS SIGNATURE [Signature]
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. M 6D 051

C 2 DEPTH (nearest ft.)

T	2	ST	2	12	21
E	8	9	11	15	17
C	23	24	26	30	32
S	38	39	41	45	47
C	38	39	41	45	47
R	45	47	51	55	57
E	58	60	64	68	70
S	74	76	80	84	86
E	88	90	94	98	100

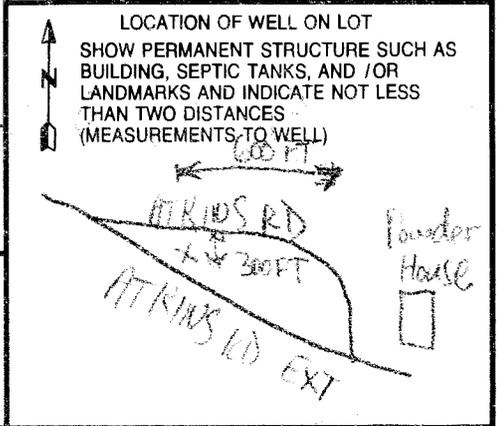
SLOT SIZE 1 _____ 2 _____ 3 _____

DIAMETER OF SCREEN (NEAREST INCH) 12

from _____ to _____

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) (E.R.O.S.) W Q



SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

TELESCOPE CASING LOG INDICATOR OTHER DATA

C1	8335	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		DATE WELL COMPLETED		PERMIT NO. FROM "PERMIT TO DRILL WELL"
ST/CO USE ONLY DATE Received MM DD YY		DATE WELL COMPLETED MM DD YY		28 29 30 31 32 33 34 35 36 37
8 13		15 17 20		22 19 26 (TO NEAREST FOOT)
OWNER <u>Naval Surface Warfare Center</u> first name				
STREET OR RFD <u>Indian Head, MD 20640</u> TOWN				
SUBDIVISION SECTION LOT				
WELL LOG Not required for driven wells		GROUTING RECORD		
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		WELL HAS BEEN GROUTED (Circle Appropriate Box)		
DESCRIPTION (Use additional sheets if needed)		TYPE OF GROUTING MATERIAL (Circle one)		
FEET FROM TO		CEMENT <input checked="" type="checkbox"/> CM BENTONITE CLAY <input checked="" type="checkbox"/> BIC		
check if water bearing		NO. OF BAGS <u>NA</u> NO. OF POUNDS <u>12</u>		
Brown Silty Clay 0 6		GALLONS OF WATER <u>Hydrated</u>		
Dense Gray to Dark gray Silty Clay 6 13 ✓		DEPTH OF GROUT SEAL (to nearest foot) from <u>0</u> TOP 52 ft. to <u>1</u> BOTTOM 58 ft. (enter 0 if from surface)		
		CASING RECORD		
		casing types insert appropriate code below		
		<input checked="" type="checkbox"/> ST STEEL <input checked="" type="checkbox"/> CO CONCRETE <input checked="" type="checkbox"/> PL PLASTIC <input type="checkbox"/> OT OTHER		
		MAIN CASING TYPE Nominal diameter top (main) casing (nearest inch)! Total depth of main casing (nearest foot) <u>PL</u> <u>60</u> <u>61</u> <u>2</u> <u>63</u> <u>64</u> <u>2</u> <u>65</u> <u>70</u>		
		OTHER CASING (if used)		
		EACH CASING diameter inch depth (feet) from to		
		SCREEN RECORD		
		screen type or open hole insert appropriate code below		
		<input checked="" type="checkbox"/> ST STEEL <input checked="" type="checkbox"/> BR BRASS <input checked="" type="checkbox"/> HO OPEN HOLE <input checked="" type="checkbox"/> PL PLASTIC <input type="checkbox"/> OT OTHER		
NUMBER OF UNSUCCESSFUL WELLS: <u>0</u>		C2 DEPTH (nearest ft.)		
WELL HYDROFRACTURED <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N		1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 E A C H S C R E E N <u>ST</u> <u>2</u> <u>12</u>		
CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL		SLOT SIZE 1 <u>0</u> 2 <u>2</u> 3 <u>0</u>		
I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.		DIAMETER OF SCREEN <u>2</u> (NEAREST INCH) from <u>56</u> to <u>60</u>		
DRILLERS LIC. NO. <u>M 6D 051</u>		GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 <u>2</u> <u>12</u>		
DRILLER'S SIGNATURE <u>[Signature]</u> (MUST MATCH SIGNATURE ON APPLICATION)		MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)		
LIC. NO. <u>H 6D 051</u>		T (E.R.O.S.) W Q		
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)		70 72 74 75 76 TELESCOPE CASING LOG INDICATOR OTHER DATA		
		C3		
		Mon. for Well Only PUMPING TEST		
		HOURS PUMPED (nearest hour) <u>1 1/2</u>		
		PUMPING RATE (gal. per min.) <u>11</u> <u>15</u>		
		METHOD USED TO MEASURE PUMPING RATE		
		WATER LEVEL (distance from land surface)		
		BEFORE PUMPING <u>17</u> <u>20</u> ft.		
		WHEN PUMPING <u>22</u> <u>25</u> ft.		
		TYPE OF PUMP USED (for test)		
		<input checked="" type="checkbox"/> A air <input checked="" type="checkbox"/> P piston <input type="checkbox"/> T turbine <input checked="" type="checkbox"/> C centrifugal <input checked="" type="checkbox"/> R rotary <input type="checkbox"/> O other (describe below) <input type="checkbox"/> J jet <input type="checkbox"/> S submersible		
		PUMP INSTALLED		
		DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
		IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.		
		TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. <u>29</u>		
		CAPACITY: GALLONS PER MINUTE (to nearest gallon) <u>31</u> <u>35</u>		
		PUMP HORSE POWER <u>37</u> <u>41</u>		
		PUMP COLUMN LENGTH (nearest ft.) <u>43</u> <u>47</u>		
		CASING HEIGHT (circle appropriate box and enter casing height)		
		<input checked="" type="checkbox"/> + above } LAND SURFACE <input type="checkbox"/> - below } <u>0</u> (nearest foot)		
		LOCATION OF WELL ON LOT		
		SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)		
		↑ 215 FT ↓ X ← 500 FT → ATKINS RD Powder House		

C 1	8335	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		COUNTY NUMBER		

ST/CO USE ONLY DATE Received MM DD YY 8 13	DATE WELL COMPLETED MM DD YY 15 11 20	Depth of Well 22 12 26 (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL" 04 04 5176
---	---	--	---

OWNER Naval Surface Warfare Center first name _____ TOWN _____
 STREET OR RFD Indian Head, MD 20640
 SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG			
Not required for driven wells			
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING			
DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Brown Silty Clay	0	6	
Dense Gray to Dark gray Silty Clay	6	13	

GROUTING RECORD yes no

WELL HAS BEEN GROUTED (Circle Appropriate Box) **Y** **N**

TYPE OF GROUTING MATERIAL (Circle one) **CM** **BC**

CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 114 NO. OF POUNDS 12

GALLONS OF WATER Hydrated

DEPTH OF GROUT SEAL (to-nearest foot)
 from 0 TOP ft. to 1 BOTTOM 58 ft.
 (enter 0 if from surface)

CASING RECORD

(casing types insert appropriate code below)

ST **CO**
 STEEL CONCRETE

PL **OT**
 PLASTIC OTHER

MAIN CASING TYPE

Nominal diameter top (main) casing (nearest inch)! 2 Total depth of main casing (nearest foot) 2

PL 60 **61** 63 **64** 66 **66** 70

OTHER CASING (if used)

EACH CASING diameter depth (feet) inch from to

SCREEN RECORD

screen type or open hole (insert appropriate code below)

ST **BR** **HO**
 STEEL BRASS OPEN HOLE

PL **OT**
 PLASTIC OTHER

C 2 DEPTH (nearest ft.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
E	S	T	2	12	15	17	21														
2	23	24	26	30	32	36															
3	38	39	41	45	47	51															
R	E	E																			
S	SLOT SIZE 1 <u>0</u> 2 <u>2</u> 3 <u>0</u>																				
L	DIAMETER OF SCREEN <u>2</u> (NEAREST INCH) <u>58</u> <u>60</u>																				
E	from _____ to _____																				
N	GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 <u>2</u> <u>12</u>																				

C 3 Mon. for Well Only

PUMPING TEST

HOURS PUMPED (nearest hour) MIA 8 9

PUMPING RATE (gal. per min.) 11 15

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.

WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)

A air **P** piston **T** turbine
C centrifugal **R** rotary **O** other (describe below)
J jet **S** submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE 0 (nearest foot)
- below }

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED YES NO

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: M 6D 051

DRILLERS SIGNATURE _____

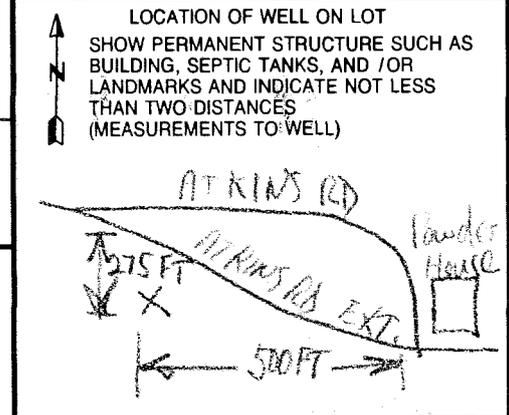
LIC. NO.: 4 6D 051

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) (E.R.O.S.) W Q

70 _____ 72 _____ 74 75 76 _____

TELESCOPE CASING LOG INDICATOR OTHER DATA



C1	8336	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		FILL IN THIS FORM COMPLETELY PLEASE TYPE		
ST/CO USE ONLY DATE Received MM DD YY 8 13		DATE WELL COMPLETED MM DD YY 07 11 03		PERMIT NO. FROM "PERMIT TO DRILL WELL" CH 94 5176

Depth of Well 22 14 26
(TO NEAREST FOOT)

OWNER Naval Surface Warfare Center
STREET OR RFD Indian Head, MD 20640 TOWN _____
SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Reddish Brown Fill Clay	0	2	
Gray to Dark Gray S. Hy Clay Dense	2	15	✓

GROUTING RECORD (Circle appropriate box)

WELL HAS BEEN GROUTED **Y** (44) **N** (44)

TYPE OF GROUTING MATERIAL (Circle one):
CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 45 46 NO. OF POUNDS 45 46
GALLONS OF WATER Hydrated

DEPTH OF GROUT SEAL (to nearest foot)
from 48 TOP ft. to 54 BOTTOM ft. (enter 0 if from surface)

CASING RECORD

MAIN CASING TYPE **PL** Nominal diameter top (main) casing (nearest inch) 2 Total depth of main casing (nearest foot) 4

SCREEN RECORD

screen type or open hole **ST** **BR** **HO**
(insert appropriate code below) STEEL BRASS OPEN HOLE
PL **OT** PLASTIC OTHER

C3 Monitor Well Only

PUMPING TEST

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) N/A

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 ft. 20 ft.

WHEN PUMPING 22 ft. 25 ft.

TYPE OF PUMP USED (for test)

A air **P** piston **T** turbine
C centrifugal **R** rotary **O** other (describe below)
J jet **S** submersible

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED **Y** **N**

CIRCLE APPROPRIATE LETTER
A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. MG D051
DRILLERS SIGNATURE _____
LIC. NO. MG D051

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C2 DEPTH (nearest ft.)

ST 4 14

E A C H S R E N
8 9 11 15 17 21
23 24 26 30 32 36
38 39 41 45 47 51

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 2 (NEAREST INCH) 56 to 60

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 2 14

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (E.R.O.S.) W Q

70 72 74 75 76
TELESCOPE LOG OTHER DATA
CASING INDICATOR

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES **NO**

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE (nearest foot)
- below } 0

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

C1	8336	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		DATE WELL COMPLETED		
ST/CO USE ONLY DATE Received MM DD YY 6 13		DATE WELL COMPLETED MM DD YY 07 17 03		Depth of Well 22 14 26 (TO NEAREST FOOT)
OWNER <u>Naval Surface Warfare Center</u>		PERMIT NO. FROM "PERMIT TO DRILL WELL" CE 94 5176		
STREET OR RFD <u>Indian Head, MD 20640</u>		COUNTY NUMBER		
SUBDIVISION _____		SECTION _____ LOT _____		
WELL LOG Not required for driven wells		GROUTING RECORD		
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		WELL HAS BEEN GROUTED (Circle Appropriate Box) <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N		
DESCRIPTION (Use additional sheets if needed)	FEET		TYPE OF GROUTING MATERIAL (Circle one)	
	FROM	TO	CEMENT <input checked="" type="checkbox"/> CM	BENTONITE CLAY <input checked="" type="checkbox"/> BC
Reddish Brown Fill/ Clay Gray to Dark Gray Silty Clay Dense	0	2	NO. OF BAGS ^{45 46} 1/2 NO. OF POUNDS ^{45 46} 25	
	2	15	GALLONS OF WATER <u>Hydrated</u>	
		DEPTH OF GROUT SEAL (to nearest foot) from <u>0</u> ft. to <u>2</u> ft. (enter 0 if from surface)		
		CASING RECORD		
		casing types insert appropriate code below		
		<input checked="" type="checkbox"/> ST STEEL <input checked="" type="checkbox"/> CO CONCRETE <input type="checkbox"/> PL PLASTIC <input type="checkbox"/> OT OTHER		
		MAIN CASING TYPE <u>PL</u> Nominal diameter top (main) casing (nearest inch) <u>2</u> Total depth of main casing (nearest foot) <u>4</u>		
		OTHER CASING (if used) diameter inch _____ depth (feet) from _____ to _____		
		SCREEN RECORD		
		screen type or open hole insert appropriate code below		
		<input checked="" type="checkbox"/> ST STEEL <input type="checkbox"/> BR BRASS <input type="checkbox"/> HO OPEN HOLE <input type="checkbox"/> PL PLASTIC <input type="checkbox"/> BR BRONZE <input type="checkbox"/> OT OTHER		
NUMBER OF UNSUCCESSFUL WELLS: <u>0</u>		C2 DEPTH (nearest ft.)		
WELL HYDROFRACTURED <input checked="" type="checkbox"/> Y <input checked="" type="checkbox"/> N		1 <u>ST</u> 4 14 E A C H 8 9 11 15 17 21 S C 2 23 24 26 30 32 36 R E 3 38 39 41 45 47 51 E E N		
CIRCLE APPROPRIATE LETTER A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED E ELECTRIC LOG OBTAINED P TEST WELL CONVERTED TO PRODUCTION WELL		SLOT SIZE 1 <u>0</u> 2 <u>2</u> 3 <u>0</u>		
I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.		DIAMETER OF SCREEN <u>2</u> (NEAREST INCH) 56 60 from _____ to _____		
DRILLERS LIC. NO. 1 <u>MGD051</u> <u>Cecil R. [Signature]</u> DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) LIC. NO. 1 <u>MGD051</u>		GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 <u>2</u> <u>14</u>		
SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)		MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER) T _____ (E.R.O.S.) W Q _____		
		70 _____ 72 _____ 74 75 76 _____ TELESCOPE CASING LOG INDICATOR OTHER DATA		
		C3 <u>Monitor well Only</u> PUMPING TEST		
		HOURS PUMPED (nearest hour) <u>N/A</u> 8 9		
		PUMPING RATE (gal. per min.) _____ 11 15		
		METHOD USED TO MEASURE PUMPING RATE _____		
		WATER LEVEL (distance from land surface)		
		BEFORE PUMPING _____ 17 20 ft.		
		WHEN PUMPING _____ 22 25 ft.		
		TYPE OF PUMP USED (for test)		
		<input checked="" type="checkbox"/> A air <input type="checkbox"/> P piston <input type="checkbox"/> T turbine <input checked="" type="checkbox"/> C centrifugal <input type="checkbox"/> R rotary <input type="checkbox"/> O other (describe below) <input type="checkbox"/> J jet <input type="checkbox"/> S submersible		
		PUMP INSTALLED		
		DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES <input type="checkbox"/> NO <input checked="" type="checkbox"/>		
		IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.		
		TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. _____ 29		
		CAPACITY: GALLONS PER MINUTE (to nearest gallon) _____ 31 35		
		PUMP HORSE POWER _____ 37 41		
		PUMP COLUMN LENGTH (nearest ft.) _____ 43 47		
		CASING HEIGHT (circle appropriate box and enter casing height)		
		<input checked="" type="checkbox"/> + above } LAND SURFACE <input type="checkbox"/> - below } _____ (nearest foot)		
		LOCATION OF WELL ON LOT		
		SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)		

C1	8337	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)				
ST/CO USE ONLY DATE Received MM DD YY 8 13		DATE WELL COMPLETED MM DD YY 15 17 83	Depth of Well 22 12 26 (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL" CH 94 5176 28 29 30 31 32 33 34 35 36 37

OWNER Naval Surface Warfare Centers
 STREET OR RFD Atkins Head, MD 20640 TOWN _____
 SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG		
Not required for driven wells		
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		
DESCRIPTION (Use additional sheets if needed)	FEET	check if water bearing
	FROM TO	
<p>Reddish Brown Fill</p> <p>Brown to Dark Gray Organic Silty Clay</p>	<p>0 2</p> <p>2 12</p>	<p></p> <p>✓</p>

GROUTING RECORD

WELL HAS BEEN GROUTED
(Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 45 46 N/A NO. OF POUNDS 45 46 12

GALLONS OF WATER Hydrated

DEPTH OF GROUT SEAL (to nearest foot)

from 1 ft. to 2 ft.
(enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

ST STEEL **CO** CONCRETE
 PL PLASTIC **OT** OTHER

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 2 Total depth of main casing (nearest foot) 2

60 61 63 64 66 70

OTHER CASING (if used)

diagram diameter depth (feet) inch from to

E
A
C
H
C
A
S
I
N
G

SCREEN RECORD

screen type or open hole insert appropriate code below

ST STEEL **BR** BRASS **HO** OPEN HOLE
 PL PLASTIC **OT** OTHER

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED **Y** **N**

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

C2 DEPTH (nearest ft.)

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	
E																					
A																					
C																					
H																					
S																					
C																					
R																					
E																					
E																					
N																					

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 2 (NEAREST INCH) 56 60

from _____ to _____

C3 Monitor well

PUMPING TEST only

HOURS PUMPED (nearest hour) N/A 8 9

PUMPING RATE (gal. per min.) 11 15

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.

WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)

A air **P** piston **T** turbine
 C centrifugal **R** rotary **O** other (describe below)
 J jet **S** submersible

PUMP INSTALLED

DRILLER INSTALLED PUMP (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 29

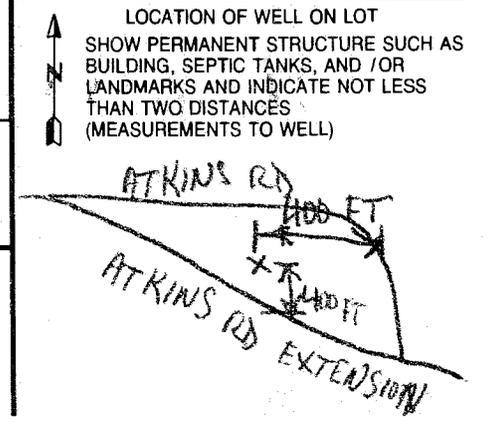
CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE
 - below } 0 (nearest foot)



I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M8 D051
 DRILLERS SIGNATURE Carl R. [Signature]
 (MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. M8 D051

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 1 12

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T _____ (E.R.O.S.) W Q _____

70 _____ 72 _____ 74 75 76 _____

TELESCOPE CASING LOG INDICATOR OTHER DATA

C1	8337	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 4 5 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		COUNTY NUMBER		

ST/CO USE ONLY DATE Received MM DD YY 8 13	DATE WELL COMPLETED MM DD YY 07 17 83	Depth of Well 22 12 26 (TO NEAREST FOOT)	PERMIT NO. FROM "PERMIT TO DRILL WELL" CH - 94 - 5176 28 29 30 31 32 33 34 35 36 37
---	---	--	--

OWNER Naval Surface Warfare Centers
 STREET OR RFD Leesville Head, MD 20640 TOWN _____
 SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG		
Not required for driven wells		
STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING		
DESCRIPTION (Use additional sheets if needed)	FEET	check if water bearing
	FROM TO	
Reddish Brown Fill	0 2	
Brown to Dark Gray Organic Silty Clay	2 12	✓

GROUTING RECORD yes no

WELL HAS BEEN GROUTED
(Circle Appropriate Box) **Y** **N**

TYPE OF GROUTING MATERIAL (Circle one)

CEMENT **CM** BENTONITE CLAY **BC**

NO. OF BAGS 45 46 NO. OF POUNDS 45 46

GALLONS OF WATER Hydrated

DEPTH OF GROUT SEAL (to nearest foot)
from 48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

ST **CO**
STEEL CONCRETE

PL **OT**
PLASTIC OTHER

MAIN CASING TYPE PL Nominal diameter top (main) casing (nearest inch) 2 Total depth of main casing (nearest foot) 2

60 61 63 64 66 70

OTHER CASING (if used)

diameter inch depth (feet) from to

E A C H C A S I N G

SCREEN RECORD

screen type or open hole (insert appropriate code below)

ST **BR** **HO**
STEEL BRASS OPEN HOLE

PL **OT**
PLASTIC OTHER

C2 DEPTH (nearest ft.)

1 ST 2 1 2

E A C H S C R E E N

8 9 11 15 17 21

23 24 26 30 32 36

38 39 41 45 47 51

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN 2 (NEAREST INCH) 56 60

from to

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

1 12 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

70 72 74 75 76

TELESCOPE CASING LOG INDICATOR OTHER DATA

C3 Monitor well

PUMPING TEST only

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) N/A 11 15

METHOD USED TO MEASURE PUMPING RATE _____

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 _____ ft. 20

WHEN PUMPING 22 _____ ft. 25

TYPE OF PUMP USED (for test)

A air **P** piston **T** turbine
27 27 27

C centrifugal **R** rotary **O** other (describe below)
27 27 27

J jet **S** submersible
27 27

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES **NO**

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29 29

CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

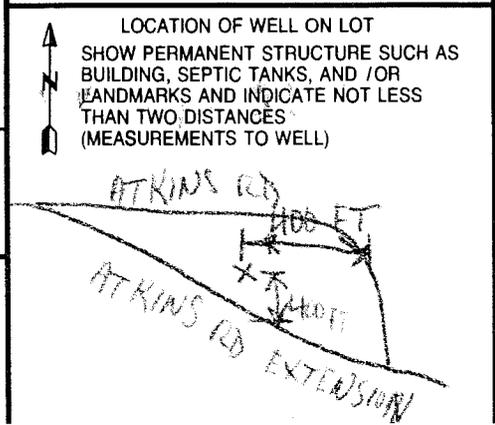
PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE

- below } 0 (nearest foot) 50 51



NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED yes **Y** no **N**

CIRCLE APPROPRIATE LETTER WHEN THIS WELL WAS COMPLETED

A A WELL WAS ABANDONED AND SEALED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. M D 051

DRILLERS SIGNATURE _____

(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO. 116 D 051

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C1	8338	SEQUENCE NO. (MDE USE ONLY)	STATE OF MARYLAND WELL COMPLETION REPORT FILL IN THIS FORM COMPLETELY PLEASE TYPE	THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.
1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)		COUNTY NUMBER		
ST/CO USE ONLY DATE Received MM DD YY 8 13		DATE WELL COMPLETED MM DD YY 07 18 03		PERMIT NO. FROM "PERMIT TO DRILL WELL" CH 06 5176
		Depth of Well 22 13 26 (TO NEAREST FOOT)		28 29 30 31 32 33 34 35 36 37

OWNER Naval Surface Warfare Center first name
 STREET OR RFD Indian Head, MD 20648 TOWN
 SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET		check if water bearing
	FROM	TO	
Fill	0	2	
Silty clay w/ decaying wood / organic material	2	12.5	✓

GROUTING RECORD YES NO
 Y N
 (Circle Appropriate Box)

TYPE OF GROUTING MATERIAL (Circle one)
 CEMENT CM BENTONITE CLAY BC

NO. OF BAGS N/A NO. OF POUNDS 12
 GALLONS OF WATER hydrated

DEPTH OF GROUT SEAL (to nearest foot)
 from 0 ft. to 1 ft.
 (enter 0 if from surface)

CASING RECORD

casing types insert appropriate code below

<input checked="" type="radio"/> ST STEEL	<input type="radio"/> CO CONCRETE
<input type="radio"/> PL PLASTIC	<input type="radio"/> OT OTHER

MAIN CASING TYPE
 Nominal diameter top (main) casing (nearest inch): 02
 Total depth of main casing (nearest foot): 2

OTHER CASING (if used)

E A C H C A S I N G	diameter		depth (feet)	
	inch		from	to

SCREEN RECORD

screen type or open hole

<input checked="" type="radio"/> ST STEEL	<input type="radio"/> BR BRASS	<input type="radio"/> HO OPEN HOLE
<input type="radio"/> PL PLASTIC	<input type="radio"/> OT OTHER	

insert appropriate code below

NUMBER OF UNSUCCESSFUL WELLS: 0

WELL HYDROFRACTURED Y N

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO. MGD 051
 DRILLERS SIGNATURE [Signature]
 (MUST MATCH SIGNATURE ON APPLICATION)
 LIC. NO. MGD 051

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

C2 DEPTH (nearest ft.)

1	2	3	4	5	6
11	13	15	17	19	21
23	25	27	29	31	33
35	37	39	41	43	45
47	49	51	53	55	57

SLOT SIZE 1 0 2 2 3 0

DIAMETER OF SCREEN (NEAREST INCH)
12 from 13 to 1

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

70 72 74 75 76

TELESCOPE CASING LOG INDICATOR OTHER DATA

C3 Monitor well

PUMPING TEST N/A

HOURS PUMPED (nearest hour) 8 9

PUMPING RATE (gal. per min.) 11 15

METHOD USED TO MEASURE PUMPING RATE

WATER LEVEL (distance from land surface)

BEFORE PUMPING 17 20 ft.
 WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)

<input checked="" type="radio"/> A air	<input type="radio"/> P piston	<input type="radio"/> T turbine
<input type="radio"/> C centrifugal	<input type="radio"/> R rotary	<input type="radio"/> O other (describe below)
<input type="radio"/> J jet	<input type="radio"/> S submersible	

PUMP INSTALLED

DRILLER INSTALLED PUMP (CIRCLE) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29: 29

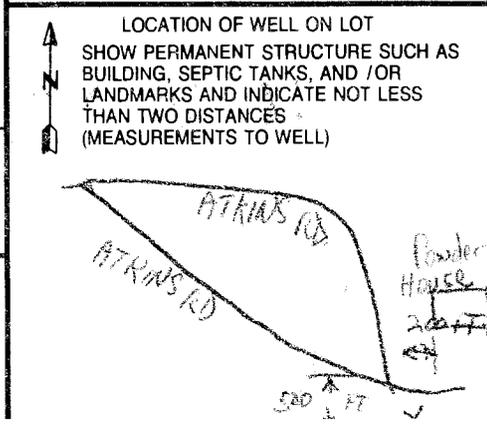
CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35

PUMP HORSE POWER 37 41

PUMP COLUMN LENGTH (nearest ft.) 43 47

CASING HEIGHT (circle appropriate box and enter casing height)

+ above } LAND SURFACE
 - below } 0 (nearest foot)



APPENDIX E

***TECHNICAL DIRECTIVES / VARIANCE
REQUESTS / REQUEST FOR INFORMATION***

APPENDIX E

TECHNICAL DIRECTIVES/VARIANCE REQUESTS/ REQUEST FOR INFORMATION

- Technical Directive Log
- TD-001 to TD-007
- Variance Request Log
- VR-001 to VR-005
- Request for Information Log
- RFI-001 to RFI-007

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. TD-001 - <u>RFI #3</u>		Date: <u>10-24-02</u>	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input checked="" type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The shoulder of Atkins Road where the 15" CMP empties into the riprap channel needs to be stabilized.			
Attachment <input checked="" type="checkbox"/> Response from Tetra Tech NUS and Cost Estimate Worksheet			
Drawing Ref: C-2		Spec. Ref.	
Explanation/Recommendation: To stabilize the embankment an 18" CMP will be slipped over the end of the existing culvert extending it 5-feet. Riprap will then be buttressed against the embankment with a layer of separation geotextile between. The work will be completed as stated in the response from Tetra Tech NUS attached.			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 1,800	
WBS Codes Affected: New <input type="checkbox"/> Existing <input checked="" type="checkbox"/> 69909220		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input checked="" type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days: 1-day	
Contractor: Site Representative: <u>[Signature]</u> Project Manager:		Date <u>10-24-02</u>	
Reviewer Comments, incl RFI Response:			
Navy: ROICC: <u>[Signature]</u> RPM/EIC: <u>[Signature]</u>		Signature <u>[Signature]</u> Date <u>10/24/02</u>	
<input type="checkbox"/> Task Order Modification to Follow (contract action)		<input type="checkbox"/> No Task Order Modification Required	

Project# 809401
 Towngut Landfill

CULVERT EXTENSION

Labor	Rate	OT	Hours	Subtotal	Fringe	Markup
Foreman	\$ 18.50	\$ 27.75	5	\$ 92.50	\$ 117.57	\$ 145.20
Equip Oper - V	\$ 17.22	\$ 25.83	5	\$ 86.10	\$ 109.43	\$ 135.15
Field Serv. Tech	\$ 10.00	\$ 15.00	5	\$ 50.00	\$ 63.55	\$ 78.48
Field Serv. Tech	\$ 10.00	\$ 15.00	5	\$ 50.00	\$ 63.55	\$ 78.48
						\$ 437.31

Total Labor \$ 437.31

Per Diems

	Diem	Lodging	Days	Daily	Total Diem	Markup
Foreman	\$ 34.00	\$ 66.00	1	\$ 75.83	\$ 75.83	\$ 80.15
Equip Oper - V	\$ 34.00	\$ 66.00	1	\$ 75.83	\$ 75.83	\$ 80.15
Field Serv. Tech	\$ 34.00	\$ 66.00	1	\$ 75.83	\$ 75.83	\$ 80.15
Field Serv. Tech	\$ 34.00	\$ 66.00	1	\$ 75.83	\$ 75.83	\$ 80.15

Total Diems \$ 320.61

IT Equipment

	Rate		Days		Total	Markup
	\$ -	/day			\$ -	\$ -
	\$ -	/day	0		\$ -	\$ -

Total IT Equipment \$ -

Materials

	unit rate		units		Total	Markup
Rip Rap	\$ 17.00	/cy	20	cy	\$ 340.00	\$ 359.38
culvert pipe 18" cmp	\$ 105.00	/ea	1	loads	\$ 105.00	\$ 110.99
						\$ 470.37

Total Rental Equipment \$ 470.37

Rental Equipment

	unit rate		units		Total	Markup
Kobelco 250 Excavator	\$ 515.00	/day	1		\$ 515.00	\$ 544.36
						\$ 544.36

Total Rental Equipment \$ 544.36

REVENUE SUMMARY

Labor	\$ 437.31
Per Diem	\$ 320.61
IT Equipment	\$ -
Field Purchase	\$ 470.37
Rental Equipment	\$ 544.36
	\$ 1,772.64



TECHNICAL MEMORANDUM

Date: October 14, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)
Tim Smith (TtNUS – Pittsburgh)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Shaw RFI-003
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to requests for information (RFI)-003 received from Shaw Environmental, Inc. (Shaw) (Ernie Duke) via e-mail on October 11, 2002.

The RFI discusses extending the 15-inch corrugated metal pipe (CMP) below Atkins Road and providing adequate stabilization for Atkins Road. Shaw recommends extending the CMP 5-feet into the riprap channel and stabilizing the embankment with a separation geotextile and riprap.

Tetra Tech NUS, Inc. has no issues with this suggestion provided the following design parameters are followed.

- To avoid decreasing the capacity of the existing CMP, the CMP extension should be, at a minimum, the same size and material as the existing CMP, and slipped over the existing CMP so that the existing CMP discharges into the extension.

**RESPONSE TO INFORMAL SHAW RFI'S
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IHDIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 2 OF 2**

- To avoid tail water conditions that would decrease the capacity of the existing culvert, the outfall invert of the extension should be set at an elevation that is either the same as, or higher than, the elevation of the plunge pool outfall elevation.
- To protect against erosion, the geotextile and riprap used to stabilize the embankment should be the same material types and sizes used to stabilize the channel that the existing CMP feeds.

If you have any additional questions concerning this RFI please feel free to contact me at (412) 921-8684 or Tim Smith at (412) 921-7720.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

Technical Directive - 002
 For RFIs 002R and 004R

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. TD-002		Date: 11-4-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input checked="" type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): Two areas of additional waste have been encountered outside the original Limits of Disturbance.			
Attachment <input checked="" type="checkbox"/> Responses from Tetra Tech NUS and Cost Estimate Worksheet			
Drawing Ref: C-6		Spec. Ref.	
Explanation/Recommendation: The two areas of waste encountered outside the Limits will be incorporated into the landfill following the recommendations presented by Tetra Tech NUS in their responses dated October 24, 2002. (attached)			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$35,700.00	
WBS Codes Affected: New <input type="checkbox"/> Existing <input checked="" type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input checked="" type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
69909220			
Contractor: _____ Signature _____ Date _____			
Site Representative: <i>[Signature]</i>		11-7-02	
Project Manager: <i>[Signature]</i>		11-7-02	
Reviewer Comments, incl RFI Response:			
Navy: _____ Signature _____ Date _____			
ROICC: <i>[Signature]</i>		11/6/02	
RPM/EIC: <i>[Signature]</i>		11/7/02	
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

Project# 809401
 Towngnt Landfill

TECHNICAL DIRECTIVE 002 CAP EXTENSION

Labor	Rate	OT	Hours	Subtotal	Fringe	Markup
Project mgr	\$ 41.33	\$ 41.33	0	\$ -	\$ -	\$ -
Site Mgr	\$ 31.94	\$ 31.94	30	\$ 958.20	\$ 1,217.87	\$ 1,504.07
QC	\$ 26.67	\$ 26.67	30	\$ 800.10	\$ 1,016.93	\$ 1,255.90
PBA	\$ 17.91	\$ 26.87	30	\$ 537.30	\$ 682.91	\$ 843.39
HSO	\$ 17.53	\$ 26.30	60	\$ 1,542.64	\$ 1,960.70	\$ 2,421.46
Foreman	\$ 18.50	\$ 27.75	60	\$ 1,628.00	\$ 2,069.19	\$ 2,555.45
Equip Oper - V	\$ 17.22	\$ 25.83	60	\$ 1,515.36	\$ 1,926.02	\$ 2,378.64
Field Serv. Tech	\$ 10.00	\$ 15.00	60	\$ 880.00	\$ 1,118.48	\$ 1,381.32
Surveyor	\$ 15.00	\$ 22.50	20	\$ 300.00	\$ 381.30	\$ 470.91

Total Labor \$ 12,811.14

Per Diems

	Diem	Lodging	Days	Daily	Total Diem	Markup
Site Mgr	\$ 30.00	\$ 60.50	3	\$ 90.50	\$ 271.50	\$ 286.98
QC	\$ 30.00	\$ 60.50	3	\$ 90.50	\$ 271.50	\$ 286.98
PBA	\$ 30.00	\$ 60.50	3	\$ 90.50	\$ 271.50	\$ 286.98
HSO	\$ 30.00	\$ 60.50	6	\$ 90.50	\$ 543.00	\$ 573.95
Foreman	\$ 30.00	\$ 60.50	6	\$ 90.50	\$ 361.50	\$ 382.11
Equip Oper - IV	\$ 30.00	\$ 30.25	6	\$ 60.25	\$ 543.00	\$ 573.95
Field Serv. Tech	\$ 30.00	\$ 30.25	6	\$ 90.50	\$ 181.00	\$ 191.32
Surveyor	\$ 30.00	\$ 60.50	2	\$ 90.50	\$ 181.00	\$ 191.32

Total Diems \$ 2,773.57

IT Equipment

	Rate		Days		Total	Markup
volvo 150 loader	\$ 175.00	/day	5		\$ 875.00	\$ 1,146.25
pick up truck	\$ 23.00	/day	3		\$ 69.00	\$ 90.39
pick up truck	\$ 23.00	/day	6		\$ 138.00	\$ 180.78
chain saw	\$ 14.00	/day	2		\$ 28.00	\$ 36.68
nuc density gauge	\$ 23.00	/day	5		\$ 115.00	\$ 150.65
data ram	\$ 10.00	/day	6		\$ 60.00	\$ 78.60

Total IT Equipment \$ 1,683.35

Mobe/demobe Equip

	unit rate		units		Total	Markup

Total Rental Equipment \$ -

Rental Equipment

	unit rate		units		Total	Markup
Excavator	\$ 197.00	/day	5		\$ 985.00	\$ 1,041.15
dozer d-5 LGP	\$ 185.00	/day	5		\$ 925.00	\$ 977.73
roller compactor	\$ 175.00	/day	5		\$ 875.00	\$ 924.88
survey equipment	\$ 56.00	/day	5		\$ 280.00	\$ 295.96
TRAILER 32' w/ steps	\$ 22.00	/day	4		\$ 88.00	\$ 93.02

Total Rental Equipment \$ 3,332.72

Materials & ODC's

	unit rate		units		Total	Markup
utilities	\$ 220.00	/day	4		\$ 880.00	\$ 930.16
H & S Equip	\$ 21.00	/day	6		\$ 126.00	\$ 133.18
FOGMA	\$ 112.00	/day	5		\$ 560.00	\$ 591.92
4 loads rip rap	\$ 350.00	/ea	4		\$ 1,400.00	\$ 1,479.80
select fill	\$ 7.20	/ton	900		\$ 6,480.00	\$ 6,849.36
top soil	\$ 11.50	/ton	300		\$ 3,450.00	\$ 3,646.65
type 2 erosion matt	\$ 2.47	/sy	293		\$ 723.71	\$ 764.96
silt fence	\$ 21.00	/roll	4		\$ 84.00	\$ 88.79
hydroseed	\$ 2,186.00	/acre	.25		\$ 546.50	\$ 577.65

Total Materials & ODC's \$ 15,062.47

REVENUE SUMMARY

<i>Labor</i>	\$ 12,811.14
<i>Per Diem</i>	\$ 2,773.57
<i>IT Equipment</i>	\$ 1,683.35
<i>Field Purchase</i>	\$ -
<i>Rental Equipment</i>	\$ 3,332.72
<i>Materials & ODC's</i>	\$ 15,062.47
	\$ 35,663.25

Gardner, Cathy B (EFACHES)

From: Morris, Jeffrey W (EFACHES)
Sent: Wednesday, November 06, 2002 8:10
To: Gardner, Cathy B (EFACHES)
Subject: RE: Cap Extension Technical Directive
Importance: High

Cathy,

I concur with the TtNUS responses.

Jeff

-----Original Message-----

From: Gardner, Cathy B (EFACHES)
Sent: Wednesday, November 06, 2002 7:38 AM
To: Morris, Jeffrey W (EFACHES)
Subject: FW: Cap Extension Technical Directive

Jeff,

I never received a response on the Cap Extension Cost. Is this approved or not?

Cathy

-----Original Message-----

From: Pringle, Daniel [mailto:Daniel.Pringle@shawgrp.com]
Sent: Monday, November 04, 2002 4:01 PM
To: Gardner, Cathy B (EFACHES)
Cc: Morris, Jeffrey W (EFACHES); Carriere, Steve M.; Duke, Ernie
Subject: Cap Extension Technical Directive

Cathy-here is TD-002 for the waste encountered beyond the design limits of the Town Gut Cap. included in this e-mail is the cost estimate and the Response to RFI-002 and RFI-004 prepared by Tetra Tech.

<<TD-002 Additional Waste.doc>> <<TD-002 Costing-Additional Areas.xls>> <<TTech Response to RFI-002.doc>> <<TTech Response to RFI-004.doc>>

Ernie for submit a signed copy(Ernie and my signature) of TD-002 to you in the next day or two

Daniel Pringle
Shaw Environmental, Inc.
2790 Mossie Blvd.
Monroeville, Pa. 15146
Phone: 412-380-6248
Fax: 412-858-3979
Daniel.Pringle@Shawgrp.com

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<<TD-002 Additional Waste.doc>> <<TD-002 Costing-Additional Areas.xls>> <<TTech Response to RFI-002.doc>> <<TTech Response to RFI-004.doc>>

Ernie for submit a signed copy(Ernie and my signature) of TD-002 to you in the next day or two

Daniel Pringle
Shaw Environmental, Inc.
2790 Mossie Blvd.
Monroeville, Pa. 15146
Phone: 412-380-6248
Fax: 412-858-3979
Daniel.Pringle@Shawgrp.com

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

Technical Directive – 003
 Applies to RFI-005 for Road Drainage

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. TD-003		Date: 11-20-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy		<input checked="" type="checkbox"/> Contractor	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Technical Direction		<input type="checkbox"/> RFI	<input type="checkbox"/> Variance Request
		<input type="checkbox"/> Overtime Authorization	
Description (Include location & attachments if necessary):			
Surface water runoff from along the west side of Atkins Road Extension discharges down over the reconstructed slope next to the 78" culvert and causes erosion during a heavy rain.			
Attachment <input checked="" type="checkbox"/> Response from Tetra Tech NUS and Cost Estimate Worksheet			
Drawing Ref: C-7		Spec. Ref.	
Explanation/Recommendation:			
Based on the response from Tetra Tech the eroded slope will be regraded, separation geotextile will be placed and an 18-inch thick layer of riprap will be installed on the slope. In addition, two rock check dams will be constructed in the drainage ditch west of the Atkins Road Extension.			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 3,800	
WBS Codes Affected: New <input type="checkbox"/> Existing <input checked="" type="checkbox"/> 69909220		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input checked="" type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days: 1 day	
Contractor:		Signature	Date
Site Representative:		<i>[Signature]</i>	12-12-02
Project Manager:		<i>Daniel W. Bringle</i>	12-12-02
Reviewer Comments, incl RFI Response:			
Navy:		Signature	Date
ROICC:		<i>[Signature]</i>	12/13/02
RPM/EIC:		<i>[Signature]</i>	12/13/02
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

Project# 809401
Towngut Landfill

TECHNICAL DIRECTIVE 003

Labor	Rate	OT	Hours	Subtotal	Fringe	Markup
Foreman	\$ 18.50	\$ 27.75	10	\$ 203.50	\$ 258.65	\$ 319.43
Equip Oper - V	\$ 17.22	\$ 25.83	10	\$ 189.42	\$ 240.75	\$ 297.33
Field Serv. Tech	\$ 10.00	\$ 15.00	10	\$ 110.00	\$ 139.81	\$ 172.67
Field Serv. Tech	\$ 10.00	\$ 15.00	10	\$ 110.00	\$ 139.81	\$ 172.67

Total Labor \$ 962.09

Per Diems

	Diem	Lodging	Days	Daily	Total Diem	Markup
Foreman	\$ 30.00	\$ 66.00	1	\$ 96.00	\$ 96.00	\$ 101.47
Equip Oper - V	\$ 30.00	\$ 66.00	1	\$ 96.00	\$ 96.00	\$ 101.47
Field Serv. Tech	\$ 30.00	\$ 66.00	1	\$ 96.00	\$ 96.00	\$ 101.47
Field Serv. Tech	\$ 30.00	\$ 66.00	1	\$ 96.00	\$ 96.00	\$ 101.47

Total Diems \$ 405.89

IT Equipment

	Rate		Days	Total	Markup
VOLVO 150 LOADER	\$ 175.00	/day	1	\$ 175.00	\$ 229.25
	\$ -	/day	0	\$ -	\$ -

Total IT Equipment \$ 229.25

Materials

	unit rate		units	Total	Markup
Rip Rap	\$ 17.00	/ton	80 ton	\$ 1,360.00	\$ 1,437.52
AASHTO #1 Stone	\$ 18.75	/ton	10 ton	\$ 187.50	\$ 198.19
			loads	\$ -	\$ -

Total Rental Equipment \$ 1,635.71

Rental Equipment

	unit rate		units	Total	Markup
Kobelco 250 Excavator	\$ 515.00	/day	1	\$ 515.00	\$ 544.36

Total Rental Equipment \$ 544.36

REVENUE SUMMARY

Labor	\$	962.09
Per Diem	\$	405.89
IT Equipment	\$	229.25
Field Purchase	\$	1,635.71
Rental Equipment	\$	544.36
	\$	3,777.29

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

Technical Directive – 004
 Leaf-grow Application

DISTRIBUTION:

____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 ____ ROICC
 ____ RPM
 ____ COTR:
 OTHER: _____
 FILE: _____

Form No. TD-004		Date: 12-12-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy		<input checked="" type="checkbox"/> Contractor	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Technical Direction		<input type="checkbox"/> RFI	<input type="checkbox"/> Variance Request
<input type="checkbox"/> Overtime Authorization			
Description (include location & attachments if necessary):			
The topsoil available in the Indian Head Area has an organic matter of 1.4% based on test results received from a sample submitted to the University of Maryland. This topsoil is acceptable to use on the upland slopes but not the wetland areas.			
Attachment <input checked="" type="checkbox"/> Cost Estimate Worksheet			
Drawing Ref: C-4 & C-7		Spec. Ref. 02951	
Explanation/Recommendation:			
The application of leafgrow has been recommended to enhance the percentage of organic matter of the topsoil used in the wetland areas. The area designated as wetland within the Limits of Disturbance is approximately 0.5 acres as measured on the Design Drawings. Approximately 2-inches of leaf-grow will be spread over the topsoil layer and then tilled into the soil.			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 5500	
WBS Codes Affected: New <input type="checkbox"/> Existing <input checked="" type="checkbox"/> 69909220		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input checked="" type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days: 2 Days	
Contractor:		Signature	Date
Site Representative:		<i>[Signature]</i>	12-12-02
Project Manager:		<i>[Signature]</i>	12-12-02
Reviewer Comments, incl RFI Response:			
Navy:		Signature	Date
ROICC:		<i>[Signature]</i>	12/12/02
RPM/EIC:		<i>[Signature]</i>	12/12/02
		<i>[Signature]</i>	12/12/02
<input type="checkbox"/> Task Order Modification to Follow (contract action)		<input type="checkbox"/> No Task Order Modification Required	

Project# 809401
 Towngut Landfill

COST FOR LEAF GROW INSTALLATION

Labor	Rate	OT	Hours	Subtotal	Fringe	Markup
Project mgr	\$ 41.33	\$ 41.33	0	\$ -	\$ -	\$ -
Site Mgr	\$ 31.94	\$ 31.94	5	\$ 159.70	\$ 202.98	\$ 250.68
QC	\$ 26.67	\$ 26.67	5	\$ 133.35	\$ 169.49	\$ 209.32
PBA	\$ 17.91	\$ 26.87	5	\$ 89.55	\$ 113.82	\$ 140.57
HSO	\$ 17.53	\$ 26.30	0	\$ -	\$ -	\$ -
Foreman	\$ 18.50	\$ 27.75	20	\$ 370.00	\$ 470.27	\$ 580.78
Equip Oper - V	\$ 17.22	\$ 25.83	20	\$ 344.40	\$ 437.73	\$ 540.60
Field Serv. Tech	\$ 10.00	\$ 15.00	20	\$ 200.00	\$ 254.20	\$ 313.94
Surveyor	\$ 15.00	\$ 22.50	0	\$ -	\$ -	\$ -

Total Labor \$ 2,035.88

Per Diems

	Diem	Lodging	Days	Daily	Total Diem	Markup
Site Mgr	\$ 30.00	\$ 60.50	0.5	\$ 90.50	\$ 45.25	\$ 47.83
QC	\$ 30.00	\$ 60.50	0.5	\$ 90.50	\$ 45.25	\$ 47.83
PBA	\$ 30.00	\$ 60.50	0.5	\$ 90.50	\$ 45.25	\$ 47.83
HSO	\$ 30.00	\$ 60.50	0	\$ 90.50	\$ 181.00	\$ 191.32
Foreman	\$ 30.00	\$ 60.50	2	\$ 90.50	\$ 120.50	\$ 127.37
Equip Oper - IV	\$ 30.00	\$ 30.25	2	\$ 60.25	\$ 181.00	\$ 191.32
Field Serv. Tech	\$ 30.00	\$ 30.25	2	\$ 90.50	\$ -	\$ -
Surveyor	\$ 30.00	\$ 60.50	0	\$ 90.50	\$ -	\$ -

Total Diems \$ 653.49

IT Equipment

	Rate		Days		Total	Markup
pick up truck	\$ 23.00	/day	2		\$ 46.00	\$ 60.26
pick up truck	\$ 23.00	/day	0		\$ -	\$ -
data ram	\$ 10.00	/day	0		\$ -	\$ -

Total IT Equipment \$ 60.26

Mobe/demobe Equip

	unit rate		units		Total	Markup

Total Rental Equipment \$ -

Rental Equipment

	unit rate		units		Total	Markup
tractor w/ disk	\$ 170.00	/day	2		\$ 340.00	\$ 359.38
dozer d-5 LGP	\$ 185.00	/day	2		\$ 370.00	\$ 391.09

Total Rental Equipment \$ 750.47

Materials & ODC's

	unit rate		units		Total	Markup
LEAF GROW	\$ 19.00	/cy	100		\$ 1,900.00	\$ 2,008.30
	\$ -	/ton	0		\$ -	\$ -
	\$ -	/ton	0		\$ -	\$ -

Total Materials & ODC's \$ 2,008.30

REVENUE SUMMARY

Labor	\$ 2,035.88
Per Diem	\$ 653.49
IT Equipment	\$ 60.26
Field Purchase	\$ -
Rental Equipment	\$ 750.47
Materials & ODC's	\$ 2,008.30
	\$ 5,508.40

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

Technical Directive – 005
 Hydro-Blanket

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. TD-005		Date: 12-31-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy		<input checked="" type="checkbox"/> Contractor	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Technical Direction	<input type="checkbox"/> RFI	<input type="checkbox"/> Variance Request	<input type="checkbox"/> Overtime Authorization
Description (Include location & attachments if necessary):			
During several rain events the select fill has had significant erosion on the slopes with the runoff beginning and accumulating from the top of the long slopes. Once the topsoil is in-place additional erosion of the slopes may occur.			
Attachment <input checked="" type="checkbox"/> Hydro-blanket Literature			
Drawing Ref: C-4 & C-7		Spec. Ref. 02951	
Explanation/Recommendation:			
The response for RFI-006 recommends installing erosion control matting (ECM) on the steeper west slope of Area 1. During the 12-12-02 QC Meeting Hydro-blanket was discussed as an erosion control measure instead of ECM. The Hydro-blanket would protect the slopes and if used on the areas upgradient of the slopes would significantly reduce the affects of any heavy rain events. The Hydro-blanket would be installed at the time the areas are hydroseeded as a subcontractor expense. The additional cost for the hydro-blanket is \$3,520 per acre or \$17,600 for 5 acres.			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 17,600	
WBS Codes Affected: New <input type="checkbox"/> Existing <input checked="" type="checkbox"/> 69909220		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: _____ Site Representative: _____ Project Manager: _____		Signature _____ Date _____	
Reviewer Comments, incl RFI Response:			
Navy: _____ ROICC: _____ RPM/EIC: _____		Signature _____ Date _____	
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

Hydraulic Mulches



The Simple and Effective Erosion Control Solution

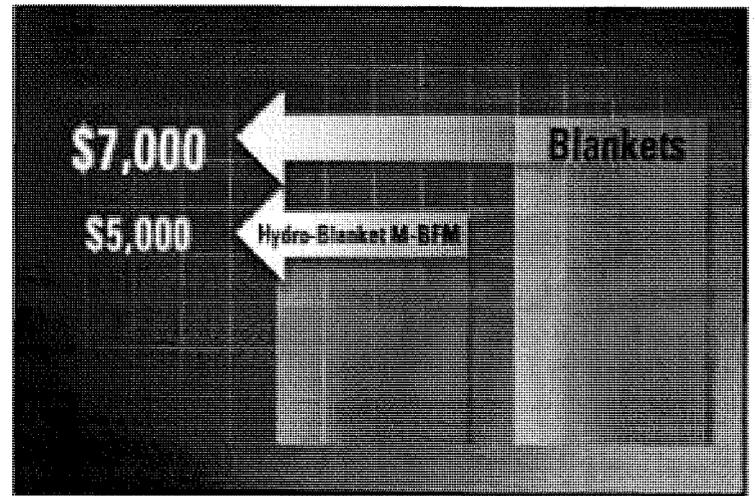
The Future IS M-BFM™- MECHANICALLY-BONDED FIBER MATRIX™

The Best Slope Protection at the Lowest Overall Cost.

Nothing controls soil erosion and accelerates seed germination like the revolutionary Hydro-Blanket® M-BFM™ from Terra-Mulch®, the ultimate hydraulic blanket. Patented technology creates a hydraulically applied Mechanically-Bonded Fiber Matrix™ (M-BFM™) that offers better protection on slopes than rolled erosion control blankets and conventional M products—with the speed and cost-savings of hydroseeding.

Hydro-Blanket M-BFM™ is the only hydraulically applied mulch that requires no cure time to be effective; it works on slopes steeper than 2.5:1 and remains effective even in sustained rainfall. And it can be used in all types of mechanically agitated hydraulic seeding equipment.

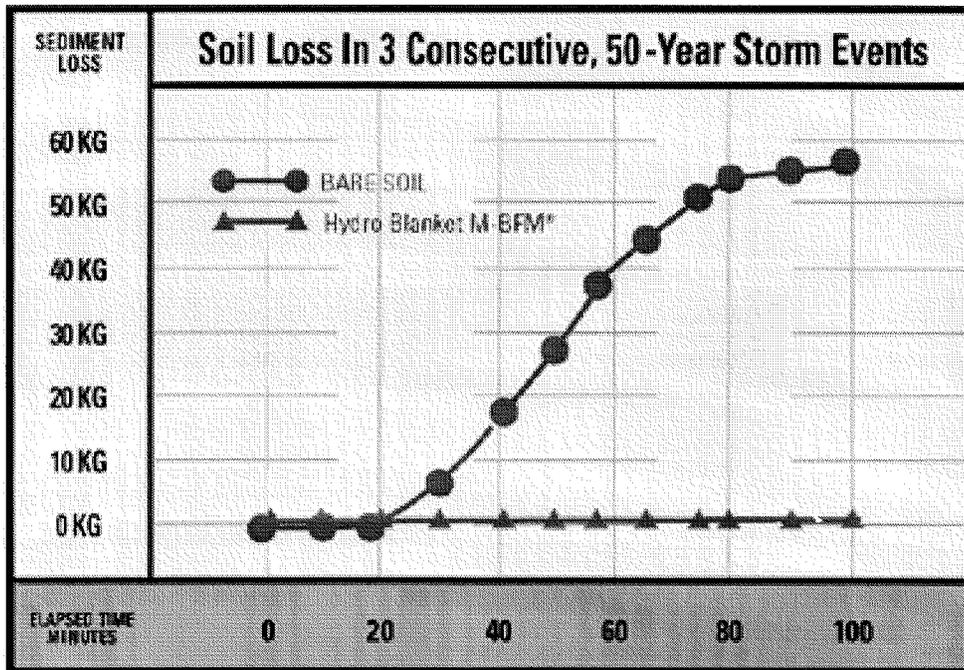
Installed cost per acre*



Hydro-Blanket M-BFM™ dramatically reduces labor and overall application costs.

*Based on installed rate at 3,000 lbs per acre, including seed bed preparation, seed, time and fertilizer.

99% Effective Controlling Erosion



Only Hydro-Blanket M-BFM™ has been subjected to three consecutive, 50-year storm events and remained 99.99% effective.

M-BFM™ application rate 3,500 lbs per acre San Diego State University Soil Erosion Research Laboratory (SDSUI SERL)

.. Doesn't Just Perform, It Outperforms.

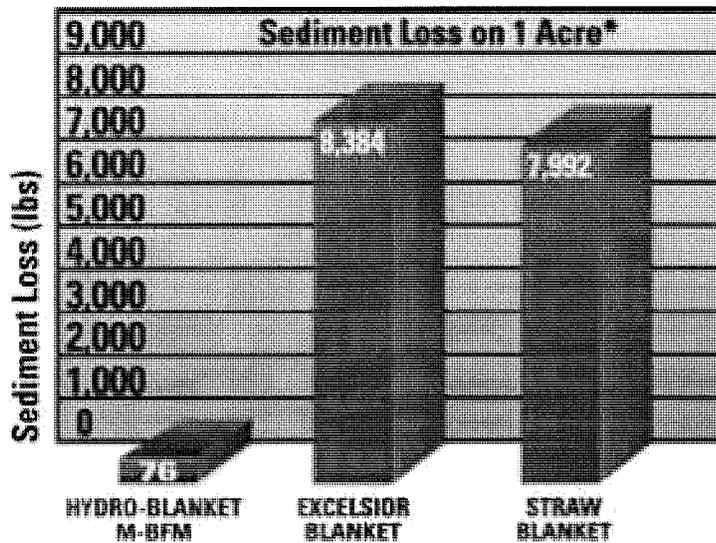
No other product has been subjected to such severe university testing. Hydro-Blanket M-BFM™ performance is proven.

- Fastest turf establishment —1500% water holding capacity delivers more moisture to the seedbed for better germination.
- Superior erosion control —99.99% effectiveness translates to a .0001 Cover Factor which rivals the industry's best.
- Apply anytime —no cure time required.

Blanket Comparisons Fall Flat.

Hydro-Blanket® M-BFM™ is an effective alternative to erosion control blankets. No straw or excelsior blanket can match its slope protection, even on critical sites. The greater loft of the M-BFM™ matrix creates more air space to enhance seedling emergence. And because Hydro-Blanket M-BFM™ is hydraulically applied, it can significantly reduce labor cost and installation time.

100 Times More Erosion Control Than Blankets



M-BFM™ application rate 3,000 lbs per acre. 5" per hr rain event on 2.5:1 slope for 1 hr.

* Extrapolated from Utah State University research

Independent testing by Utah State University proves that M-BFM™ significantly out-performs excelsior and straw blankets in preventing erosion.

Product Comparison:

	Hydro-Blanket® 3000	Blankets
Effective without special site preparation	yes	no
Can be applied without direct access to site	yes	no
Eliminates costly, labor-intensive staking	yes	no
Bonds directly to the soil	yes	no
Rids site of messy, leftover netting	yes	no

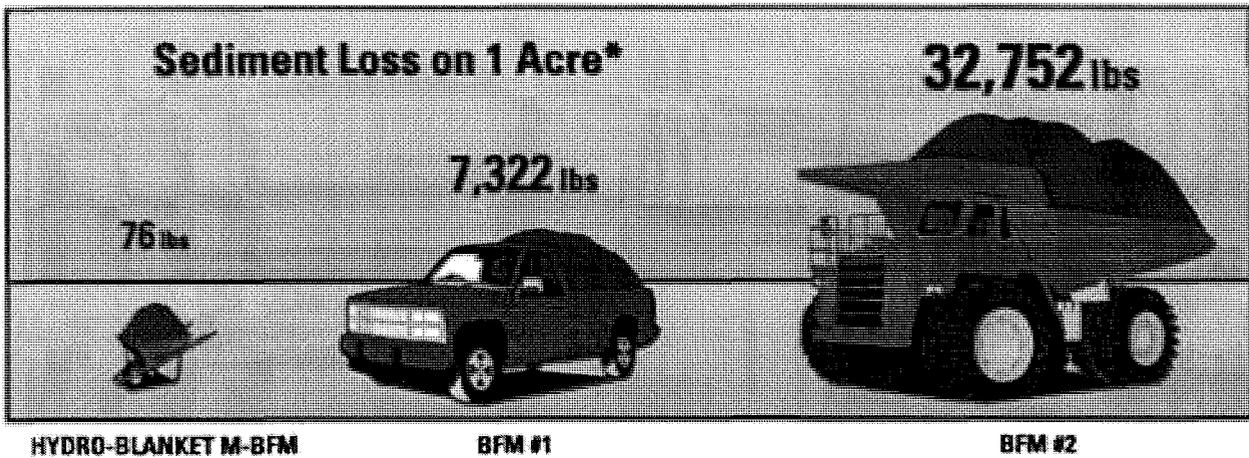
Taking BFMs to a Whole New Level.

Hydro-Blanket® M-BFM™ soundly beat BFM products in side-by-side testing.

Hydro-Blanket M-BFM™

- Features a stronger mechanical and chemical bond to hold it together—BFMs rely only on a chemical bond.
- Protects soil from erosion much longer—BFMs degrade faster with a limited window of protection.
- Can be applied anytime—BFMs can only be applied when the soil is dry and rain is not expected within 48 hours after application.
- Holds 50% more water with significantly less soil loss.
- Costs less over the life of a project—BFMs need to be reapplied after rains to reestablish soil cover.

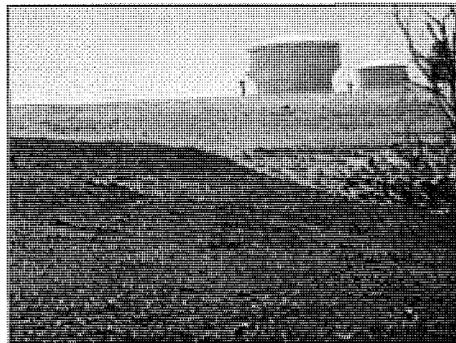
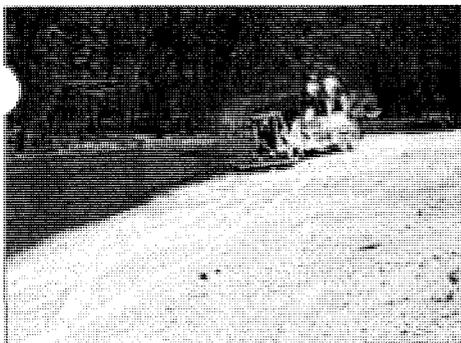
More than 95 Times More Erosion Control Than BFMs



Utah State University testing illustrates how M-BFM™ absorbs more water with less soil loss than conventional BFM's. M-BFM™ application rate 3,000 lbs per acre. 5" per hr rain event on 2.5:1 slope for 1 hr.

**Extrapolated from Utah State University research.*

In a study comparing soil and water loss data, M-BFM™ also displayed 57 times less sediment loss and 5 times less water runoff than liquid polymer emulsion SFM matrix systems.



M-BFM™ exceeded expectations in project at Ft. Jackson, SC.

The Right Chemistry Works Every Time.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND
TD-006
 OLSEN ROAD LANDFILL TEST PITS

DISTRIBUTION:

____ CONTRACTING OFFICER/SPECIALIST (TO'S)
 ____ ROICC
 ____ RPM
 ____ COTR:
 OTHER: _____
 FILE: _____

Form No. VRRF/VD	TD-006	Date:	2-3-03	Respond *NLT:
Initiated By:	<input checked="" type="checkbox"/> Navy	<input type="checkbox"/> Contractor	<input type="checkbox"/> Other	
<input checked="" type="checkbox"/> Technical Direction	<input type="checkbox"/> RFI	<input type="checkbox"/> Variance Request	<input type="checkbox"/> Overtime Authorization	
Description (include location & attachments if necessary): Equipment and personnel are needed to assist Tetra Tech NUS to determine the extent and volume of waste at the Olsen Road Landfill.				
Attachment <input checked="" type="checkbox"/> Scope of Work, Cost Estimate				
Drawing Ref:		Spec. Ref.		
Explanation/Recommendation: This work will include the excavation of ten test pits at Site 42 at locations determined by Tetra Tech NUS, Inc. (TTNUS). The objective is to verify the presence or absence of waste and to determine the waste depth in order for TTNUS to perform waste volume calculations and develop the waste limits.				
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 4,600		
WBS Codes Affected: New <input checked="" type="checkbox"/> Existing <input type="checkbox"/> 69909230		Schedule impact (assume response by *NLT date) <input type="checkbox"/> None <input checked="" type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days: 2 Days		
Contractor:		Signature		Date
Site Representative:		<i>[Signature]</i>		2-3-03
Project Manager:		<i>[Signature]</i>		2-3-03
Reviewer Comments, Incl RFI Response:				
Navy:		Signature		Date
ROICC:		<i>[Signature]</i>		2/9/03 * PREP MTG R.O.D.
RPM/EIC:		<i>[Signature]</i>		2-4-03
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required				

Project# 809401
 Olsen Road Landfill Investigation

	Rate	OT	Hours	Subtotal	Fringe	Markup
Office Labor						
H&S Coordinator (CIH)	\$ 24.00	\$ 24.00	4	\$ 96.00	\$ 122.02	\$ 147.40
Project Manager	\$ 41.07	\$ 41.07	2	\$ 82.14	\$ 104.40	\$ 126.12
Engineer/Scientist	\$ 25.75	\$ 24.00	8	\$ 206.00	\$ 261.83	\$ 316.29
GIS Draftsperson	\$ 33.38	\$ 19.00	2	\$ 66.72	\$ 84.80	\$ 102.44

Office Labor \$ 692.24

	Rate	OT	Hours	Subtotal	Fringe	Markup
Field Labor						
Site Safety Officer	\$ 23.48	\$ 35.22	26	\$ 857.44	\$ 835.81	\$ 970.14
Equip Oper - V	\$ 18.00	\$ 27.00	20	\$ 396.00	\$ 503.32	\$ 584.35
EOD Tech/Surveyor	\$ 22.00	\$ 33.00	20	\$ 242.00	\$ 307.58	\$ 357.10
Project Business Administrator	\$ 15.79	\$ 23.69	2	\$ 31.58	\$ 40.14	\$ 46.60

Total Field Labor \$ 1,958.19

	Diem	Lodging	Days	Daily	Total Diem	Markup
Per Diems						
Site Safety Officer	\$ 22.50	\$ 66.00	2	\$ 88.50	\$ 177.00	\$ 187.09
Equip Oper - V	\$ 22.50	\$ 33.00	2	\$ 55.50	\$ 111.00	\$ 117.33
EOD Tech/Surveyor	\$ 22.50	\$ 33.00	2	\$ 55.50	\$ 111.00	\$ 117.33
Project Business Administrator	\$ 22.50	\$ -	1	\$ 22.50	\$ 22.50	\$ 23.78

Total Diems \$ 445.53

	unit rate		units	Total	Markup
Shaw Equipment					
Robotic Survey Unit	\$ 47.00	/day	2	\$ 94.00	\$ 105.84
Level C PPE & Respirators	\$ 211.00	/day	2	\$ 422.00	\$ 475.17
Photolonization Detector	\$ 10.00	/day	6	\$ 60.00	\$ 67.56
Mob/Demob PID	\$ 25.00	/way	2	\$ 50.00	\$ 56.30
LEL 3 Gas Meter	\$ 9.00	/day	6	\$ 54.00	\$ 60.80
Mob/Demob LEL	\$ 25.00	/way	2	\$ 50.00	\$ 56.30
Mini Ram	\$ 16.00	/day	6	\$ 96.00	\$ 108.10
Mob/Demob Mini Ram	\$ 25.00	/way	2	\$ 50.00	\$ 56.30

Total Shaw Equipment \$ 986.38

	unit rate		units	Total	Markup
Rental Equipment					
Mini Excavator	\$ 225.00	/day	2	\$ 450.00	\$ 475.65
Mob/Demob Mini Excavator	\$ 75.00	/way	2	\$ 150.00	\$ 158.56
FOGM Mini Excavator	\$ 22.75	/day	2	\$ 45.50	\$ 48.09
Pressure Washer	\$ 35.00	/day	2	\$ 70.00	\$ 73.99
Mob/Demob Pressure Washer	\$ 35.00	/way	2	\$ 70.00	\$ 73.99
FOGM Pressure Washer @ 25%	\$ 7.13	/day	2	\$ 14.26	\$ 15.07
Generator	\$ 7.00	/day	2	\$ 14.00	\$ 14.60
Mob/Demob Generator	\$ 35.00	/way	2	\$ 70.00	\$ 73.99
FOGM Generator @ 25%	\$ 3.88	/day	2	\$ 7.76	\$ 8.20

Total Rental Equipment \$ 942.34

	unit rate		units	Total	Markup
Subcontractors					
Utility Search	\$ 50.00	/hr	4	\$ 200.00	\$ 211.40

Total Subcontractor \$ 211.40

REVENUE SUMMARY	
Office Labor	\$ 692.24
Field Labor	\$ 1,958.19
Per Diem	\$ 445.53
Shaw Equipment	\$ 986.38
Rental Equipment	\$ 942.34
Subcontractors	\$ 211.40
	\$ 4,543.83

LANTDIV RAC FIELD FORM

DISTRIBUTION:

Contract No. N62470-97-D-5000
 Task Order No. 0052
 Title/Location Site 12
INDIAN HEAD, MARIAND

____ CONTRACTING OFFICER/SPECIALIST (TDS)
 ____ ROICC
 ____ RPM
 ____ COTR
 OTHER: _____
 FILE: _____

Technical Directive - 085
 Hydro-Blanket

12-30-02

Form No. TD-065		Date: 12-30-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy		<input checked="" type="checkbox"/> Contractor	<input type="checkbox"/> Other
<input checked="" type="checkbox"/> Technical Direction		<input type="checkbox"/> RFI	<input type="checkbox"/> Variance Request
		<input type="checkbox"/> Overtime Authorization	
Description (include location & attachments if necessary): During several rain events the select fill has had significant erosion on the slopes with the runoff beginning and accumulating from the top of the long slopes. Once the topsoil is in-place additional erosion of the slopes may occur.			
Attachment <input checked="" type="checkbox"/> Hydro-blanket Literature			
Drawing Ref. C-4 & C-7		Spec. Ref. 02551	
Explanation/Recommendation: The response for RFI-008 recommends installing erosion control matting (ECM) on the steeper west slope of Area 1. During the 12-12-02 QC Meeting Hydro-blanket was discussed as an erosion control measure instead of ECM. The Hydro-blanket would protect the slopes and if used on the areas upgradient of the slopes would significantly reduce the affects of any heavy rain events. The Hydro-blanket would be installed at the time the areas are hydroseeded as a subcontractor expense. The additional cost for the hydro-blanket is \$3,520 per acre or \$17,600 for 5 acres.			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost Impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 17,600	
WBS Codes Affected: New <input type="checkbox"/> Existing <input checked="" type="checkbox"/> 69909220		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor:		Signature	
Site Representative:		Date	
Project Manager:		12-30-02	
		12-18-02	
Reviewer Comments, incl RFI Response:			
Navy:		Signature	
ROICC:		Date	
RPMEIC:		1/7/03	
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. VR-001		Date: 10-8-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input checked="" type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The invert of the culvert underlying Atkins Road at the head of the southern channel where riprap is to be placed is too low to place the riprap at the design elevation.			
Attachment <input type="checkbox"/>			
Drawing Ref: C-6		Spec. Ref.	
Explanation/Recommendation: It is recommended to dig out a plunge pool just below the culvert discharge. This would allow unrestricted flow from the culvert and dissipate the energy of the flow. This plunge pool would be constructed the width of the channel and approximately 10 feet in length with the required 18" of riprap below the culvert. The plunge pool would prevent redigging the channel and there would be no change in cost or schedule to construct the plunge pool.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input checked="" type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input checked="" type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: _____		Signature _____ Date _____	
Site Representative: <i>[Signature]</i>		10-10-02	
Project Manager: <i>[Signature]</i>		10-10-02	
Reviewer Comments, incl RFI Response: <i>Acceptable per discussion at 10/10/02 QC mtg</i>			
Navy: _____		Signature _____ Date _____	
ROICC: _____			
RPM/EIC: _____			
<input type="checkbox"/> Task Order Modification to Follow (contract action)		<input type="checkbox"/> No Task Order Modification Required	



TECHNICAL MEMORANDUM

Date: October 22, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)
Tim Smith (TtNUS – Pittsburgh)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Shaw VR-001
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to variance request requests (VR)-001 received from Cathy Gardner (IHDIV-NSWC ROICC) via e-mail on October 17, 2002. This variance request follows informal request for information (RFI)-001 received from Shaw September 24, 2002

The VR discusses constructing a plunge pool at the outfall of the culvert underlying Atkins Road that feeds the drainage channel east of Area 2.

Tetra Tech NUS, Inc. has no issues with this suggestion provided the following design parameters are followed.

- To avoid tail water conditions that may decrease the efficiency of the culvert underlying Atkins Road, the elevation of the down slope plunge pool lip must be lower than the outfall invert elevation of the culvert. In addition, in the event that the culvert is extended as discussed in RFI-003 received October 11, 2002, the elevation of the down slope plunge pool lip must also be lower than the new culvert outfall invert elevation.

**RESPONSE TO VR-001
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IHDIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 2 OF 2**

If you have any additional questions concerning this VR please feel free to contact me at (412) 921-8684 or Tim Smith at (412) 921-7720.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. VR-002		Date: 10-22-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input checked="" type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
<p>Description (Include location & attachments if necessary): The organic content of the topsoil in the area is less than the specified requirement of 5 – 8 %. The test result of the topsoil from Laplata Sand and Gravel, which is the closest source in the area, is 1.4%. The test results indicate the topsoil is acceptable for other specified requirements (Section 02951, Para. 2.2.3) Texture is Sandy Loam (listed), the pH is 7.2 (6.0 – 7.5)(6.0 – 7.0 Dwg. C-4), and the soluble salt concentration is 85.08 ppm (500 ppm).</p>			
Attachment <input checked="" type="checkbox"/> University of MD. Test Results			
Drawing Ref: C-4		Spec. Ref. 02951, 2.2.3	
Explanation/Recommendation:			
Nutrients will be added as recommended by the County Cooperative through the University of Maryland.			
Section 20 of the MDE SESC specifies a 1.5% minimum organic matter.			
Warranties will not be altered by accepting this variance.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input checked="" type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input checked="" type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: Site Representative: <i>E. D. [Signature]</i>		Date: <i>10-21-02</i>	
Project Manager:			
Reviewer Comments, incl RFI Response:			
Navy: _____ Signature _____ Date _____		ROICC: RPM/EIC: <i>Use of topsoil acceptable on upland areas. Acceptable per AC meeting 11/7/02</i>	
<input type="checkbox"/> Task Order Modification to Follow (contract action)		<input type="checkbox"/> No Task Order Modification Required	



Fax 301-74 3616

Date: 10/15/2002

Receipt: 37336

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

AXEDED OCT 15 2002

MONROEVILLE

PA 15146

MONROEVILLE

PA 15146

Lab #	Sample ID	*Texture	pH	Mg index	P index	K index	Ca index	O.M. %	Zn ppm	B ppm	Mn ppm	Cu ppm	SO4-S ppm	NO3-N ppm	Sol.Salt ppm	Sand %	Silt %	Clay %	CEC MEQ	Ash %	Mt
20012	IH-TS-003-LSG	SL	7.2	20 (L)	78 (O)	54 (O)	6 (L)	1.4							85.08	63	17	20			

* F - Fine, S - Sand or Sandy, L - Loam, Si - Silty, C - Clay

(L) - Low: 0-25
(M) - Medium: 26-50
(O) - Optimum: 51-100
(E) - Excessive: 100+

To receive further recommendation, please contact your county agent at 301-934-5283

10/18/2002 14:48 FAX 412 372 8968

SHAW E&I MONROEVILLE

002

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland at College Park, and local governments. Thomas A. Fretz, Director of Cooperative Extension, University of Maryland at College Park.

The University of Maryland is equal opportunity. The University's policies, programs, and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, and disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990 related legal requirements should be directed to the Director of Personnel/Human Relations, Office of the Dean, College of Agriculture, Symons Hall, College Park, MD 20742.



FERTILIZER RECOMMENDATIONS

Date: 10/15/2002

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

SHAW E & I
ATTN: DAN PRINGLE
2790 MOSSIDE BLVD

FAXED OCT 15

MONROEVILLE PA 15146

MONROEVILLE PA 15146

Lab #	Sample ID	Crop codes & name	Y. goal (bu/A or T/A)	Lime T/A (% oxides)	Past legume N credit (lbs/A)	Nutrient Recommendation										
						Method	N lbs/A	P2O5 lbs/A	K2O lbs/A	Mg lbs/A	Mn lbs/A	Zn lbs/A	SO4 lbs/A	B lbs/A	Cu lbs/A	Notes
20012	IH-TS-003-LSG	65 Est. cool season perennial grasses		0.0 (50%)	0	Total	60	30	40	15						3,4,7,49
						broadcast & disk in	60	30	40	15						

10/18/2002 14:49 FAX 412 372 8968

SHAW E&I MONROEVILLE

003

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Soil Testing Information for Field Recommendations

Send report to Shaw E&I ATTN: DAN PRINGLE
 If commercial co., charge to _____
 Address 2790 Mosside Blvd
Monroeville, Pa 15146 Phone 412-380-6248

Date 10-2-02 County Charles
 Consultant _____
 Tract No./Farm Name INDIAN HEAD NSWC
 Watershed Code _____

Field Information Please fax results to 412-858-3979

Sample number	Field I.D. or sample I.D.	Acres	Crop to be grown (see reverse)	Yield goal	Previous legume N credit (lbs/A)	Tillage method	Soil type
1	05/1H-TS-003-LSG	8	Code: 65 Name: Perennial Grass	—	—	No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
2			Code: — Name: —	—	—	No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
3			Code: — Name: —	—	—	No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
4			Code: 20012 Name: —	—	—	No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
5			Code: — Name: —	—	—	No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain
6			Code: — Name: —	—	—	No-till Disk Chisel Ridge Moldboard	Coastal plain Piedmont/Mountain

\$15.00
 \$15.00
 10/7/02
 37336
 93223
 FOR UNIVERSITY OF MARYLAND USE
 10/17/02 10:33:36 AM
 10/18/2002 14:51 FAX 412 372 8968
 SHAW E&I MONROEVILLE
 005

Instructions

- For sampling, divide fields into areas of 5 to 10 acres each. For each area, take 15 to 20 small samples, mix together well, and fill sample bag to the line indicated.
- Sample to plow depth except for permanent pastures and no-tillage fields where sampling should be at the upper 2 inches.
- Fill out information sheet indicating tests to be run.
- Total all charges and make check payable to The University of Maryland.
- Mail soil samples, information sheets, and check to **Soil Testing Laboratory, The University of Maryland, College Park, MD 20742.**

Test	Charges	1	2	3	4	5	6
*Regular soil test	\$6	\$6	\$6	\$6	\$6	\$6	\$6
Manganese, zinc, and copper	5	—	—	—	—	—	—
Manganese, zinc, copper, and sulfate	7	—	—	—	—	—	—
Boron	5	—	—	—	—	—	—
Nitrate	3	—	—	—	—	—	—
Sulfate	4	—	—	—	—	—	—
Soluble salts	1	1	—	—	—	—	—
Cation exchange capacity	12	—	—	—	—	—	—
Mechanical analysis (% sand, silt, & clay)	8	8	—	—	—	—	—
Total Charges:		\$15	—	—	—	—	—

* Regular test includes pH, texture, Mg, P₂O₅, K₂O, Ca, and percentage of organic matter.

Please provide recommendations.

OR CROP # 65 EST. COOL SEASON PERENNIAL GRASSES

For conventional tillage, ag-lime recommendations are based upon the amount of oxides required for the surface 8" of soil. Lime should be thoroughly mixed with the soil by plowing and disking. If recommended amount of oxides exceeds 1.5 tons of lime per acre (assuming 50% total oxides), ½ should be plowed down and the remainder applied after plowing and disking in thoroughly.

If topdressing ag-lime without tillage, reduce the total amount of oxides recommended by 50 percent. When topdressing ag-lime, and soil mixing is not possible, do not apply more than 1500 lbs per acre of oxides in any one application. The balance can be applied the next year. It would be best to do a soil test before making the second application.

Magnesium will be recommended when the soil test indicates a low or very low level. Use dolomitic lime as a liming material when magnesium is recommended AND when lime is needed to correct soil acidity. The magnesium recommendation is expressed as elemental Mg when lime is not required.

For the establishment of cool-season grasses (such as orchardgrass, timothy, bromegrass, tall fescue, reed canarygrass and perennial ryegrass), the TOTAL N recommendation ranges from 40-60 lbs per acre broadcast and disking in before planting.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

VARIANCE REQUEST - 003
 PLANTING SCHEDULE

DISTRIBUTION:

____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 ____ ROICC
 ____ RPM
 ____ COTR:
 OTHER: _____

 FILE: _____

Form No. VR-003		Date: 12-12-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input checked="" type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The planting schedule recommends planting permanent species of grasses before November 15. Construction of the cover system at the site and preparation for planting will not be completed until after the recommended date.			
Attachment: Revised seed mix for winter planting			
Drawing Ref: C-4		Spec. Ref.	
Explanation/Recommendation: Recommend increasing the amount of annual rye to the permanent seed mix and planting after the recommended dates. The temporary seed will germinate and serve as erosion control cover and a nurse crop. The permanent seed will remain dormant until early spring when it will germinate without further soil disturbance. The Hydroseeding subcontractor will warrant 90% coverage of the permanent seed for a period of one year as specified. Base personnel have also recommended changing the percentages of several of the permanent seed species. The revised mix as proposed is attached.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input checked="" type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input checked="" type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor:		Signature	
Site Representative:		<i>[Signature]</i>	
Project Manager:		Date	
		12-12-02	
		12-12-02	
Reviewer Comments, incl RFI Response:			
Navy:		Signature	
ROICC:		<i>[Signature]</i>	
RPM/EIC:		Date	
		12/12/02	
		12/12/02	
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

PERMANENT SEEDING

SEEDING GRASS AND LEGUMES TO ESTABLISH GROUND COVER FOR A MINIMUM PERIOD OF ONE YEAR ON DISTURBED AREAS GENERALLY RECEIVING LOW MAINTENANCE.

PERMANENT SEEDING SUMMARY

SEED MIXTURE				FERTILIZER RATE (10 - 20 - 20)	LIME RATE
SPECIES	APPLICATION RATE (lb / ac)	SEEDING DATES	SEEDING DEPTHS		
SWITCHGRASS	10	3/1 - 5/15 AND 8/15 - 11/15	1/4 - 1/2 INCHES	900 lb / ac (20 lb / 1000 sf)	4000 lb / ac (100 lb / 1000 sf)
PARTRIDGE PEA	5	3/1 - 5/15 AND 8/15 - 11/15	1/4 - 1/2 INCHES		
LITTLE BLUESTEM	15	3/1 - 5/15 AND 8/15 - 11/15	1/4 - 1/2 INCHES		
ANNUAL RYE GRASS	20	3/1 - 5/15 AND 8/15 - 11/15	1/4 - 1/2 INCHES		
CANADIAN WILD RYE	6	3/1 - 5/15 AND 8/15 - 11/15	1/4 - 1/2 INCHES		
INDIAN GRASS	7	3/1 - 5/15 AND 8/15 - 11/15	1/4 - 1/2 INCHES		
BIG BLUESTEM	15	3/1 - 5/15 AND 8/15 - 11/15	1/4 - 1/2 INCHES		

NOTES:

1) IN LIEU OF PROVIDING MARYLAND STANDARD FERTILIZER AND LIME, PERFORM SOIL TEST TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES.

2) THE FERTILIZATION RATE (10-20-20) REFERS TO THE PERCENT N, P₂O₅, AND K₂O PROVIDED IN THE FERTILIZER.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

VARIANCE REQUEST - 004
 ROAD BASE AGGREGATE

DISTRIBUTION:

____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 ____ ROICC
 ____ RPM
 ____ COTR:
 OTHER: _____

 FILE: _____

Form No. VR-004		Date: 12-12-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input checked="" type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The Specifications require Crusher Run Aggregate CR-6 per Section 901 and Table 901A of the MD SHA Construction Manual			
Attachment: Section 901 and Table 901A and RC-6 Test Data			
Drawing Ref: C-9		Spec. Ref. 02742	
Explanation/Recommendation: As a cost savings to the project Shaw E & I recommends using RC-6, recycled concrete, instead of CR-6, crusher run, for subbase aggregate for the reconstruction of the Atkins Road Extension.			
<input type="checkbox"/> Scope Increase <input checked="" type="checkbox"/> Scope Decrease <input checked="" type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input checked="" type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 4.00 per ton	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor:		Signature	
Site Representative:		Date	
Project Manager:		Date	
Reviewer Comments, incl RFI Response: Forwarded as acceptable via email from C. Gardner & D. Munnis 1-21-03			
Navy:		Signature	
ROICC:		Date	
RPM/EIC:			
<input type="checkbox"/> Task Order Modification to Follow (contract action)		<input type="checkbox"/> No Task Order Modification Required	

Dec 11 02 09:25a

Dec 11 02 09:44a

P. 4

P. 1

AGGREGATE INDUSTRY
ECO-ROK, BLADENSBURG TERMINAL



November 19, 2002

ATT:Ms.Christina Baltzar
Corman Construction, Inc.
12001 Guilford Road
Annapolis Junction, Md 20701

RE: Contract #Mo 8365170 ,RT 29 & Randolph Road Interchange

Dear Ms. Baltzar ,

This is to certify that our Crushed Recycled Concrete Aggregate, identified as RC-6 (CR-6), meets the requirements as specified by the Maryland State D.O.T. These specifications are listed in Section #901 AND TABLE 901A of "Standard Specifications for Construction and Material, JANUARY 2001". A sample from our stockpile was recently tested with the following results:

RC-6

Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	100 %
1 1/2"	37.5 mm	100 %	90 - 100 %
3/4"	19.0 mm	86 %	60 - 90 %
#4	4.75 mm	48 %	30 - 60 %
#200	0.075 mm	6 %	0 - 15 %

PHYSICAL PROPERTIES

BULK SPECIFIC GRAVITY	2.53
ABSORPTION	4.10%
PLASTICITY INDEX	NON-PLASTIC
L.A.ABRASION	38 % WEAR

PAGE 1

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
Suite 400
Greenbelt, Maryland 20770

Tel: 301 - 982 - 1400
Fax: 301 - 513 - 0014

An AGGREGATE INDUSTRIES PLC Company
www.aggregate-us.com

AGGREGATE INDUSTRY-BLADENSBURG TERMINAL

September 17, 2002

ATT:Mr. YUREK
 CHERRY HILL CONSTRUCTION, INC.
 8211 WASHINGTON BLVD
 JESSUP, MD 20794



RE: WASHINGTON CONVENTION CENTER: STREETScape, WASHINGTON D.C.

DEAR Mr. YUREK

This is to certify that our Crushed Stone Aggregates, identified as CR-6 (GASB) and G.A.B. meets the requirements for their designation as specified by the Maryland State D.O.T. These specifications are listed in Section #901, Table # 901A of "Standard Specifications for Construction and Materials, January 2001". A sample from our stockpile was recently tested with the following results:

CR-6 (GASB) SIEVE ANALYSIS

Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	100 %
1 1/2"	37.5 mm	100 %	90 - 100 %
1/2"	19.0 mm	86 %	60 - 90 %
#4	4.75 mm	49 %	30 - 60 %
#200	.075 mm	7 %	0 - 15 %

S.H.A. (MD) MIX DESIGN NO. S-P-GA22-1-01

G.A.B. SIEVE ANALYSIS

Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	98 - 100 %
1 1/2"	37.5 mm	100 %	95 - 100 %
1/2"	19.0 mm	85 %	77 - 93 %
3/8"	9.5 mm	65 %	57 - 73 %
#4	4.75 mm	49 %	41 - 57 %
#30	600 micro	15 %	10 - 20 %
#200	75 micro	04 %	02 - 06 %

Maximum Dry Density 149.9 P.C.F. @ 4.3 % Moisture

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
 Suite 400
 Greenbelt, Maryland 20770

Tel: 301 - 981 - 1400
 Fax: 301 - 513 - 0614

An AGGREGATE INDUSTRIES PLC Company

www.aggregate-us.com

Crushed Stone - Sand & Gravel - Ready-Mixed Concrete - Asphalt

12 11 02

THE SHAW GP.

JOEY GUZZARDO

Phone #

Fax # 743 9139

Job Location : INDIAN HEAD

Terms : \$ Net 30 days (pending credit approval)

Bidding :

Product Description

F.O.B.
(\$/ton)

Haul
(\$/ton)

Total
(\$/ton)

{ Shipping Plant Name/Location }

LAPLATA SAND AND GRAVEL 301 870 3711

RC6
CR6

\$4.50
\$8.50

\$4.00
\$4.00

\$8.50
\$12.50

Notes : i) Above pricing applicable out of plant(s) denoted. Orders placed at other aggregate plants may result in higher pricing being invoiced.

ii) Minimum of 24 hours of advance notice required for delivery of double-washed products.

Additional Comments :

Pricing good through

Prices do not include applicable taxes.

Above prices based upon 20 ton/trk.

Get.....

Quotation Considered Binding for 30 Days.

Quoted By : Tom Miller
Mgr. : LaPlata Plant

Thank You !

Phone # 301-870-3711
Fax # 301-870-2754

Terms, conditions and any additional charges to be sent upon acceptance.

AGGREGATE PHYSICAL

MATERIAL	SPECIFICATION	TEST METHOD			
		T 90	T 104	T 112	T 113
		PI	SODIUM SULFATE SOUNDNESS	CLAY LUMPS and FRIABLE PARTICLES	CHERT, LESS THAN 2.00 Sp Gr
		MAX	% MAX	% MAX	% MAX
GRADED AGGREGATE—SUBBASE	D 2940	6	12	—	—
BANK RUN GRAVEL—SUBBASE	D 2940	9	12	—	—
GRADED AGGREGATE—BASE	D 2940	6	12	—	—
BANK RUN GRAVEL—BASE	D 2940	9	12	—	—
COARSE AGGREGATE—PORTLAND CEMENT CONCRETE (b)	M 80 CLASS A	—	12	2.0	3.0
FINE AGGREGATE—PORTLAND CEMENT CONCRETE (b)(c)	M 6 CLASS B	—	10	3.0	—
COARSE AGGREGATE—LIGHTWEIGHT PORTLAND CEMENT CONCRETE	M 195	—	—	2.0	—
FINE AGGREGATE—LIGHTWEIGHT PORTLAND CEMENT CONCRETE (f)	M 195	—	—	2.0	—
FINE AGGREGATE/SAND MORTAR & EPOXIES	M 45	—	10	1.0	—
MINERAL FILLER (g)	M 17	NP	—	—	—
CRUSHED GLASS	M 80	—	12	—	—

- (a) Dimensional ratio of culpers shall be 3:1.
- (b) Coarse and fine aggregates for PCC shall be tested for alkali-silica reactivity (ASR) as specified in MSMT 212.
- (c) 1.5 if material passing No. 200 sieve is dust or fines, free of clay or silt.
- (d) In areas exposed to traffic manufactured sand, natural sand, or a blend of both shall be used. The sand shall have a minimum ultimate polish value of 8.5.
- (e) 5.0 for concrete not subject to surface abrasion.
- (f) Fine aggregates conforming to M 6 may be used if the lightweight concrete does not exceed the maximum unit weight specified in the Contract Documents.
- (g) Fly ash shall have a maximum of 12 percent loss on ignition.

PROPERTY REQUIREMENTS

TEST METHOD					
T 112 & T 113	T 11	T 113	D 4791 (a)	T 96	T 21
SUM OF CLAY LUMPS, FRIABLE PARTICLES and CHERT	MATERIAL FINER THAN No. 200 SIEVE	COAL and LIGNITE	FLAT and ELONGATED	LOS ANGELES ABRASION	ORGANIC IMPURITIES
% MAX	% MAX	% MAX	% MAX	% MAX	MAX
—	—	—	15	50	—
—	—	—	—	50	—
—	—	—	15	50	—
—	—	—	—	50	—
3.0	1.0 (c)	0.5	12	50	—
—	4.0 (a)	1.0	—	—	3
—	—	—	12	—	—
—	—	—	—	—	3
—	—	0.5	—	—	3
—	—	—	—	—	—
—	—	—	—	45	—

TABLE

901 A

TABLE

AGGREGATE GRADING REQUIREMENTS

MATERIAL	SIEVE SIZE						
	2-1/2"	2"	1-1/2"	1"	3/4"	1/2"	
GRADED AGGREGATE— SUBBASE DESIGN RANGE (a)	—	100	90-100	—	60-85	—	
TOLERANCE (b)	—	-3	±5	—	±10	—	
BANK RUN GRAVEL— SUBBASE	100	—	—	90-100	—	60-100	
GRADED AGGREGATE— BASE DESIGN RANGE (a)	—	100	95-100	—	70-92	—	
TOLERANCE (b)	—	-2	±5	—	±8	—	
BANK RUN GRAVEL—BASE	100	—	—	85-100	—	60-100	
COARSE AGGREGATE— PORTLAND CEMENT CONCRETE	57 and UNDERDRAIN	—	—	100	95-100	—	25-60
	67	—	—	—	100	90-100	—
	7	—	—	—	—	100	90-100
FINE AGGREGATE— PORTLAND CEMENT CONCRETE and UNDERDRAIN (d)	—	—	—	—	—	—	
COARSE AGGREGATE— LIGHTWEIGHT PORTLAND CEMENT CONCRETE	—	—	—	100	90-100	—	
FINE AGGREGATE— LIGHTWEIGHT PORTLAND CEMENT CONCRETE (d)	—	—	—	—	—	—	
FINE AGGREGATE/SAND MORTAR and EPOXIES (d)	—	—	—	—	—	—	
MINERAL FILLER	—	—	—	—	—	—	
CRUSHED GLASS (e)	—	—	—	—	100	—	

- (a) To establish target values for design.
- (b) Production tolerance.
- (c) ±2 for field grading. (omitting T 11)
- (d) Fine aggregate includes natural or manufactured sand.
- (e) Crushed glass shall not contain more than one percent contaminants by weight.

901 A

TEST METHOD T 27

SIEVE SIZE	SIEVE SIZE									
	3/8"	No. 4	No. 8	No. 10	No. 16	No. 30	No. 40	No. 50	No. 100	No. 200
40-70	30-60	—	—	—	—	—	10-25	—	—	0-12
6 10	6 10	—	—	—	—	—	6 5	—	—	6 5
—	—	—	—	35-90	—	—	20-55	—	—	5-25
50-70	35-55	—	—	—	—	12-25	—	—	—	0-8
6 8	6 8	—	—	—	—	6 5	—	—	—	6 3 (c)
—	—	—	—	35-75	—	—	20-50	—	—	3-20
—	0-10	0-5	—	—	—	—	—	—	—	—
20-55	0-10	0-5	—	—	—	—	—	—	—	—
40-70	0-15	0-5	—	—	—	—	—	—	—	—
100	95-100	—	—	—	45-80	—	—	10-30	2-10	—
10-50	0-15	—	—	—	—	—	—	—	—	—
100	85-100	—	—	—	40-80	—	—	10-35	5-25	—
—	100	95-100	—	—	—	—	—	—	0-25	0-10
—	—	—	—	—	—	100	—	95-100	—	70-100
—	0-55	—	—	—	—	—	—	—	—	—



TECHNICAL MEMORANDUM

Date: December 13, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Shaw VR 004
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to Variance Request 004 received from Cathy Gardner (IHDIV-NSWC ROICC) via e-mail on December 13, 2002.

The VR requests a variance for the use of recycled concrete (RC-6) in place of the specified crusher run aggregate CR-6 per Section 901 and Table 901A of the Maryland State Highway Administration construction manual.

From the information submitted, it appears that the recycled concrete has a gradation similar to the specified aggregate, and it can be provided to the Navy as a reduced cost.

Tetra Tech NUS, Inc. has no objections to granting this variance request.

If you have any additional questions concerning this VRI please feel free to contact me at (412) 921-8684.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

VARIANCE REQUEST - 005
 ROAD SUBBASE COMPACTION TESTING

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. VR-005		Date: 3-5-03	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input checked="" type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary):			
The Specifications require the aggregate to be compacted and tested on Atkins Road Extension to demonstrate 97% of Modified Proctor following ASTM D 1557 or Relative Density following ASTM D 4253 and ASTM D 4254. Testing in the field and discussions with the laboratory have indicated that neither method works well for testing an aggregate such as RC-6.			
Attachment : Technology Brief: Quality Control for Recycled Concrete as a Structural Fill Material (2 pages)			
Drawing Ref: C-9		Spec. Ref. 02742	
Explanation/Recommendation:			
Nuclear densometer field testing indicated compaction ranging from approximately 95% to 98%. Based on visual observations in the field during compaction efforts, the aggregate subbase has achieved maximum compaction. No movement or additional compaction of the material occurs after multiple passes with the vibratory smooth drum roller. As indicated in the attached Technology Brief, when testing recycled concrete, the nuclear densometer tends to indicate a higher moisture content than is actually present. The moisture content is used to determine the dry density of the material. A higher moisture content results in a lower dry density, which falsely indicates a lower compaction than is actually present. Therefore, the actual compaction is most likely higher than the reported compaction of 95% to 98%. It is recommended that after final grading and just prior to asphaltting, performance compaction acceptance criteria is used to confirm the compaction. A minimum of 4-passes with a minimum 9-ton vibratory roller with no visual changes to the surface should demonstrate acceptance of the subbase compaction.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input checked="" type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input checked="" type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude:	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: _____		Signature _____ Date _____	
Site Representative: _____			
Project Manager: _____		<i>Daniel Whungle</i> 3-5-03	
Reviewer Comments, incl RFI Response:			
Navy: _____		Signature _____ Date _____	
ROICC: _____			
RPM/EIC: _____			
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

Technology Brief

Quality Control for Recycled Concrete as a Structural Fill Material

The use of recycled concrete as a structural fill material, in lieu of natural aggregate, has recently been increasing. In some regions, recycled concrete aggregate may cost 20 % to 30 % less than natural aggregate. This technology brief summarizes the results of testing two modifications of conventional aggregate testing procedures, specifically adapted for potential use in compaction specification of recycled concrete aggregate.

Background

On-site quality control during the placement of structural fill is typically maintained through verification of compaction level by measurement of in-situ moisture and density. Nuclear densometers are commonly used for these quality control measurements, because densometers provide quick and reasonably accurate field measurements of moisture content and density for natural soils and aggregates. The nuclear densometer measures wet density and moisture content of a fill material, from which the dry density is calculated through the following relationship:

$$\gamma_d = \gamma_t / (1 + \omega)$$

where: γ_d = Dry Density
 γ_t = Wet Density
 ω = Moisture Content (%)

Compaction level is then calculated as the ratio of field-measured to laboratory-measured dry density:

$$\text{Percent Compaction} = \gamma_d (\text{field}) / \gamma_d (\text{laboratory})$$

Because of the prevalent use of nuclear densometers for compaction specification of natural aggregate, it is desirable to develop quality control procedures for recycled concrete that also use nuclear densometer measurements. The nuclear densometer, however, provides an inaccurate moisture content measurement



Key Words

Materials:	Recycled concrete aggregate
Technologies:	Nuclear densometer field testing, Modified Proctor laboratory testing (ASTM D-1557)
Applications:	Structural fill applications
Market Goals:	Develop simple quality control methods for field verification of compaction level
Abstract:	Modification of conventional aggregate compaction specification testing procedures (1 1/2 inch & 3 inch minus)

for recycled concrete, since it measures moisture based on the hydrogen content of the tested material. Because water is the sole source of hydrogen in most natural aggregates, the densometer provides a reasonably accurate measurement for these materials. However, for hydrogen rich materials, such as recycled concrete or organic soils, the densometer measures a moisture content that is higher than the actual content. This leads to the calculation of a dry density that is lower than the actual value, and in turn a lower compaction level. Thus, existing in-situ moisture and density testing procedures must be modified in order to accurately measure the characteristics of recycled concrete.

Test Description

This study explores the viability of two conventional aggregate testing procedures that are modified for recycled concrete aggregate.

COMPACTION SPECIFICATION USING WET DENSITY:

The first modified testing procedure examines the potential of using wet density for compaction specification of recycled concrete. The moisture-density relationships (Modified Proctor curves) are

plotted for two recycled concrete samples, 1¼ inch minus and ¾ inch minus.

The wet and dry density curves indicate a relatively high degree of non-linearity, yielding two substantially different wet-density based compaction levels, one for the dry-of-optimum condition and one for the wet-of-optimum condition.

COMPACTION SPECIFICATION USING MOISTURE CONTENT CORRELATION CURVES (FIELD-MEASURED VS. LABORATORY-MEASURED):

The second modified testing procedure examines the potential of using a correlation between field-measured (nuclear densometer) moisture content and laboratory-measured moisture content for compaction specification of recycled concrete. Moisture content correlations are developed for two recycled concrete samples, 1¼ inch minus and ¾ inch minus, each laid in six inch thick layers as subgrade of slab-on-grade. Results indicate that the field-measured moisture content varies between 9% and 20% while the laboratory measured moisture content varies between 4% and 11%. For samples with relatively low moisture content, the nuclear densometer measurements are approximately two times greater than the actual (laboratory) values. The difference in field and actual values decreases with the increase in moisture content.

Test Results

Test results indicate that fill control using moisture content correlation curves is a more promising technique than fill control using wet density.

COMPACTION SPECIFICATION USING WET DENSITY:

The two samples in this study showed a significant non-linearity between dry and wet densities. The materials are sufficiently moisture sensitive so that for a constant, dry-density based compaction level, there are two substantially different wet-density based compaction levels for the dry-of-optimum and wet-of-optimum conditions. Thus, for fill control using wet density, field personnel would be required to distinguish the moisture state (i.e., dry or wet-of-optimum) and apply the correct corresponding

compaction level. Consequently, this methodology should be used with care, because it requires both a high level of field experience, as well as a thorough evaluation of dry and wet density compaction curves.

COMPACTION SPECIFICATION USING MOISTURE CONTENT CORRELATION CURVES (FIELD-MEASURED VS. LABORATORY-MEASURED):

The collected data indicates that the moisture content measured by nuclear densometer in the field is approximately twice that of the actual moisture content measured in the laboratory. Since it appears that the difference in measured and actual moisture content varies only with the actual moisture content, a correlation curve of laboratory measured moisture content versus field measured moisture content can be established. Using this correlation curve, nuclear densometer measurements in the field can be used to estimate actual moisture content. This estimated actual moisture content can then be used to calculate the dry density and corresponding compaction level with reasonable accuracy. This method is easily applied in practice since the correlation between the measured and actual moisture contents can be established prior to the fill control program. The fill control program should involve confirmation samples for every 250 to 500 cubic yards of material.

These conclusions, however, are based on a very small sample size, and sensitivity of the correlation to other variables (such as gradation, material sources, and compaction method) has not been established. Therefore, prior to extensive use, this methodology should be further investigated and confirmed using a larger database.

Acknowledgements

This testing program was developed and performed by Soil and Environmental Engineers, a civil engineering firm in Seattle, Washington. Recycled concrete aggregate was supplied by Renton Concrete Recyclers, Renton, Washington.

Fact Sheet Issue: *January 1998*

For More Information

For more information on this fact sheet, contact CWC at (206) 443-7746, email info@cwc.org, or visit the CWC Internet Website at www.cwc.org. This technology brief was prepared by CWC, Managing Partner of the Recycling Technology Assistance Partnership (ReTAP). ReTAP is a part of the national Manufacturing Extension Partnership (MEP), a program of the U.S. Commerce Department's National Institute of Standards and Technology. ReTAP is also funded by the U.S. Environmental Protection Agency and the American Plastics Council.

CWC is a division of the Pacific Northwest Economic Region, 2200 Alaskan Way, Suite 450, Seattle, Washington 98121.



TECHNICAL MEMORANDUM

Date: October 2, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)
Bob Mertz (TtNUS – Pittsburgh)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Informal Shaw RFI's
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to informal requests for information (RFI) received from Shaw Environmental, Inc. (Shaw) (Ernie Duke) via an October 2, 2002 telephone conversation.

Question No. 1: The erosion control matting is required to withstand a flow velocity of 6.7 fps. Vendors contacted have indicated that temporary erosion control matting cannot withstand this flow velocity but permanent erosion control matting can. Should permanent erosion control matting be used?

Response: The erosion control matting is required to withstand a flow velocity of 6.74 fps per Detail 9 on Drawing C-9 and is intended to be permanent. Erosion control matting specifications were not provided; however, the erosion control matting should conform to Maryland Department of the Environment Standards and Specifications for Soil Erosion and Sediment Control (MDE SESC), Section 22; Maryland State Highway Administration Construction and Materials manual (MD SHA CM), Section 920.06, Type B; and contain ultraviolet (UV) inhibiting stabilizers to ensure endurance and provide permanent root reinforcement.

**RESPONSE TO INFORMAL SHAW RFI'S
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IHDIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 2 OF 2**

Question No. 2: The riprap lined channels do not indicate an underlying geotextile. Should a geotextile be provided?

Response: A separation geotextile should be provided beneath the riprap. The geotextile should have an Apparent Opening Size (AOS) less than 0.30 mm, permeability greater than 0.01 cm/sec, grab tensile strength greater than 90 lbs, and burst strength greater than 145 psi.

Question No. 3: The north channel contains areas to receive riprap. Can the riprap be placed continuously?

Response: The Area 3 channel shown on Drawing C-2 has riprap at the bend and at the outfall. The distance between the two areas is approximately 30 feet. Although not required riprap may be placed in the 30 feet portion of the channel between the bend and the outfall.

LANTDIV RAC FIELD FORM

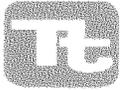
Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-002		Date: 10-8-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input checked="" type="checkbox"/> RFI <input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The triangular shaped area south of the site along Atkins Road was discovered to contain waste debris material when the surface debris was removed.			
Attachment <input type="checkbox"/>			
Drawing Ref: C-6		Spec. Ref.	
Explanation/Recommendation:			
Recommendation #1 The landfill cover system could be extended to the edge of the ravine with minimal changes to the design. Protection of the ravine with erosion controls may be necessary.			
Alternatively, the waste debris could be removed and incorporated within the existing Limits. Approximately 250 to 300 CY of material would need to be relocated to the elevation of the existing ravine. It is not known if the depth of the waste extends below the level of the ravine. Erosion controls through the ravine would probably be necessary for this method also.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor:		Signature	
Site Representative:		Date	
Project Manager:		10-10-02	
		10-10-02	
Reviewer Comments, incl RFI Response:			
Navy:		Signature	
ROICC:		Date	
RPM/EIC:			
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			



TECHNICAL MEMORANDUM

Date: October 22, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)
Tim Smith (TtNUS – Pittsburgh)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Shaw RFI-002
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to requests for information (RFI)-002 received from Cathy Gardner (IHDIV-NSWC ROICC) via e-mail on October 17, 2002.

The RFI discusses extending the cap system to include a triangular area south of the site along Atkins Road where waste material was discovered when surface debris was removed. According to the RFI the depth of the waste is unknown, but it is approximated that 250 to 300 cy of material would need to be relocated if the limits of the cap system are not changed to include this area. The RFI also indicates the need for erosion control on the slope that approaches the channel in this area.

Tetra Tech NUS, Inc. has no issues with this suggestion provided the following design parameters are followed.

- Two feet of cover material must overlay any waste that remains, therefore, in order to maintain positive drainage from the cover system, the waste material must be excavated to a minimum depth of 2 feet to achieve the cover requirement. In the

**RESPONSE TO RFI-002
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IHDIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 2 OF 2**

event that riprap is placed as erosion control in this area and the same size stone is used in this area as in other areas on site, the 6-inch stone placed at a depth of 18-inches could be considered as a portion of the required two feet.

- The slope that approaches the channel to the south of the identified triangular area must meet design slope requirements (minimum slope 4%, maximum slope 4H:1V). These slope requirements may necessitate the excavation of more than 2 feet of material in this area.
- In the event that waste is not found at depth and the bottom of waste is located while removing the waste to provide for the appropriate cover thickness. The cover system may not need to be extended to this area. However, because one of the remedial action objectives is to remove the potential for direct contact between receptors and surface soil contaminants (page 3-1 of Basis of Design), if the cover system is not extended, verification samples may need to be collected to verify the removal of all contaminants of concern.
- Lastly, the use of erosion controls along this slope would be suggested. Without an evaluation of the contributing watershed to determine whether permanent erosion control matting is acceptable, riprap should be placed along the toe of slope and may also be required around the outfall that feeds the channel because of the proximity of Atkins Road.

If you have any additional questions concerning this RFI please feel free to contact me at (412) 921-8684 or Tim Smith at (412) 921-7720.

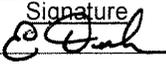
LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-002 R		Date: 10-23-02		Respond *NLT:	
Initiated By:		<input type="checkbox"/> Navy	<input checked="" type="checkbox"/> Contractor	<input type="checkbox"/> Other	
<input type="checkbox"/> Technical Direction		<input checked="" type="checkbox"/> RFI	<input type="checkbox"/> Variance Request	<input type="checkbox"/> Overtime Authorization	
Description (Include location & attachments if necessary): The triangular shaped area south of the site along Atkins Road was discovered to contain waste debris material when the surface debris was removed.					
Attachment <input type="checkbox"/>					
Drawing Ref: C-6			Spec. Ref.		
Explanation/Recommendation:					
Recommendation #1 The landfill cover system could be extended to the edge of the ravine with minimal changes to the design. Protection of the ravine with erosion controls may be necessary.					
Alternatively, the waste debris could be removed and incorporated within the existing Limits. Approximately 250 to 300 CY of material would need to be relocated to the elevation of the existing ravine. It is not known if the depth of the waste extends below the level of the ravine. Erosion controls through the ravine would probably be necessary for this method also.					
*This work is out of scope. Please provide a defined scope of work with the necessary details for Shaw to work up a cost estimate.					
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope			Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ To be determined		
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>			Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input checked="" type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:		
Contractor:		Signature		Date	
Site Representative				10-23-02	
Project Manager:					
Reviewer Comments, incl RFI Response:					
Navy:		Signature		Date	
ROICC:					
RPM/EIC					
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required					

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD/S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-003		Date: 10-11-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input checked="" type="checkbox"/> RFI <input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
<p>Description (Include location & attachments if necessary): The invert of the 15" CMP culvert outlet at the head of the riprap channel is 5-feet below the shoulder of Atkins Road. There is a concrete wall above the culvert, initially thought to be an endwall. However the wall does not extend down to the pipe. The top of the wall is 44" above the invert and has 16" of soil overlying the top of it. This soil material currently supports the shoulder of the road. The cut is nearly vertical at the culvert outlet and is approximately 6-feet from the edge of the road surface. (See attached Photos)</p>			
Attachment <input checked="" type="checkbox"/> Photos			
Drawing Ref: C-2		Spec. Ref:	
Explanation/Recommendation:			
Recommendation: Extend the culvert an additional 5-feet into the riprap channel and then buttress the embankment with a separation geotextile and riprap.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: Site Representative: <i>[Signature]</i> Project Manager:		Date 10-11-02	
Reviewer Comments, incl RFI Response:			
Navy: ROICC: RPM/EIC:		Signature Date	
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			





LANTDIV RAC FIELD FORM

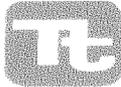
Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-004		Date: 10-16-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input checked="" type="checkbox"/> RFI <input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): Additional waste was found down slope of the riprap channel in area 2. The waste was found while removing some surface debris from that area. The area appears to extend from the end of the riprap channel to the edge of the pond. It also appears to extend wider to the east in the area below the channel.			
Attachment <input type="checkbox"/>			
Drawing Ref: C-2		Spec. Ref.	
Explanation/Recommendation: Recommendation: The riprap channel can be extended to the edge of the pond and the waste overexcavated to allow placement of 2-feet of material (clean fill and riprap). The landfill cover can be extended east of the channel to include the additional waste. If this work can be done prior to finishing the interim grading in area 2 then the overexcavated waste can be incorporated into the waste grade under the cover.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: Site Representative: _____ Project Manager: _____		Signature _____ Date 10-16-02	
Reviewer Comments, incl RFI Response: 			
Navy: ROICC: RPM/EIC:		Signature _____ Date _____	
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			



TECHNICAL MEMORANDUM

Date: October 14, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)
Tim Smith (TtNUS – Pittsburgh)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Shaw RFI-003
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to requests for information (RFI)-003 received from Shaw Environmental, Inc. (Shaw) (Ernie Duke) via e-mail on October 11, 2002.

The RFI discusses extending the 15-inch corrugated metal pipe (CMP) below Atkins Road and providing adequate stabilization for Atkins Road. Shaw recommends extending the CMP 5-feet into the riprap channel and stabilizing the embankment with a separation geotextile and riprap.

Tetra Tech NUS, Inc. has no issues with this suggestion provided the following design parameters are followed.

- To avoid decreasing the capacity of the existing CMP, the CMP extension should be, at a minimum, the same size and material as the existing CMP, and slipped over the existing CMP so that the existing CMP discharges into the extension.

**RESPONSE TO INFORMAL SHAW RFI'S
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IH DIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 2 OF 2**

- To avoid tail water conditions that would decrease the capacity of the existing culvert, the outfall invert of the extension should be set at an elevation that is either the same as, or higher than, the elevation of the plunge pool outfall elevation.
- To protect against erosion, the geotextile and riprap used to stabilize the embankment should be the same material types and sizes used to stabilize the channel that the existing CMP feeds.

If you have any additional questions concerning this RFI please feel free to contact me at (412) 921-8684 or Tim Smith at (412) 921-7720.

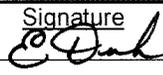
LANTDIV RAC FIELD FORM

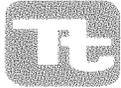
DISTRIBUTION:

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-004 R		Date: 10-23-02	Respond *NLT:
Initiated By:		<input type="checkbox"/> Navy	<input checked="" type="checkbox"/> Contractor
<input type="checkbox"/> Technical Direction		<input checked="" type="checkbox"/> RFI	<input type="checkbox"/> Variance Request
		<input type="checkbox"/> Overtime Authorization	
Description (Include location & attachments if necessary): Additional waste was found down slope of the riprap channel in area 2. The waste was found while removing some surface debris from that area. The area appears to extend from the end of the riprap channel to the edge of the pond. It also appears to extend wider to the east in the area below the channel.			
Attachment <input type="checkbox"/>			
Drawing Ref: C-2		Spec. Ref.	
Explanation/Recommendation:			
Recommendation: The riprap channel can be extended to the edge of the pond and the waste overexcavated to allow placement of 2-feet of material (clean fill and riprap). The landfill cover can be extended east of the channel to include the additional waste. If this work can be done prior to finishing the interim grading in area 2 then the overexcavated waste can be incorporated into the waste grade under the cover. *This work is out of scope. Please provide a defined scope of work with the necessary details for Shaw to work up a cost estimate.			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input checked="" type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ To be determined	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input checked="" type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor:		Signature	
Site Representative:			
Project Manager:		Date	
		10-23-02	
Reviewer Comments, incl RFI Response:			
Navy:		Signature	
ROICC:		Date	
RPM/EIC			
<input type="checkbox"/> Task Order Modification to Follow (contract action)		<input type="checkbox"/> No Task Order Modification Required	



TECHNICAL MEMORANDUM

Date: October 24, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)
Tim Smith (TtNUS – Pittsburgh)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Shaw RFI-004R
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to requests for information (RFI)-004R received from Cathy Gardner (IHDIV-NSWC ROICC) via e-mail on October 23, 2002.

The RFI indicates that additional waste was discovered while removing surface debris from an area down slope of the riprap channel in area 2. The RFI also indicates that the additional waste appears to extend to the east further than the indicated width of the channel.

The RFI recommends excavating 2 feet of waste material from this area and extending the 2-foot cover system. The area immediately down slope of the riprap channel would receive 6-inches of select fill and 18-inches of riprap to achieve the required 2-feet of cover material and 18-inches of select fill and 6-inches of topsoil east of the channel.

Tetra Tech NUS, Inc. has no issues with this suggestion provided the following design parameters are followed.

**RESPONSE TO RFI-004R
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IHDIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 2 OF 3**

- Two feet of cover material must overlay any waste that remains, therefore, in order to maintain positive drainage from the landfill cover, the waste material must be excavated to a minimum depth of 2 feet to obtain the cover requirement. This minimum excavation depth may need to be increased in order to meet slope requirements (minimum slope 4%, maximum slope 4H:1V). In the event that riprap is placed as erosion control in this area and the same size stone is used in this area as in other areas on site, the 6-inch stone placed at a depth of 18-inches could be considered as a portion of the required two feet.
- The area down slope of the designed riprap channel located on the eastern side of Area 2 is designated as wetland area. Consideration should be given to replacing this area with wetland vegetation rather than extending the riprap channel to the edge of the pond.
- Lastly, in the event that waste is not found at depth and the bottom of waste is located while removing the waste to provide for the appropriate cover thickness. The cover system may not need to be extended to this area. However, because one of the remedial action objectives is to remove the potential for direct contact between receptors and surface soil contaminants (page 3-1 of Basis of Design), if waste is removed at depth and the cover system is not extended, verification samples may need to be collected to verify the removal of all contaminants of concern.

In the absence of direction to the contrary from the Navy to Shaw, TtNUS recommends the following approach to extend the 2-foot cover system to the extent of the newly defined waste limit.

Excavation

Based on observations made during a site visit (October 17, 2002), in order to provide positive drainage to the pond from the cover system, it is anticipated that debris deposited on the existing surface within the newly identified limits of waste will require removal. To the extent that the newly identified waste material is within the delineated wetlands, excavate a minimum of two feet of material, and replace with select fill and

**RESPONSE TO RFI-004R
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IHDIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 3 OF 3**

topsoil as indicated on Details 1 and 2 on Design Drawing C-9. To the extent that newly identified waste material is not within delineated wetlands (e.g., to the east of the riprap channel), remove debris deposited on the existing surface, and place select fill and topsoil as indicated on Details 1 and 2 on Design Drawing C-9. Note that, as indicated on Detail 2 on Design Drawing C-9, some additional excavation below the existing surface may be necessary in order to provide 2 feet of cover material over waste material left in place while maintaining required surface grades. The excavated materials should be re-graded within the limits of the cover system where additional fill is required to achieve Interim Grades.

Cover System

Place the two foot cover system (18-inches of select fill and 6-inches of topsoil, see Detail 1 on Design Drawing C-9) within the area of excavation so as to achieve final grades.

Erosion and Sediment Control

Following excavation and placement of the cover system as directed for areas where the cover system terminates at wetlands (Detail 2, on Design Drawing C-9) the area will need to be stabilized/vegetated. Based on a review of Design Drawing C-7, it appears that the additional excavation will occur within the limits of delineated wetlands. Therefore, TtNUS does not recommend extending the existing riprap channel further than the limits identified on Design Drawing C-7. Rather, TtNUS recommends that the wetlands in this area be restored by extending the plant schedule identified on Design Drawing C-7 into the newly defined limits of the soil cover system.

Silt fence shall be installed on the down slope side of excavations that takes place in areas outside the current silt fence perimeter.

If you have any additional questions concerning this RFI please feel free to contact me at (412) 921-8684 or Tim Smith at (412) 921-7720.

LANTDIV RAC FIELD FORM

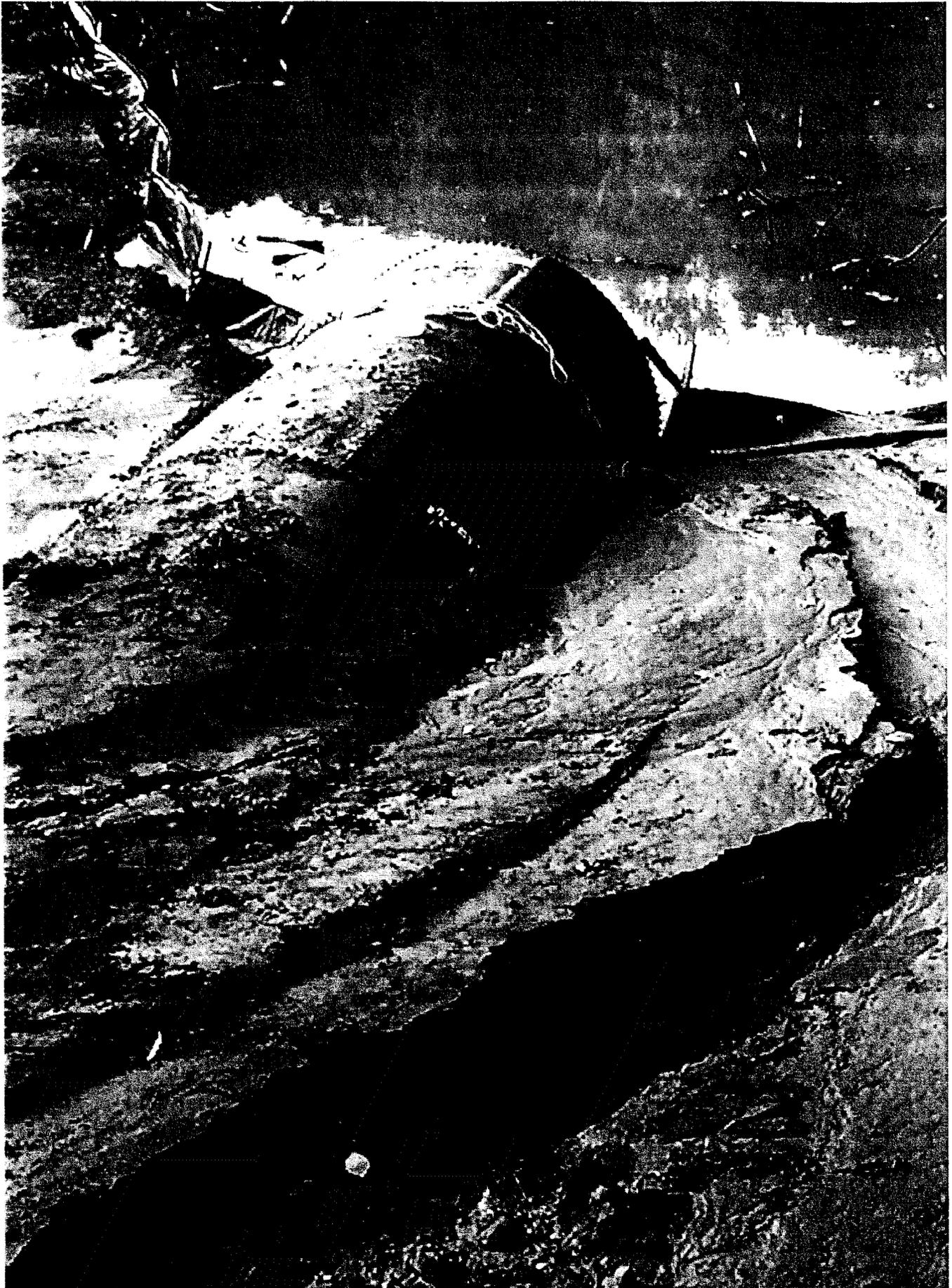
Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

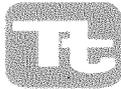
DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-005		Date: <u>10-7-02</u>	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input checked="" type="checkbox"/> RFI <input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The surface water that flows along the west side of the Atkins Road Extension discharges down over the reconstructed slope next to the 78" culvert and causes erosion during a heavy rain.			
Attachment <input checked="" type="checkbox"/> Photo			
Drawing Ref: C-7		Spec. Ref.	
Explanation/Recommendation:			
Recommendation: The slope adjacent to the culvert needs to have an erosion control device for additional protection. Based on the erosion evident after a 1" rainfall riprap may be necessary. (Photo attached)			
<input checked="" type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ To be determined	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days: To be determined	
Contractor: _____		Signature _____ Date _____	
Site Representative: _____		_____	
Project Manager: _____		_____	
Reviewer Comments, incl RFI Response:			
Navy: _____		Signature _____ Date _____	
ROICC: _____		_____	
RPM/EIC _____		_____	
<input checked="" type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			





TECHNICAL MEMORANDUM

Date: November 14, 2002

To: Jeff Morris (EFACHES)
Cathy Gardner (IHDIV-NSWC ROICC)

From: George Latulippe (TtNUS – Pittsburgh, PA)

cc: Shawn Jorgensen (IHDIV-NSWC Environmental)
File

RE: Response to Shaw RFI-005
Remedial Action
Site 12 – Town Gut Landfill
Indian Head Division - Naval Surface Warfare Center
Indian Head, Maryland

The purpose of this technical memorandum is to respond to requests for information (RFI)-005 received from Cathy Gardner (IHDIV-NSWC ROICC) via e-mail on November 7, 2002, and discussed during the on-site QC Meeting on the same day.

The RFI indicates that surface water that flows from north of Site 12 toward the south along the west side of Atkins Road Extension discharges down over the reconstructed slope next to the 78-inch diameter culvert and causes erosion during a heavy rain storm.

The RFI recommends placing riprap on the slope to guard against future erosion.

Tetra Tech NUS, Inc. has no issues with this suggestion provided the following design parameters are followed.

- Place two rock check dams (refer to Drawing C-5, Detail 6) in the drainage ditch located west of Atkins Road Extension. Place the most downgradient rock check dam approximately at Baseline A Station 0+00, and the second rock check dam approximately 40 feet upgradient. Construct the rock check dams of the same material as the other rock check dams previously installed as part of the work.

**RESPONSE TO RFI-005
REMEDIAL ACTION
SITE 12 – TOWN GUT LANDFILL, IHDIV-NSWC
INDIAN HEAD, MARYLAND
PAGE 2 OF 3**

- Re-grade the eroded slope located west of Atkins Road Extension and north of the 78-inch diameter culvert to the planned interim grade.
- Place a separation geotextile on the regraded surface. Use the same geotextile as was placed under the riprap lined channels. (A technical memorandum dated October 2, 2002, from George Latulippe to Jeff Morris and Cathy Gardner specified the separation geotextile as having and Apparent Opening Size (AOS) less than 0.30 mm, permeability greater than 0.01 cm/sec, grab tensile strength greater than 90 lbs., and burst strength greater than 145 psi).
- On the geotextile, place an 18 inch (minimum) thickness of rip rap similar to that used for drainage channels elsewhere on the site (i.e., $d_{50} = 6$ inches).

If you have any additional questions concerning this RFI please feel free to contact me at (412) 921-8684 or Tim Smith at (412) 921-7720.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

RFI-006 Area 1 West Slope Erosion

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-006		Date: 11-18-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input checked="" type="checkbox"/> RFI <input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): A heavy rain event of 2.1" caused extensive erosion to the Select Fill layer on the west slope of Area 1. The worst erosion occurred in the center of the slope where the surface contributing runoff is the widest. Until vegetation is established this erosion may continue even after the topsoil is placed.			
Attachment <input checked="" type="checkbox"/> 2 Photos			
Drawing Ref: C-7		Spec. Ref.	
Explanation/Recommendation:			
Recommendation: Either an erosion control device such as a berm or silt fence could be used to divert or reduce the volume and velocity of the runoff, or erosion mat could be used on the slope itself.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ To be determined	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time . Approximate Calendar Days: To be determined	
Contractor: Site Representative: _____ Project Manager: _____		Signature _____ Date _____ 11-18-02	
Reviewer Comments, incl RFI Response:			
Navy: _____ ROICC: _____ RPM/EIC: _____		Signature _____ Date _____	
<input checked="" type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			







TECHNICAL MEMORANDUM

DATE: 19 November 2002

TO: Cathy Gardner (EFACHES)

FROM: Jeffrey Morris (EFACHES)
George Latulippe (Project Manager)

cc: Project File

SUBJECT: Request For Information (RFI) No. 006
Site 12 – Town Gut Landfill
Indian Head Division Naval Surface Warfare Center, Indian Head, Maryland

The purpose of this technical memorandum is to present the results of the review of Request For Information (RFI) No. 006 dated November 18, 2002 received by Tetra Tech NUS, Inc. (TtNUS) on November 18, 2002. RFI-006 pertains to the erosion of the select fill layer on the west slope of Area 1.

Based on a review of the RFI and a photograph provided by the Remedial Action Contractor (RAC), and in the absence of direction from the Navy to the contrary, the following mitigation measures are suggested to repair the select fill layer on the west slope of Area 1:

- Construct a drying pad consisting of a gravel base at the crest of the slope.
- Excavate eroded select fill and place on pad (as necessary) to dry to a moisture content that allows the select fill to be re-placed. The drying process may be assisted by frequently turning the material.

*Drying bed not
necessary if no
free liquids present.*

11/29/02

TECHNICAL MEMORANDUM
NOVEMBER 19, 2002
REVIEW OF REQUEST FOR INFORMATION No. 006
PAGE 2 OF 2

- As an alternative, the excavated select fill may be utilized elsewhere on-base and new select fill imported for use along the west slope of Area 1, in which case a drying pad would not be constructed.
- Establish interim grades with the excavated select fill or the newly imported select fill according to the remedial design, and compact according to the specifications.
- If placement of topsoil on the select fill layer will be delayed longer than 48 hours, install silt fence along the crest of slope just above where the erosion of the select fill began.
- Establish final grades with the approved topsoil according to the remedial design.
- Install or re-install silt fence along the crest of slope as described above.
- Install temporary erosion control matting (ECM) on the topsoil layer and then seed.

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

RFI-007 Atkins Road Extension Line Striping

DISTRIBUTION:

_____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 _____ ROICC
 _____ RPM
 _____ COTR:
 OTHER: _____

 FILE: _____

Form No. RFI-007		Date: 02-24-03	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy		<input checked="" type="checkbox"/> Contractor	<input type="checkbox"/> Other
<input type="checkbox"/> Technical Direction		<input checked="" type="checkbox"/> RFI	<input type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization
Description (Include location & attachments if necessary): Atkins Road and Atkins Road Extension are not line striped. Although the specifications call for line striping, is it necessary and/or consistent with other Base roads?			
Attachment <input type="checkbox"/>			
Drawing Ref:		Spec. Ref. 02742 (2.6 and 3.7)	
Explanation/Recommendation: Recommendation: Review line striping of existing roads and determine if line striping is necessary for the new section of Atkins Road Extension and the repaired section of Atkins Road.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ To be determined	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days: To be determined	
Contractor: _____		Signature _____ Date _____	
Site Representative: _____			
Project Manager: _____			
Reviewer Comments, incl RFI Response:			
Navy: _____		Signature _____ Date _____	
ROICC: _____			
RPM/EIC _____			
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

Staszak, Janna

From: Gardner, Cathy B (EFACHES) [GardnerCB@efaches.navfac.navy.mil]
Sent: Tuesday, February 25, 2003 9:30 AM
To: Staszak, Janna
Cc: Duke, Ernie
Subject: RE: Town Gut Landfill line striping

Janna,

The provision of striping at this location is not warranted since there was none there before and there is none on the other sections of the same roadway.

Therefore disregard the striping and provide credit.

Cathy Gardner

-----Original Message-----

From: Staszak, Janna [mailto:Janna.Staszak@shawgrp.com]
Sent: Monday, February 24, 2003 8:49 AM
To: Gardner, Cathy B (EFACHES)
Cc: Duke, Ernie
Subject: Town Gut Landfill line striping

Cathy,

Please see the attached RFI regarding line striping of the roads for Town Gut Landfill.

Thanks.

Janna Staszak
Shaw Environmental, Inc.
2790 Mosside Boulevard
Monroeville, PA 15146-2792
Phone: 412-858-1532
Fax: 412-858-3979

<<RFI-007 Line Striping.doc>>

APPENDIX F

ANALYTICAL TEST RESULTS

APPENDIX F

ANALYTICAL TEST RESULTS

- IH-DM-006 & IH-DM-007 Detects Summary.xls
- IH-DM-006 & IH-DM-007 Drum Waste Form 1s.pdf
- IH-DM-006 & IH-DM-007 Drum Waste Full Report.pdf
- IH-GW-008 & IH-DS-009 Detects Summary.xls
- IH-GW-008 & IH-DS-009 Final Report.pdf
- IH-GW-008 & IH-DS-009 Form 1s.pdf
- IH-SF-001 & IH-TS-002 Detects Summary.xls
- IH-SF-001 & IH-TS-002 Final Report.pdf
- IH-SF-001 & IH-TS-002 Form 1s.pdf
- IH-WD-005 Debris Waste Detects Summary.xls
- IH-WD-005 Debris Waste Final Report.pdf
- IH-WD-005 Debris Waste Form.pdf

Sample Summary

Shaw E & I, Inc.

Job No: F15057

Indian Head

Project No: 809401-Site 12

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F15057-1	10/15/02	11:20	ED	10/16/02	SO Soil	IH-DM-006
F15057-2	10/15/02	11:30	ED	10/16/02	SO Soil	IH-DM-007

Report of Analysis

Client Sample ID: IH-DM-006	Date Sampled: 10/15/02
Lab Sample ID: F15057-1	Date Received: 10/16/02
Matrix: SO - Soil	Percent Solids: 60.2
Method: SW846 8260B SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	G0018589.D	1000	10/24/02	RAW	10/17/02	OP6133	VG612
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	1.0	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	2.0	mg/l	
67-66-3	Chloroform	ND	D022	6.0	2.0	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	2.0	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	2.0	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	2.0	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	2.0	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	2.0	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	2.0	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	98%		87-113%
460-00-4	4-Bromofluorobenzene	92%		84-117%
17060-07-0	1,2-Dichloroethane-D4	103%		78-125%

(a) Dilution required due to matrix interference (non-target analytes present above calibration range).

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-006	Date Sampled:	10/15/02
Lab Sample ID:	F15057-1	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	60.2
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015013.D	1	10/22/02	ME	10/19/02	OP6142	SL830
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	0.0304	D024	200	0.050	mg/l	J
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		19-90%
4165-62-2	Phenol-d5	34%		10-68%
118-79-6	2,4,6-Tribromophenol	89%		36-137%
4165-60-0	Nitrobenzene-d5	86%		49-119%
321-60-8	2-Fluorobiphenyl	88%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-006		Date Sampled:	10/15/02
Lab Sample ID:	F15057-1		Date Received:	10/16/02
Matrix:	SO - Soil		Percent Solids:	60.2
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST17235.D	1	10/22/02	SKW	10/21/02	OP6148	GST623
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		52-131%
2051-24-3	Decachlorobiphenyl	120%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-006		Date Sampled:	10/15/02
Lab Sample ID:	F15057-1		Date Received:	10/16/02
Matrix:	SO - Soil		Percent Solids:	60.2
Method:	SW846 8082 SW846 3550B			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MN16315.D	4	10/22/02	NJ	10/21/02	OP6151	GMN625
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	220	ug/kg	
11104-28-2	Aroclor 1221	ND	220	ug/kg	
11141-16-5	Aroclor 1232	ND	220	ug/kg	
53469-21-9	Aroclor 1242	ND	220	ug/kg	
12672-29-6	Aroclor 1248 ^b	405	220	ug/kg	J
11097-69-1	Aroclor 1254 ^b	371	220	ug/kg	J
11096-82-5	Aroclor 1260	ND	220	ug/kg	
	Total PCBs ^b	776	440	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	61%		50-134%
2051-24-3	Decachlorobiphenyl	75%		48-147%

(a) All hits confirmed by dual column analysis.

(b) Estimated value due to the presence of multiple overlapping Arochlor patterns.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006 Lab Sample ID: F15057-1 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 60.2
---	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG07132.D	1	10/24/02	ATX	10/23/02	T:OP1501	T:GGG255
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006

Lab Sample ID: F15057-1

Matrix: SO - Soil

Project: Indian Head

Date Sampled: 10/15/02

Date Received: 10/16/02

Percent Solids: 60.2

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.011	D004	5.0	0.010	0.0028	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Barium	0.94 B	D005	100	1.0	0.00049	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Cadmium	0.18	D006	1.0	0.0050	0.00026	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Chromium	13.1	D007	5.0	0.010	0.00043	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Lead	0.12	D008	5.0	0.010	0.0012	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/22/02	10/23/02	DM	SW846 7470A
Selenium	0.0056 B	D010	1.0	0.010	0.0020	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/21/02	10/22/02	DM	SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-DM-006	Date Sampled: 10/15/02
Lab Sample ID: F15057-1	Date Received: 10/16/02
Matrix: SO - Soil	Percent Solids: 60.2
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	7.9			1	10/24/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 2.5	2.5	mg/kg	1	10/24/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	65		Deg. F	1	10/24/02 SJL	SW846 1010
Solids, Percent	60.2		%	1	10/18/02 SJL	EPA 160.3 M
Sulfide Reactivity	< 83	83	mg/kg	1	10/23/02 LL	SW846 CHAP7

Report of Analysis

Client Sample ID:	IH-DM-007		Date Sampled:	10/15/02
Lab Sample ID:	F15057-2		Date Received:	10/16/02
Matrix:	SO - Soil		Percent Solids:	51.0
Method:	SW846 8260B SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	G0018590.D	10000	10/24/02	RAW	10/17/02	OP6133	VG612
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	10	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	20	mg/l	
67-66-3	Chloroform	ND	D022	6.0	20	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	20	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	20	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	20	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	20	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	100	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	20	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	20	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	96%		84-117%
17060-07-0	1,2-Dichloroethane-D4	100%		78-125%

(a) Dilution required due to matrix interference; sample foamed.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-007	Date Sampled:	10/15/02
Lab Sample ID:	F15057-2	Date Received:	10/16/02
Matrix:	SO - Soil	Percent Solids:	51.0
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L015014.D	20	10/22/02	ME	10/19/02	OP6142	SL830
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	1.0	mg/l	
	3&4-Methylphenol	ND	D024	200	1.0	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	5.0	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	1.0	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	1.0	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	1.0	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	1.0	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	1.0	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	1.0	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	1.0	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	1.0	mg/l	
110-86-1	Pyridine	ND	D038	5.0	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	30%		19-90%
4165-62-2	Phenol-d5	18%		10-68%
118-79-6	2,4,6-Tribromophenol	0% ^b		36-137%
4165-60-0	Nitrobenzene-d5	53%		49-119%
321-60-8	2-Fluorobiphenyl	72%		45-118%
1718-51-0	Terphenyl-d14	62%		46-135%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-007		Date Sampled:	10/15/02
Lab Sample ID:	F15057-2		Date Received:	10/16/02
Matrix:	SO - Soil		Percent Solids:	51.0
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST17236.D	1	10/22/02	SKW	10/21/02	OP6148	GST623
Run #2	DD07499.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281

	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2	100 ml	10.0 ml

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%	59%	52-131%
2051-24-3	Decachlorobiphenyl	0% ^b	2% ^a	16-153%

(a) Confirmed by re-extraction and reanalysis.

(b) Outside control limits due to matrix interference.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261.6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DM-007		Date Sampled:	10/15/02
Lab Sample ID:	F15057-2		Date Received:	10/16/02
Matrix:	SO - Soil		Percent Solids:	51.0
Method:	SW846 8082 SW846 3550B			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MN16317.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625
Run #2							

Run #	Initial Weight	Final Volume
Run #1	3.00 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	650	ug/kg	
11104-28-2	Aroclor 1221	ND	650	ug/kg	
11141-16-5	Aroclor 1232	ND	650	ug/kg	
53469-21-9	Aroclor 1242	ND	650	ug/kg	
12672-29-6	Aroclor 1248	ND	650	ug/kg	
11097-69-1	Aroclor 1254	ND	650	ug/kg	
11096-82-5	Aroclor 1260	ND	650	ug/kg	
	Total PCBs	ND	1300	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		50-134%
2051-24-3	Decachlorobiphenyl	64%		48-147%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007 Lab Sample ID: F15057-2 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 51.0
---	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG07133.D	1	10/24/02	ATX	10/23/02	T:OP1501	T:GGG255
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007			
Lab Sample ID: F15057-2		Date Sampled: 10/15/02	
Matrix: SO - Soil		Date Received: 10/16/02	
Project: Indian Head		Percent Solids: 51.0	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.028 U	D004	5.0	0.10	0.028	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Barium	0.24 B	D005	100	10	0.0049	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Cadmium	0.0026 U	D006	1.0	0.050	0.0026	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Chromium	0.0043 U	D007	5.0	0.10	0.0043	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Lead	0.058	D008	5.0	0.010	0.012	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/22/02	10/23/02	DM	SW846 7470A
Selenium	0.12	D010	1.0	0.20	0.020	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Silver	0.0055 U	D011	5.0	0.10	0.0055	mg/l	1	10/21/02	10/22/02	DM	SW846 3010

RL = Reporting Limit **IDL = Instrument Detection Limit** **U = Indicates a result < IDL**
MCL = Maximum Contamination Level (40 CFR 261 6/96) **B = Indicates a result > = IDL but < RL**

Report of Analysis**Client Sample ID:** IH-DM-007**Lab Sample ID:** F15057-2**Matrix:** SO - Soil**Project:** Indian Head**Date Sampled:** 10/15/02**Date Received:** 10/16/02**Percent Solids:** 51.0**General Chemistry**

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	10.0			1	10/24/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 2.9	2.9	mg/kg	1	10/24/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 210		Deg. F	1	10/23/02 ATX	SW846 1010
Solids, Percent	51		%	1	10/18/02 SJL	EPA 160.3 M
Sulfide Reactivity	< 98	98	mg/kg	1	10/23/02 LL	SW846 CHAP7

Technical Report for

Shaw E & I, Inc.

Indian Head

809401-Site 12

Accutest Job Number: F15057

Report to:

Shaw E & I, Inc.

Natasha.Sullivan@theitgroup.com

ATTN: Natasha Sullivan

Total number of pages in report: 158



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certification: Florida DOH E83510

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Sample Summary

Shaw E & I, Inc.

Job No: F15057

Indian Head

Project No: 809401-Site 12

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F15057-1	10/15/02	11:20	ED	10/16/02	SO Soil	IH-DM-006
F15057-2	10/15/02	11:30	ED	10/16/02	SO Soil	IH-DM-007

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: IH-DM-006	Date Sampled: 10/15/02
Lab Sample ID: F15057-1	Date Received: 10/16/02
Matrix: SO - Soil	Percent Solids: 60.2
Method: SW846 8260B SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	G0018589.D	1000	10/24/02	RAW	10/17/02	OP6133	VG612
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	1.0	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	2.0	mg/l	
67-66-3	Chloroform	ND	D022	6.0	2.0	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	2.0	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	2.0	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	2.0	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	2.0	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	2.0	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	2.0	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	98%		87-113%
460-00-4	4-Bromofluorobenzene	92%		84-117%
17060-07-0	1,2-Dichloroethane-D4	103%		78-125%

(a) Dilution required due to matrix interference (non-target analytes present above calibration range).

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006 Lab Sample ID: F15057-1 Matrix: SO - Soil Method: SW846 8270C SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 60.2
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Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L015013.D	1	10/22/02	ME	10/19/02	OP6142	SL830
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	0.0304	D024	200	0.050	mg/l	J
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	54%		19-90%
4165-62-2	Phenol-d5	34%		10-68%
118-79-6	2,4,6-Tribromophenol	89%		36-137%
4165-60-0	Nitrobenzene-d5	86%		49-119%
321-60-8	2-Fluorobiphenyl	88%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006 Lab Sample ID: F15057-1 Matrix: SO - Soil Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 60.2
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST17235.D	1	10/22/02	SKW	10/21/02	OP6148	GST623
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	94%		52-131%
2051-24-3	Decachlorobiphenyl	120%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006 Lab Sample ID: F15057-1 Matrix: SO - Soil Method: SW846 8082 SW846 3550B Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 60.2
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MN16315.D	4	10/22/02	NJ	10/21/02	OP6151	GMN625
Run #2							

	Initial Weight	Final Volume
Run #1	29.9 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	220	ug/kg	
11104-28-2	Aroclor 1221	ND	220	ug/kg	
11141-16-5	Aroclor 1232	ND	220	ug/kg	
53469-21-9	Aroclor 1242	ND	220	ug/kg	
12672-29-6	Aroclor 1248 ^b	405	220	ug/kg	J
11097-69-1	Aroclor 1254 ^b	371	220	ug/kg	J
11096-82-5	Aroclor 1260	ND	220	ug/kg	
	Total PCBs ^b	776	440	ug/kg	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	61%		50-134%
2051-24-3	Decachlorobiphenyl	75%		48-147%

(a) All hits confirmed by dual column analysis.

(b) Estimated value due to the presence of multiple overlapping Arochlor patterns.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006 Lab Sample ID: F15057-1 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 60.2
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG07132.D	1	10/24/02	ATX	10/23/02	T:OP1501	T:GGG255
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	103%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-006 Lab Sample ID: F15057-1 Matrix: SO - Soil Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 60.2
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.011	D004	5.0	0.010	0.0028	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Barium	0.94 B	D005	100	1.0	0.00049	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Cadmium	0.18	D006	1.0	0.0050	0.00026	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Chromium	13.1	D007	5.0	0.010	0.00043	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Lead	0.12	D008	5.0	0.010	0.0012	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/22/02	10/23/02	DM	SW846 7470A
Selenium	0.0056 B	D010	1.0	0.010	0.0020	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/21/02	10/22/02	DM	SW846 3010

RL = Reporting Limit **IDL = Instrument Detection Limit**
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-DM-006		Date Sampled: 10/15/02
Lab Sample ID: F15057-1		Date Received: 10/16/02
Matrix: SO - Soil		Percent Solids: 60.2
Project: Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	7.9			1	10/24/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 2.5	2.5	mg/kg	1	10/24/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	65		Deg. F	1	10/24/02 SJL	SW846 1010
Solids, Percent	60.2		%	1	10/18/02 SJL	EPA 160.3 M
Sulfide Reactivity	< 83	83	mg/kg	1	10/23/02 LL	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID: IH-DM-007 Lab Sample ID: F15057-2 Matrix: SO - Soil Method: SW846 8260B SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 51.0
--	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	G0018590.D	10000	10/24/02	RAW	10/17/02	OP6133	VG612
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	10	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	20	mg/l	
67-66-3	Chloroform	ND	D022	6.0	20	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	20	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	20	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	20	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	20	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	100	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	20	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	20	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	10	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	96%		84-117%
17060-07-0	1,2-Dichloroethane-D4	100%		78-125%

(a) Dilution required due to matrix interference; sample foamed.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007 Lab Sample ID: F15057-2 Matrix: SO - Soil Method: SW846 8270C SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 51.0
--	--

	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	L015014.D	20	10/22/02	ME	10/19/02	OP6142	SL830
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	1.0	mg/l	
	3&4-Methylphenol	ND	D024	200	1.0	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	5.0	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	1.0	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	1.0	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	1.0	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	1.0	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	1.0	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	1.0	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	1.0	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	1.0	mg/l	
110-86-1	Pyridine	ND	D038	5.0	1.0	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	30%		19-90%
4165-62-2	Phenol-d5	18%		10-68%
118-79-6	2,4,6-Tribromophenol	0% ^b		36-137%
4165-60-0	Nitrobenzene-d5	53%		49-119%
321-60-8	2-Fluorobiphenyl	72%		45-118%
1718-51-0	Terphenyl-d14	62%		46-135%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007 Lab Sample ID: F15057-2 Matrix: SO - Soil Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 51.0
--	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ST17236.D	1	10/22/02	SKW	10/21/02	OP6148	GST623
Run #2	DD07499.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2	100 ml	10.0 ml

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	65%	59%	52-131%
2051-24-3	Decachlorobiphenyl	0% ^b	2% ^a	16-153%

- (a) Confirmed by re-extraction and reanalysis.
 (b) Outside control limits due to matrix interference.

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007 Lab Sample ID: F15057-2 Matrix: SO - Soil Method: SW846 8082 SW846 3550B Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 51.0
--	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	MN16317.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625
Run #2							

Run #	Initial Weight	Final Volume
Run #1	3.00 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	650	ug/kg
11104-28-2	Aroclor 1221	ND	650	ug/kg
11141-16-5	Aroclor 1232	ND	650	ug/kg
53469-21-9	Aroclor 1242	ND	650	ug/kg
12672-29-6	Aroclor 1248	ND	650	ug/kg
11097-69-1	Aroclor 1254	ND	650	ug/kg
11096-82-5	Aroclor 1260	ND	650	ug/kg
	Total PCBs	ND	1300	ug/kg

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	71%		50-134%
2051-24-3	Decachlorobiphenyl	64%		48-147%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007 Lab Sample ID: F15057-2 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 51.0
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG07133.D	1	10/24/02	ATX	10/23/02	T:OP1501	T:GGG255
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DM-007 Lab Sample ID: F15057-2 Matrix: SO - Soil Project: Indian Head	Date Sampled: 10/15/02 Date Received: 10/16/02 Percent Solids: 51.0
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.028 U	D004	5.0	0.10	0.028	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Barium	0.24 B	D005	100	10	0.0049	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Cadmium	0.0026 U	D006	1.0	0.050	0.0026	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Chromium	0.0043 U	D007	5.0	0.10	0.0043	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Lead	0.058	D008	5.0	0.010	0.012	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/22/02	10/23/02	DM	SW846 7470A
Selenium	0.12	D010	1.0	0.20	0.020	mg/l	1	10/21/02	10/22/02	DM	SW846 3010
Silver	0.0055 U	D011	5.0	0.10	0.0055	mg/l	1	10/21/02	10/22/02	DM	SW846 3010

RL = Reporting Limit **IDL = Instrument Detection Limit**
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-DM-007		Date Sampled: 10/15/02
Lab Sample ID: F15057-2		Date Received: 10/16/02
Matrix: SO - Soil		Percent Solids: 51.0
Project: Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	10.0			1	10/24/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 2.9	2.9	mg/kg	1	10/24/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 210		Deg. F	1	10/23/02 ATX	SW846 1010
Solids, Percent	51		%	1	10/18/02 SJL	EPA 160.3 M
Sulfide Reactivity	< 98	98	mg/kg	1	10/23/02 LL	SW846 CHAP7

RL = Reporting Limit

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Instrument Performance Checks (BFB)**
- **Internal Standard Area Summaries**
- **Surrogate Recovery Summaries**
- **Initial and Continuing Calibration Summaries**

Blank Spike Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG612-BS	G0018567.D	1	10/23/02	RAW	n/a	n/a	VG612

The QC reported here applies to the following samples:

Method: SW846 8260B

F15057-1, F15057-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	25.8	103	76-123
108-90-7	Chlorobenzene	25	25.8	103	78-115
67-66-3	Chloroform	25	28.6	114	74-123
56-23-5	Carbon tetrachloride	25	28.9	116	68-137
75-35-4	1,1-Dichloroethylene	25	32.5	130	64-136
107-06-2	1,2-Dichloroethane	25	28.1	112	66-118
106-46-7	p-Dichlorobenzene	25	24.5	98	74-117
78-93-3	Methyl ethyl ketone	125	114	91	65-124
127-18-4	Tetrachloroethylene	25	31.2	125*	75-124
79-01-6	Trichloroethylene	25	27.3	109	75-122
75-01-4	Vinyl chloride	25	33.4	134	62-142

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	108%	86-115%
17060-07-0	1,2-Dichloroethane-D4	115%	78-125%
2037-26-5	Toluene-D8	107%	87-113%
460-00-4	4-Bromofluorobenzene	95%	84-117%

Blank Spike Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG612-BS	G0018587.D	10	10/24/02	RAW	n/a	n/a	VG612

The QC reported here applies to the following samples:

Method: SW846 8260B

F15057-1, F15057-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	250	287	115	76-123
108-90-7	Chlorobenzene	250	294	118*	78-115
67-66-3	Chloroform	250	307	123	74-123
56-23-5	Carbon tetrachloride	250	290	116	68-137
75-35-4	1,1-Dichloroethylene	250	302	121	64-136
107-06-2	1,2-Dichloroethane	250	253	101	66-118
106-46-7	p-Dichlorobenzene	250	270	108	74-117
78-93-3	Methyl ethyl ketone	1250	1570	126*	65-124
127-18-4	Tetrachloroethylene	250	292	117	75-124
79-01-6	Trichloroethylene	250	241	96	75-122
75-01-4	Vinyl chloride	250	254	102	62-142

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	102%	86-115%
17060-07-0	1,2-Dichloroethane-D4	99%	78-125%
2037-26-5	Toluene-D8	103%	87-113%
460-00-4	4-Bromofluorobenzene	103%	84-117%

Leachate Blank Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VG612-LB	G0018588.D	10	10/24/02	RAW	n/a	n/a	VG612

The QC reported here applies to the following samples:

Method: SW846 8260B

F15057-1, F15057-2

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
67-66-3	Chloroform	ND	20	ug/l	
56-23-5	Carbon tetrachloride	ND	20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
106-46-7	p-Dichlorobenzene	ND	20	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	ug/l	
127-18-4	Tetrachloroethylene	ND	20	ug/l	
79-01-6	Trichloroethylene	ND	20	ug/l	
75-01-4	Vinyl chloride	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	86-115%
17060-07-0	1,2-Dichloroethane-D4	101%	78-125%
2037-26-5	Toluene-D8	95%	87-113%
460-00-4	4-Bromofluorobenzene	93%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F15058-11MS	G0018592.D	10	10/24/02	RAW	n/a	n/a	VG612
F15058-11MSD	G0018593.D	10	10/24/02	RAW	n/a	n/a	VG612
F15058-11	G0018591.D	10	10/24/02	RAW	10/17/02	OP6133	VG612

The QC reported here applies to the following samples:

Method: SW846 8260B

F15057-1, F15057-2

CAS No.	Compound	F15058-11 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	250	281	112	284	114	1	71-127/8
108-90-7	Chlorobenzene	ND	250	268	107	260	104	3	77-113/6
67-66-3	Chloroform	ND	250	305	122	291	116	5	72-125/11
56-23-5	Carbon tetrachloride	ND	250	268	107	277	111	3	61-140/13
75-35-4	1,1-Dichloroethylene	ND	250	286	114	285	114	0	60-141/14
107-06-2	1,2-Dichloroethane	ND	250	264	106	269	108	2	64-121/9
106-46-7	p-Dichlorobenzene	ND	250	271	108	263	105	3	72-116/7
78-93-3	Methyl ethyl ketone	ND	1250	1550	124	1630	130*	5	63-128/16
127-18-4	Tetrachloroethylene	ND	250	270	108	287	115	6	74-123/11
79-01-6	Trichloroethylene	ND	250	282	113	272	109	4	71-124/9
75-01-4	Vinyl chloride	ND	250	257	103	266	106	3	53-149/22

CAS No.	Surrogate Recoveries	MS	MSD	F15058-11	Limits
1868-53-7	Dibromofluoromethane	100%	101%	102%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	103%	104%	78-125%
2037-26-5	Toluene-D8	101%	102%	94%	87-113%
460-00-4	4-Bromofluorobenzene	113%	102%	99%	84-117%

Instrument Performance Check (BFB)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-BFB	Injection Date: 10/24/02
Lab File ID: G0018585.D	Injection Time: 15:22
Instrument ID: GCMSG	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	45984	23.5	Pass
75	30.0 - 60.0% of mass 95	110915	56.7	Pass
95	Base peak, 100% relative abundance	195712	100.0	Pass
96	5.0 - 9.0% of mass 95	16710	8.5	Pass
173	Less than 2.0% of mass 174	762	0.39 (0.46) ^a	Pass
174	50.0 - 100.0% of mass 95	167445	85.6	Pass
175	5.0 - 9.0% of mass 174	14232	7.3 (8.5) ^a	Pass
176	95.0 - 101.0% of mass 174	164075	83.8 (98.0) ^a	Pass
177	5.0 - 9.0% of mass 176	10507	5.4 (6.4) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG612-CC612	G0018586.D	10/24/02	15:39	00:17	Continuing cal 40
VG612-BS	G0018587.D	10/24/02	16:17	00:55	Blank Spike
VG612-LB	G0018588.D	10/24/02	16:48	01:26	Leachate Blank
F15057-1	G0018589.D	10/24/02	17:19	01:57	IH-DM-006
F15057-2	G0018590.D	10/24/02	17:51	02:29	IH-DM-007
F15058-11	G0018591.D	10/24/02	18:22	03:00	(used for QC only; not part of job F15057)
F15058-11MS	G0018592.D	10/24/02	18:53	03:31	Matrix Spike
F15058-11MSD	G0018593.D	10/24/02	19:24	04:02	Matrix Spike Duplicate
ZZZZZZ	G0018594.D	10/24/02	19:55	04:33	(unrelated sample)
ZZZZZZ	G0018595.D	10/24/02	20:26	05:04	(unrelated sample)
ZZZZZZ	G0018596.D	10/24/02	20:57	05:35	(unrelated sample)
ZZZZZZ	G0018597.D	10/24/02	21:28	06:06	(unrelated sample)
ZZZZZZ	G0018598.D	10/24/02	21:59	06:37	(unrelated sample)
ZZZZZZ	G0018599.D	10/24/02	22:30	07:08	(unrelated sample)
VG613-BS	G0018606.D	10/25/02	12:06	20:44	Blank Spike

Instrument Performance Check (BFB)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-BFB	Injection Date: 10/24/02
Lab File ID: G0018575.D	Injection Time: 10:08
Instrument ID: GCMSG	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	46843	25.3	Pass
75	30.0 - 60.0% of mass 95	110541	59.6	Pass
95	Base peak, 100% relative abundance	185408	100.0	Pass
96	5.0 - 9.0% of mass 95	14493	7.8	Pass
173	Less than 2.0% of mass 174	1115	0.6 (0.83) ^a	Pass
174	50.0 - 100.0% of mass 95	134597	72.6	Pass
175	5.0 - 9.0% of mass 174	10424	5.6 (7.7) ^a	Pass
176	95.0 - 101.0% of mass 174	129363	69.8 (96.1) ^a	Pass
177	5.0 - 9.0% of mass 176	10160	5.5 (7.9) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG612-IC612	G0018577.D	10/24/02	10:57	00:49	Initial cal 1
VG612-IC612	G0018578.D	10/24/02	11:28	01:20	Initial cal 5
VG612-IC612	G0018579.D	10/24/02	11:59	01:51	Initial cal 20
VG612-ICC612	G0018580.D	10/24/02	12:30	02:22	Initial cal 40
VG612-IC612	G0018581.D	10/24/02	13:01	02:53	Initial cal 70
VG612-IC612	G0018582.D	10/24/02	13:32	03:24	Initial cal 100

Instrument Performance Check (BFB)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VG611-BFB	Injection Date:	10/22/02
Lab File ID:	G0018531.D	Injection Time:	15:21
Instrument ID:	GCMMSG		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	13191	22.4	Pass
75	30.0 - 60.0% of mass 95	31008	52.7	Pass
95	Base peak, 100% relative abundance	58882	100.0	Pass
96	5.0 - 9.0% of mass 95	4690	8.0	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	43913	74.6	Pass
175	5.0 - 9.0% of mass 174	3931	6.7 (9.0) ^a	Pass
176	95.0 - 101.0% of mass 174	43855	74.5 (99.9) ^a	Pass
177	5.0 - 9.0% of mass 176	3185	5.4 (7.3) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG611-CC611	G0018532.D	10/22/02	15:38	00:17	Continuing cal 40
VG611-BS	G0018533.D	10/22/02	16:09	00:48	Blank Spike
VG611-MB	G0018534.D	10/22/02	16:40	01:19	Method Blank
ZZZZZZ	G0018535.D	10/22/02	17:11	01:50	(unrelated sample)
ZZZZZZ	G0018539.D	10/22/02	19:15	03:54	(unrelated sample)
ZZZZZZ	G0018540.D	10/22/02	19:46	04:25	(unrelated sample)
F14989-1	G0018541.D	10/22/02	20:17	04:56	(used for QC only; not part of job F15057)
F14989-1MS	G0018542.D	10/22/02	20:48	05:27	Matrix Spike
F14989-1MSD	G0018543.D	10/22/02	21:19	05:58	Matrix Spike Duplicate
VG612-BS	G0018567.D	10/23/02	10:56	19:35	Blank Spike

Instrument Performance Check (BFB)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG611-BFB	Injection Date: 10/22/02
Lab File ID: G0018523.D	Injection Time: 11:03
Instrument ID: GCMSG	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	46752	23.6	Pass
75	30.0 - 60.0% of mass 95	103187	52.1	Pass
95	Base peak, 100% relative abundance	197888	100.0	Pass
96	5.0 - 9.0% of mass 95	15693	7.9	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	151253	76.4	Pass
175	5.0 - 9.0% of mass 174	13384	6.8 (8.8) ^a	Pass
176	95.0 - 101.0% of mass 174	147456	74.5 (97.5) ^a	Pass
177	5.0 - 9.0% of mass 176	10964	5.5 (7.4) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VG611-ICC611	G0018524.D	10/22/02	11:20	00:17	Initial cal 40
VG611-IC611	G0018525.D	10/22/02	12:08	01:05	Initial cal 1
VG611-IC611	G0018526.D	10/22/02	12:38	01:35	Initial cal 5
VG611-IC611	G0018527.D	10/22/02	13:09	02:06	Initial cal 20
VG611-IC611	G0018528.D	10/22/02	13:40	02:37	Initial cal 70
VG611-IC611	G0018529.D	10/22/02	14:11	03:08	Initial cal 100

Volatile Internal Standard Area Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VG612-CC612	Injection Date:	10/24/02
Lab File ID:	G0018586.D	Injection Time:	15:39
Instrument ID:	GCMMSG	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	1273259	7.74	777356	12.79	396494	17.21	131651	4.38
Upper Limit ^a	2546518	8.24	1554712	13.29	792988	17.71	263302	4.88
Lower Limit ^b	636630	7.24	388678	12.29	198247	16.71	65826	3.88

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VG612-BS	1490837	7.76	744365	12.79	413236	17.22	162581	4.37
VG612-LB	1277221	7.76	852374	12.78	564396	17.20	137032	4.38
F15057-1 ^c	1273690	7.76	786857	12.78	535684	17.20	121509	4.38
F15057-2 ^d	1254765	7.74	794993	12.79	527719	17.21	122921	4.34
F15058-11	1230029	7.75	812311	12.78	538292	17.21	130900	4.36
F15058-11MS	1227379	7.75	733180	12.78	358693	17.20	147398	4.36
F15058-11MSD	1226267	7.74	722831	12.78	404181	17.20	151612	4.35
ZZZZZZ	1199922	7.74	747213	12.77	511548	17.20	133014	4.35
ZZZZZZ	1196315	7.74	770078	12.78	492820	17.20	136112	4.35
ZZZZZZ	1139796	7.75	711527	12.77	475726	17.19	128786	4.35
ZZZZZZ	1135248	7.75	736667	12.78	490852	17.19	126401	4.36
ZZZZZZ	1115393	7.75	735195	12.78	486753	17.20	125892	4.34
ZZZZZZ	1123476	7.73	736223	12.77	475982	17.20	129403	4.37
VG613-BS	1198084	7.74	697947	12.78	342305	17.20	61324*	4.38

- IS 1 = Fluorobenzene
- IS 2 = Chlorobenzene-D5
- IS 3 = 1,4-Dichlorobenzene-d4
- IS 4 = Tert Butyl Alcohol-D10

- (a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
- (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
- (c) Dilution required due to matrix interference (non-target analytes present above calibration range).
- (d) Dilution required due to matrix interference; sample foamed.

Volatile Internal Standard Area Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VG611-CC611	Injection Date:	10/22/02
Lab File ID:	G0018532.D	Injection Time:	15:38
Instrument ID:	GCMMSG	Method:	SW846 8260B

	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
	AREA		AREA		AREA		AREA	
Check Std	1307606	7.74	967914	12.78	467366	17.20	129831	4.35
Upper Limit ^a	2615212	8.24	1935828	13.28	934732	17.70	259662	4.85
Lower Limit ^b	653803	7.24	483957	12.28	233683	16.70	64916	3.85

Lab	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
Sample ID	AREA		AREA		AREA		AREA	
VG611-BS	1288513	7.74	920137	12.78	466861	17.20	129446	4.35
VG611-MB	1335131	7.74	938160	12.78	554226	17.20	130405	4.36
ZZZZZZ	1271210	7.73	915982	12.77	537958	17.20	114729	4.35
ZZZZZZ	1099112	7.74	780820	12.77	455352	17.19	113264	4.36
ZZZZZZ	1009509	7.73	735466	12.77	436049	17.19	98208	4.35
F14989-1	988229	7.73	706335	12.76	413001	17.19	99336	4.34
F14989-1MS	951984	7.74	693324	12.77	417285	17.19	96736	4.34
F14989-1MSD	983697	7.72	701224	12.77	429505	17.19	104700	4.35
VG612-BS	1004632	7.74	633157	12.78	324735	17.19	97143	4.35

IS 1 = Fluorobenzene
 IS 2 = Chlorobenzene-D5
 IS 3 = 1,4-Dichlorobenzene-d4
 IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8260B	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F15057-1	G0018589.D	99.0	98.0	92.0	103.0
F15057-2	G0018590.D	96.0	97.0	96.0	100.0
F15058-11MS	G0018592.D	100.0	101.0	113.0	96.0
F15058-11MSD	G0018593.D	101.0	102.0	102.0	103.0
VG612-BS	G0018567.D	108.0	107.0	95.0	115.0
VG612-BS	G0018587.D	102.0	103.0	103.0	99.0
VG612-LB	G0018588.D	100.0	95.0	93.0	101.0

Surrogate Compounds	Recovery Limits
---------------------	-----------------

S1 = Dibromofluoromethane	86-115%
S2 = Toluene-D8	87-113%
S3 = 4-Bromofluorobenzene	84-117%
S4 = 1,2-Dichloroethane-D4	78-125%

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-ICC612
 Lab FileID: G0018580.D

Response Factor Report MSVOA1

Method : C:\HPCHEM\1\METHODS\8260-30M.M (RTE Integrator)
 Title : SW-846 Method 5030B/8260B & EPA 624
 Last Update : Thu Oct 24 14:07:02 2002
 Response via : Initial Calibration

Calibration Files

1 =G0018577.D 2 =G0018578.D 3 =G0018579.D
 4 =G0018580.D 5 =G0018581.D 6 =G0018582.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) I Fluorobenzene	-----I STD-----							
2) Dichlorodifluoromet	0.222	0.380	0.367	0.267	0.247	0.234	0.286	24.23
	----- Quadratic regression ----- Coefficient = 0.9941							
	Response Ratio = 0.01018 + 0.29119 *A + -0.03237 *A^2							
3) P Chloromethane	0.465	0.448	0.388	0.372	0.343	0.403	0.403	12.82
4) C Vinyl Chloride	0.370	0.384	0.327	0.317	0.279	0.335	0.335	12.56
5) Bromomethane	0.168	0.213	0.208	0.213	0.191	0.161	0.192	12.04
6) Chloroethane	0.250	0.193	0.230	0.185	0.172	0.153	0.197	18.48
	----- Quadratic regression ----- Coefficient = 0.9982							
	Response Ratio = 0.00177 + 0.21417 *A + -0.03103 *A^2							
7) Trichlorofluorometh	0.639	0.609	0.579	0.498	0.461	0.417	0.534	16.55
	----- Quadratic regression ----- Coefficient = 0.9995							
	Response Ratio = 0.00668 + 0.55729 *A + -0.07205 *A^2							
8) Ethyl Ether	0.273	0.204	0.248	0.237	0.225	0.209	0.233	11.17
9) C 1,1-Dichloroethene	0.453	0.551	0.544	0.447	0.439	0.389	0.471	13.54
10) Freon 113	0.254	0.254	0.286	0.266	0.230	0.214	0.251	10.15
11) Acetone	0.076	0.092	0.103	0.107	0.098	0.091	0.095	11.68
12) Iodomethane	0.150	0.208	0.175	0.189	0.185	0.171	0.180	10.83
13) Carbon Disulfide	0.897	0.856	0.809	0.728	0.688	0.643	0.770	12.92
14) Methyl acetate	0.171	0.190	0.233	0.247	0.244	0.231	0.219	14.30
15) Methylene Chloride	0.731	0.542	0.496	0.406	0.382	0.375	0.489	27.85
	----- Linear regression ----- Coefficient = 0.9970							
	Response Ratio = 0.02546 + 0.36531 *A							
16) trans-1,2-Dichloroe	0.397	0.458	0.459	0.423	0.389	0.367	0.416	9.06
17) Acrylonitrile	0.070	0.086	0.099	0.098	0.098	0.094	0.089	13.31
18) Methyl Tert Butyl E	0.573	0.692	0.700	0.671	0.671	0.667	0.661	7.67
19) Hexane	0.271	0.277	0.294	0.290	0.290	0.271	0.280	3.92
20) P 1,1-Dichloroethane	0.512	0.569	0.542	0.505	0.491	0.445	0.511	8.37
21) Vinyl acetate	0.660	0.507	0.687	0.663	0.642	0.624	0.630	10.20
22) Di-isopropyl ether	0.618	0.812	0.779	0.822	0.821	0.797	0.775	10.14
23) ETBE	0.566	0.553	0.599	0.627	0.610	0.620	0.596	5.01
24) 2,2-Dichloropropane	0.410	0.361	0.330	0.328	0.324	0.317	0.345	10.16
25) cis-1,2-Dichloroeth	0.318	0.326	0.297	0.277	0.269	0.251	0.290	10.16
26) 2-Butanone	0.102	0.127	0.146	0.140	0.140	0.133	0.130	13.00
27) Bromochloromethane	0.104	0.157	0.154	0.145	0.145	0.139	0.141	13.59
28) Tetrahydrofuran	0.038	0.080	0.086	0.090	0.087	0.087	0.076	28.65
	----- Linear regression ----- Coefficient = 0.9988							
	Response Ratio = -0.00393 + 0.09037 *A							
29) C Chloroform	0.605	0.689	0.586	0.515	0.496	0.461	0.559	15.05
	----- Linear regression ----- Coefficient = 0.9959							
	Response Ratio = 0.02977 + 0.45876 *A							

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-ICC612
 Lab FileID: G0018580.D

30)		1, 1, 1-Tri chl oroetha	0.417	0.479	0.455	0.453	0.424	0.410	0.440	6.13
31)	S	Di bromofl uoromethan	0.366	0.368	0.377	0.342	0.333	0.313	0.350	7.05
32)		Cycl ohexane	0.460	0.407	0.412	0.425	0.417	0.404	0.421	4.90
33)		1, 1-Di chl oropropene	0.364	0.413	0.360	0.356	0.349	0.335	0.363	7.39
34)		Carbon Tetrachl ori d	0.324	0.385	0.340	0.338	0.320	0.313	0.337	7.65
35)	S	1, 2-Di chl oroethane-	0.427	0.426	0.489	0.459	0.436	0.394	0.439	7.37
36)		Benzene	0.911	1.028	0.954	0.907	0.879	0.842	0.920	7.00
37)		1, 2-Di chl oroethane		0.539	0.536	0.478	0.440	0.419	0.482	11.34
38)		TAME	0.401	0.452	0.485	0.522	0.500	0.525	0.481	9.87
39)		Tri chl oroethene		0.326	0.301	0.295	0.293	0.274	0.298	6.39
40)		Methyl cycl ohexane	0.250	0.257	0.252	0.307	0.296	0.295	0.276	9.32
41)	C	1, 2-Di chl oropropane	0.251	0.257	0.276	0.256	0.257	0.248	0.257	3.79
42)		Di bromomethane	0.185	0.203	0.203	0.181	0.169	0.158	0.183	9.84
43)		Bromodi chl oromethan	0.403	0.397	0.383	0.371	0.363	0.348	0.378	5.56
44)		2-Ni tropropane	0.035	0.060	0.093	0.110	0.108	0.106	0.085	36.23
		----- Linear regression -----								
		Response Ratio = -0.01512 + 0.10881 *A								
45)		2-Chl oroethyl vinyl	0.052	0.053	0.082	0.089	0.081	0.086	0.074	22.54
		----- Linear regression -----								
		Response Ratio = -0.00815 + 0.08596 *A								
46)		4-Methyl -2-pentanon	0.129	0.140	0.219	0.280	0.262	0.256	0.214	30.27
		----- Linear regression -----								
		Response Ratio = -0.02771 + 0.26265 *A								
47)		ci s-1, 3-Di chl oropro	0.281	0.328	0.309	0.281	0.255	0.265	0.287	9.48
48)	I	Chl orobenzene-d5								
		-----I STD-----								
49)	S	Tol uene-d8	1.355	1.418	1.420	1.402	1.372	1.361	1.388	2.09
50)	C	Tol uene	1.168	1.394	1.346	1.259	1.267	1.206	1.274	6.63
51)		trans-1, 3-Di chl orop	0.385	0.457	0.433	0.415	0.375	0.390	0.409	7.73
52)		1, 1, 2-Tri chl oroetha	0.363	0.413	0.387	0.365	0.344	0.331	0.367	8.09
53)		Tetrachl oroethene	0.414	0.520	0.430	0.408	0.419	0.393	0.431	10.54
54)		2-hexanone	0.147	0.142	0.227	0.281	0.278	0.266	0.224	28.77
		----- Linear regression -----								
		Response Ratio = -0.03588 + 0.27493 *A								
55)		1, 3-Di chl oropropane	0.648	0.688	0.641	0.543	0.510	0.502	0.589	13.61
56)		Di bromochl oromethan	0.274	0.410	0.434	0.409	0.389	0.381	0.383	14.70
57)		1, 2-Di bromoethane	0.238	0.272	0.251	0.185	0.137	0.144	0.204	28.01
		----- Quadratic regression -----								
		Response Ratio = 0.01316 + 0.17343 *A + -0.02025 *A^2								
58)		1-Chl orohexane		0.370	0.316	0.292	0.267	0.263	0.302	14.43
59)	P	Chl orobenzene	0.957	0.883	0.814	0.826	0.768	0.752	0.833	9.14
60)		1, 1, 1, 2-Tetrachl oro	0.375	0.484	0.379	0.358	0.359	0.349	0.384	13.13
61)	C	Ethyl benzene	1.218	1.103	1.158	1.087	1.045	1.028	1.107	6.45
62)		m, p-Xyl ene	0.657	0.923	0.898	0.873	0.824	0.807	0.830	11.49
63)		o-Xyl ene	0.826	0.926	0.907	0.920	0.894	0.884	0.893	4.06
64)		Styrene	0.660	0.701	0.643	0.619	0.602	0.609	0.639	5.88
65)	P	Bromoform	0.185	0.182	0.234	0.241	0.229	0.238	0.218	12.39
66)	I	1, 4-Di chl orobenzene-d								
		-----I STD-----								
67)		I sopropyl benzene		1.574	1.683	1.858	1.921	1.901	1.787	8.50
68)	S	4-Bromofl uorobenzen	0.779	0.757	0.915	0.958	1.041	1.101	0.925	14.88
69)		Bromobenzene	0.481	0.461	0.573	0.606	0.618	0.676	0.569	14.65
70)	P	1, 1, 2, 2-Tetrachl oro	0.521	0.551	0.866	0.953	0.989	1.007	0.814	27.18
		----- Linear regression -----								
		Response Ratio = 0.9994								

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-ICC612
 Lab FileID: G0018580.D

Response Ratio = -0.04150 + 1.02142 *A

71) 1, 2, 3-Tri chloroprop 0.226 0.167 0.265 0.264 0.247 0.244 0.236 15.57
 ----- Linear regression ----- Coefficient = 0.9982
 Response Ratio = 0.00207 + 0.24589 *A

72) trans-1, 4-Di chloro- 0.084 0.068 0.148 0.134 0.122 0.130 0.115 27.30
 ----- Linear regression ----- Coefficient = 0.9958
 Response Ratio = -0.00025 + 0.12890 *A

73) n-Propyl benzene 1.969 2.519 2.398 2.386 2.400 2.299 2.328 8.14
 74) 2-Chl orotol uene 1.230 1.416 1.488 1.606 1.650 1.658 1.508 11.02
 75) 4-Chl orotol uene 1.609 1.917 1.992 1.928 1.969 1.949 1.894 7.52
 76) 1, 3, 5-Tri methyl benz 2.023 2.076 2.137 2.164 2.102 2.100 2.60
 77) sec-Butyl benzene 1.789 2.255 2.248 2.209 2.191 1.941 2.106 9.20
 78) 1, 3-Di chl orobenzene 1.044 1.093 1.118 1.043 1.105 1.058 1.077 3.01
 79) 4-Isopropyl tol uene 1.679 2.000 2.020 2.029 1.961 1.763 1.909 7.84
 80) 1, 4-Di chl orobenzene 1.436 1.305 1.172 1.076 1.123 1.102 1.202 11.66
 81) tert-Butyl benzene 1.043 1.329 1.337 1.384 1.357 1.249 1.283 9.82
 82) Benzyl Chloride 0.678 0.672 0.978 1.001 1.001 0.972 0.884 18.34
 ----- Linear regression ----- Coefficient = 0.9993
 Response Ratio = -0.00778 + 0.98829 *A

83) n-Butyl benzene 1.779 2.047 2.434 2.272 2.178 1.951 2.110 11.11
 84) 1, 2-Di chl orobenzene 0.986 1.225 1.141 1.091 1.111 1.109 1.110 6.97
 85) 1, 2, 4-Tri methyl benz 1.782 2.219 2.291 2.236 2.266 2.097 2.148 8.93
 86) 1, 2-Di bromo-3-Chl or 0.224 0.110 0.167 0.164 0.152 0.128 0.157 25.04
 ----- Quadratic regression ----- Coefficient = 0.9983
 Response Ratio = -0.00512 + 0.20117 *A + -0.03499 *A^2

87) 1, 2, 4-Tri chl orobenz 0.995 1.402 1.346 1.385 1.333 1.292 13.04
 88) Hexachl orobutadi ene 0.408 0.458 0.515 0.515 0.487 0.444 0.471 9.04
 89) Naphthal ene 1.154 1.312 2.906 3.270 3.452 3.366 2.577 41.08
 ----- Linear regression ----- Coefficient = 0.9989
 Response Ratio = -0.14701 + 3.47018 *A

90) 1, 2, 3-Tri chl orobenz 0.972 0.923 1.324 1.307 1.338 1.284 1.191 15.97
 ----- Linear regression ----- Coefficient = 0.9990
 Response Ratio = -0.00663 + 1.30656 *A

91) I Tert Butyl Al coh ol -d1 -----I STD-----
 92) Acrol ei n 3.054 2.586 2.338 2.368 2.104 2.490 14.41
 93) Tert Butyl Al coh ol 1.021 1.388 1.409 1.457 1.374 1.330 13.20
 94) 1, 4-Di oxane 0.113 0.141 0.172 0.169 0.161 0.151 16.32
 ----- Linear regression ----- Coefficient = 0.9969
 Response Ratio = -0.01453 + 0.16654 *A

95) Cycl ohexanone 0.516 0.307 0.349 0.409 0.427 0.471 0.413 18.60
 ----- Linear regression ----- Coefficient = 0.9944
 Response Ratio = -0.02706 + 0.46840 *A

(#) = Out of Range

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-CC612
 Lab FileID: G0018586.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102402\G0018586.D Vial : 10
 Acq On : 24 Oct 2002 3:39 pm Operator: RickW
 Sample : CC612-40 Inst : MSVOA1
 Misc : Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8260-30M.M (RTE Integrator)
 Title : SW-846 Method 5030B/8260B & EPA 624
 Last Update : Thu Oct 24 14:07:02 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)	R. T.
1 I	Fluorobenzene	1.000	1.000	0.0	101	0.00	7.74
	----- True	Cal c.	% Dri ft	-----			
2	Di chlorodi fluoromethane	40.000	44.848	-12.1	115	0.00	1.86
	----- AvgRF	CCRF	% Dev	-----			
3 P	Chloromethane	0.403	0.401	0.5	104	0.00	2.12
4 C	Vinyl Chloride	0.335	0.346	-3.3	106	0.00	2.18
5	Bromomethane	0.192	0.248	-29.2#	117	0.00	2.56
	----- True	Cal c.	% Dri ft	-----			
6	Chloroethane	40.000	40.600	-1.5	105	0.00	2.67
7	Tri chlorofluoromethane	40.000	40.227	-0.6	103	0.02	2.95
	----- AvgRF	CCRF	% Dev	-----			
8	Ethyl Ether	0.233	0.221	5.2	94	0.04	3.33
9 C	1,1-Dichloroethene	0.471	0.453	3.8	102	0.02	3.60
10	Freon 113	0.251	0.255	-1.6	97	0.03	3.61
11	Acetone	0.095	0.172	-81.1#	162	0.02	3.76
12	Iodomethane	0.180	0.208	-15.6	111	0.02	3.80
13	Carbon Disulfide	0.770	0.732	4.9	101	0.02	3.86
14	Methyl acetate	0.219	0.258	-17.8	105	0.02	4.15
	----- True	Cal c.	% Dri ft	-----			
15	Methylene Chloride	40.000	41.976	-4.9	103	0.00	4.29
	----- AvgRF	CCRF	% Dev	-----			
16	trans-1,2-Dichloroethene	0.416	0.436	-4.8	104	0.02	4.62
17	Acrylonitrile	0.089	0.105	-18.0	107	0.02	4.73
18	Methyl Tert Butyl Ether	0.661	0.724	-9.5	104	0.02	4.62
19	Hexane	0.280	0.282	-0.7	96	-0.01	4.92
20 P	1,1-Dichloroethane	0.511	0.504	1.4	100	0.00	5.26
21	Vinyl acetate	0.630	0.716	-13.7	109	0.00	5.30
22	Diisopropyl ether	0.775	0.825	-6.5	101	0.00	5.28
23	ETBE	0.596	0.658	-10.4	105	0.00	5.77
24	2,2-Dichloropropane	0.345	0.366	-6.1	112	0.00	6.02
25	cis-1,2-Dichloroethene	0.290	0.283	2.4	103	0.00	6.07
26	2-Butanone	0.130	0.186	-43.1#	128	0.02	6.13
27	Bromochloromethane	0.141	0.152	-7.8	106	0.00	6.41
	----- True	Cal c.	% Dri ft	-----			
28	Tetrahydrofuran	40.000	42.111	-5.3	105	0.00	6.42

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-CC612
 Lab FileID: G0018586.D

Sample ID	Compound	AvgRF	CCRF	% Dev	Count	0.00	Value
29 C	Chl oroform	40.000	42.125	-5.3	102	0.00	6.53
----- AvgRF CCRF % Dev -----							
30	1, 1, 1-Tri chl oroethane	0.440	0.453	-3.0	101	0.00	6.74
31 S	Di bromofl uoromethane	0.350	0.337	3.7	99	0.03	6.79
32	Cycl ohexane	0.421	0.442	-5.0	104	0.02	6.74
33	1, 1-Di chl oropropene	0.363	0.360	0.8	102	0.02	6.99
34	Carbon Tetrachl oride	0.337	0.332	1.5	99	0.03	6.93
35 S	1, 2-Di chl oroethane-d4	0.439	0.426	3.0	93	0.00	7.30
36	Benzene	0.920	0.907	1.4	100	0.00	7.28
37	1, 2-Di chl oroethane	0.482	0.461	4.4	97	0.00	7.43
38	TAME	0.481	0.547	-13.7	105	0.02	7.43
39	Tri chl oroethene	0.298	0.305	-2.3	104	0.00	8.28
40	Methyl cycl ohexane	0.276	0.316	-14.5	103	0.02	8.46
41 C	1, 2-Di chl oropropane	0.257	0.273	-6.2	107	0.00	8.71
42	Di bromomethane	0.183	0.179	2.2	99	0.02	8.89
43	Bromodi chl oromethane	0.378	0.369	2.4	100	0.00	9.13
----- True Cal c. % Dri ft -----							
44	2-Ni tropropane	200.000	201.492	-0.7	97	0.02	9.65
45	2-Chl oroethyl vinyl ether	200.000	195.800	2.1	93	0.00	9.67
46	4-Methyl -2-pentanone	200.000	204.291	-2.1	94	0.00	10.15
----- AvgRF CCRF % Dev -----							
47	ci s-1, 3-Di chl oropropene	0.287	0.246	14.3	88	0.00	9.87
48 I	Chl orobenzene-d5	1.000	1.000	0.0	96	0.00	12.79
49 S	Tol uene-d8	1.388	1.375	0.9	94	0.00	10.24
50 C	Tol uene	1.274	1.275	-0.1	97	0.00	10.35
51	trans-1, 3-Di chl oropropene	0.409	0.357	12.7	82	0.02	10.87
52	1, 1, 2-Tri chl oroethane	0.367	0.354	3.5	93	0.00	11.18
53	Tetrachl oroethene	0.431	0.442	-2.6	104	0.00	11.22
----- True Cal c. % Dri ft -----							
54	2-hexanone	200.000	244.722	-22.4#	111	0.00	11.58
----- AvgRF CCRF % Dev -----							
55	1, 3-Di chl oropropane	0.589	0.520	11.7	92	0.00	11.47
56	Di bromochl oromethane	0.383	0.407	-6.3	95	0.00	11.79
----- True Cal c. % Dri ft -----							
57	1, 2-Di bromoethane	40.000	0.337	99.2#	9	-0.17	11.81
----- AvgRF CCRF % Dev -----							
58	1-Chl orohexane	0.302	0.325	-7.6	107	0.00	12.79
59 P	Chl orobenzene	0.833	0.823	1.2	95	0.00	12.84
60	1, 1, 1, 2-Tetrachl oroethane	0.384	0.379	1.3	101	0.02	13.02
61 C	Ethyl benzene	1.107	1.188	-7.3	105	0.02	13.00
62	m, p-Xyl ene	0.830	0.968	-16.6	106	0.02	13.23
63	o-Xyl ene	0.893	1.016	-13.8	106	0.02	13.96
64	Styrene	0.639	0.687	-7.5	106	0.02	14.02
65 P	Bromoform	0.218	0.238	-9.2	95	0.02	14.38
66 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	99	0.00	17.21
67	I sopropyl benzene	1.787	2.050	-14.7	109	0.02	14.64
68 S	4-Bromofl uorobenzene	0.925	1.018	-10.1	105	0.00	14.99
69	Bromobenzene	0.569	0.667	-17.2	109	0.02	15.26
----- True Cal c. % Dri ft -----							
70 P	1, 1, 2, 2-Tetrachl oroethane	40.000	38.189	4.5	96	0.00	15.37

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG612-CC612
 Lab FileID: G0018586.D

71	1, 2, 3-Tri chl oropropane	40.000	40.851	-2.1	95	0.00	15.44	
72	trans-1, 4-Di chl oro-2-Bute	40.000	32.733	18.2	77	0.02	15.49	
	----- AvgRF	CCRF	% Dev	-----				
73	n-Propyl benzene	2.328	2.405	-3.3	100	0.02	15.42	
74	2-Chl orotol uene	1.508	1.743	-15.6	107	0.00	15.60	
75	4-Chl orotol uene	1.894	2.031	-7.2	104	0.02	15.84	
76	1, 3, 5-Tri methyl benzene	2.100	2.120	-1.0	98	0.02	15.78	
77	sec-Butyl benzene	2.106	2.222	-5.5	99	0.00	16.80	
78	1, 3-Di chl orobenzene	1.077	1.150	-6.8	109	0.02	17.06	
79	4-Isopropyl tol uene	1.909	1.977	-3.6	96	0.00	17.09	
80	1, 4-Di chl orobenzene	1.202	1.167	2.9	107	0.00	17.26	
81	tert-Butyl benzene	1.283	1.374	-7.1	98	0.02	16.37	
	----- True	Cal c.	% Dri ft	-----				
82	Benzyl Chl ori de	40.000	44.305	-10.8	107	0.00	17.55	
	----- AvgRF	CCRF	% Dev	-----				
83	n-Butyl benzene	2.110	2.264	-7.3	99	0.00	17.89	
84	1, 2-Di chl orobenzene	1.110	1.160	-4.5	105	0.00	17.99	
85	1, 2, 4-Tri methyl benzene	2.148	2.193	-2.1	97	0.00	16.49	
	----- True	Cal c.	% Dri ft	-----				
86	1, 2-Di bromo-3-Chl oropropa	40.000	36.043	9.9	92	0.02	19.42	
	----- AvgRF	CCRF	% Dev	-----				
87	1, 2, 4-Tri chl orobenzene	1.292	1.375	-6.4	101	0.00	20.60	
88	Hexachl orobutadi ene	0.471	0.521	-10.6	100	0.00	20.77	
	----- True	Cal c.	% Dri ft	-----				
89	Naphthal ene	40.000	40.075	-0.2	100	0.00	20.96	
90	1, 2, 3-Tri chl orobenzene	40.000	41.720	-4.3	102	0.00	21.28	
	----- AvgRF	CCRF	% Dev	-----				
91 I	Tert Butyl Al coh ol -d10	1.000	1.000	0.0	98	0.03	4.38	
92	Acrol ei n	2.490	2.404	3.5	100	0.00	3.54	
93	Tert Butyl Al coh ol	1.330	1.502	-12.9	104	0.04	4.49	
	----- True	Cal c.	% Dri ft	-----				
94	1, 4-Di oxane	800.000	767.345	4.1	88	0.00	8.90	
95	Cycl ohexanone	200.000	18.333	90.8#	2	0.16	15.08	

(6.6 %) 6 of 91 compounds' %D > 20

(#) = Out of Range
 G0018580.D 8260-30M.M

SPCC's out = 0 CCC's out = 0
 Fri Oct 25 10:10:51 2002 RP1

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG611-ICC611
 Lab FileID: G0018524.D

Response Factor Report MSVOA1

Method : C:\HPCHEM\1\METHODS\8260-30M.M (RTE Integrator)
 Title : SW-846 Method 5030B/8260B & EPA 624
 Last Update : Wed Oct 23 09:36:11 2002
 Response via : Initial Calibration

Calibration Files

1 =G0018525.D 2 =G0018526.D 3 =G0018527.D
 4 =G0018524.D 5 =G0018528.D 6 =G0018529.D

Compound	1	2	3	4	5	6	Avg	%RSD
-----I STD-----								
1) I Fluorobenzene								
2) Dichlorodifluoromethane	0.317	0.326	0.334	0.313	0.302	0.289	0.314	5.19
3) P Chloromethane	0.431	0.378	0.453	0.414	0.413	0.410	0.417	5.97
4) C Vinyl Chloride	0.361	0.336	0.367	0.336	0.335	0.326	0.344	4.76
5) Bromomethane	0.188	0.208	0.209	0.189	0.188	0.167	0.192	8.10
6) Chloroethane	0.204	0.197	0.189	0.181	0.172	0.164	0.185	8.23
7) Trichlorofluoromethane	0.423	0.426	0.426	0.384	0.384	0.378	0.404	5.87
8) Ethyl Ether	0.223	0.235	0.221	0.203	0.201	0.199	0.214	6.89
9) C 1,1-Dichloroethene	0.364	0.403	0.407	0.355	0.364	0.360	0.376	6.08
10) Freon 113	0.229	0.221	0.220	0.201	0.206	0.190	0.211	6.96
11) Acetone		0.118	0.105	0.112	0.089	0.089	0.103	13.09
12) Iodomethane		0.182	0.241	0.228	0.222	0.199	0.214	11.04
13) Carbon Disulfide	0.777	0.689	0.686	0.620	0.637	0.622	0.672	8.93
14) Methyl acetate	0.294	0.275	0.247	0.240	0.231	0.230	0.253	10.25
15) Methylene Chloride	0.701	0.450	0.401	0.370	0.369	0.362	0.442	29.60
----- Linear regression ----- Coefficient = 0.9998								
Response Ratio = 0.01066 + 0.35850 *A								
16) trans-1,2-Dichloroethane	0.402	0.423	0.410	0.372	0.375	0.366	0.391	6.01
17) Acrylonitrile	0.100	0.112	0.101	0.100	0.097	0.096	0.101	5.76
18) Methyl Tert Butyl Ether	0.603	0.687	0.666	0.648	0.654	0.645	0.650	4.32
19) Hexane	0.415	0.324	0.328	0.307	0.305	0.297	0.329	13.28
20) P 1,1-Dichloroethane	0.513	0.490	0.476	0.445	0.448	0.431	0.467	6.70
21) Vinyl acetate	0.468	0.515	0.552	0.563	0.581	0.521	0.533	7.63
22) Diisopropyl ether	0.860	0.941	0.915	0.859	0.882	0.881	0.890	3.64
23) ETBE	0.732	0.754	0.729	0.717	0.711	0.712	0.726	2.23
24) 2,2-Dichloropropane	0.367	0.339	0.333	0.313	0.322	0.318	0.332	5.92
25) cis-1,2-Dichloroethane	0.273	0.259	0.262	0.249	0.245	0.242	0.255	4.60
26) 2-Butanone	0.193	0.161	0.146	0.148	0.132	0.135	0.152	14.73
27) Bromochloromethane	0.120	0.147	0.136	0.127	0.130	0.128	0.131	7.02
28) Tetrahydrofuran		0.099	0.087	0.089	0.088	0.092	0.091	5.57
29) C Chloroform		0.539	0.499	0.445	0.441	0.433	0.471	9.73
30) 1,1,1-Trichloroethane	0.434	0.400	0.394	0.356	0.371	0.371	0.388	7.22
31) S Dibromofluoromethane	0.309	0.312	0.305	0.302	0.302	0.295	0.304	1.94
32) Cyclohexane	0.433	0.412	0.439	0.409	0.420	0.412	0.421	2.97
33) 1,1-Dichloropropene	0.385	0.356	0.344	0.325	0.323	0.322	0.342	7.35
34) Carbon Tetrachloride	0.290	0.294	0.320	0.270	0.292	0.290	0.293	5.52
35) S 1,2-Dichloroethane	0.426	0.421	0.426	0.419	0.426	0.391	0.418	3.28
36) Benzene	1.005	0.948	0.918	0.859	0.871	0.839	0.907	6.92
37) 1,2-Dichloroethane		0.518	0.466	0.423	0.424	0.409	0.448	9.92
38) TAME	0.669	0.624	0.631	0.596	0.598	0.588	0.618	4.88
39) Trichloroethene	0.272	0.291	0.268	0.260	0.268	0.260	0.270	4.28
40) Methylcyclohexane	0.382	0.334	0.356	0.346	0.367	0.361	0.358	4.69
41) C 1,2-Dichloropropane	0.261	0.283	0.273	0.272	0.263	0.256	0.268	3.67
42) Dibromomethane	0.188	0.185	0.179	0.164	0.166	0.161	0.174	6.72
43) Bromodichloromethane	0.351	0.361	0.367	0.341	0.356	0.343	0.353	2.94

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG611-ICC611
 Lab FileID: G0018524.D

44)		2-Ni tropropane	0.087	0.093	0.103	0.097	0.102	0.103	0.097	6.49
45)		2-Chl oroethyl vinyl	0.051	0.055	0.052	0.059	0.051	0.057	0.054	6.26
46)		4-Methyl -2-pentanon	0.402	0.330	0.309	0.305	0.288	0.292	0.321	13.25
47)		ci s-1, 3-Di chl oropro	0.292	0.337	0.337	0.333	0.331	0.335	0.327	5.35
48)	I	Chl orobenzene-d5	-----I STD-----							
49)	S	Tol uene-d8	1.281	1.299	1.314	1.287	1.277	1.265	1.287	1.35
50)	C	Tol uene	1.292	1.259	1.255	1.144	1.160	1.155	1.211	5.35
51)		trans-1, 3-Di chl orop	0.296	0.378	0.382	0.370	0.399	0.398	0.370	10.29
52)		1, 1, 2-Tri chl oroetha	0.246	0.322	0.289	0.264	0.269	0.264	0.275	9.63
53)		Tetrachl oroethene	0.334	0.376	0.353	0.318	0.346	0.327	0.342	6.07
54)		2-hexanone	0.304	0.266	0.274	0.280	0.267	0.263	0.276	5.47
55)		1, 3-Di chl oropropane	0.557	0.555	0.517	0.475	0.472	0.443	0.503	9.40
56)		Di bromchl oromethan	0.287	0.330	0.307	0.307	0.315	0.307	0.309	4.49
57)		1, 2-Di bromoethane	0.275	0.247	0.218	0.198	0.185	0.158	0.214	19.85
			----- Quadratic regression ----- Coefficient = 0.9993							
			Response Ratio = 0.00047 + 0.23285 *A + -0.03694 *A^2							
58)		1-Chl orohexane	0.383	0.345	0.341	0.336	0.319	0.345		6.88
59)	P	Chl orobenzene	0.880	0.881	0.843	0.777	0.793	0.753	0.821	6.67
60)		1, 1, 1, 2-Tetrachl oro	0.290	0.318	0.312	0.284	0.286	0.281	0.295	5.37
61)	C	Ethyl benzene	1.323	1.308	1.250	1.219	1.225	1.190	1.252	4.22
62)		m, p-Xyl ene	1.018	1.035	0.997	0.974	0.973	0.949	0.991	3.22
63)		o-Xyl ene	1.022	1.068	1.015	1.040	1.054	1.063	1.044	2.07
64)		Styrene	0.689	0.729	0.720	0.741	0.742	0.728	0.725	2.68
65)	P	Bromoform	0.160	0.210	0.213	0.204	0.211	0.210	0.201	10.16
66)	I	1, 4-Di chl orobenzene-d	-----I STD-----							
67)		Isopropyl benzene	1.999	1.909	2.020	1.955	2.001	1.921	1.968	2.33
68)	S	4-Bromofl uorobenzen	1.039	1.034	1.115	1.106	1.140	1.079	1.086	3.93
69)		Bromobenzene	0.615	0.665	0.673	0.641	0.670	0.619	0.647	4.04
70)	P	1, 1, 2, 2-Tetrachl oro	0.763	0.814	0.907	0.804	0.853	0.798	0.823	6.11
71)		1, 2, 3-Tri chl oroprop	0.252	0.273	0.259	0.212	0.226	0.193	0.236	12.92
72)		trans-1, 4-Di chl oro-		0.130	0.159	0.166	0.157	0.136	0.150	10.63
73)		n-Propyl benzene	2.810	2.589	2.568	2.402	2.491	2.381	2.540	6.17
74)		2-Chl orotol uene	1.807	1.852	1.849	1.726	1.802	1.697	1.789	3.56
75)		4-Chl orotol uene	2.070	2.138	2.136	1.980	2.054	1.938	2.053	3.95
76)		1, 3, 5-Tri methyl benz	1.856	1.863	1.975	1.867	1.939	1.858	1.893	2.69
77)		sec-Butyl benzene	2.198	2.130	2.163	1.912	2.025	1.995	2.071	5.33
78)		1, 3-Di chl orobenzene	1.176	1.253	1.176	1.126	1.098	1.064	1.149	5.84
79)		4-Isopropyl tol uene	1.842	1.794	1.905	1.605	1.740	1.651	1.756	6.50
80)		1, 4-Di chl orobenzene	1.451	1.293	1.151	1.132	1.110	1.084	1.203	11.75
81)		tert-Butyl benzene	1.288	1.193	1.317	1.195	1.292	1.213	1.250	4.43
82)		Benzyl Chl ori de	1.056	1.045	1.107	1.119	1.118	1.053	1.083	3.24
83)		n-Butyl benzene	1.999	1.829	2.046	1.687	1.773	1.643	1.830	8.94
84)		1, 2-Di chl orobenzene	1.278	1.253	1.146	1.101	1.100	1.075	1.159	7.45
85)		1, 2, 4-Tri methyl benz	2.059	1.952	1.985	1.820	1.908	1.837	1.927	4.73
86)		1, 2-Di bromo-3-Chl or	0.210	0.175	0.177	0.166	0.157	0.138	0.170	14.06
87)		1, 2, 4-Tri chl orobenz	1.287	0.991	1.064	0.961	0.989	0.913	1.034	12.87
88)		Hexachl orobutadi ene		0.395	0.395	0.343	0.377	0.352	0.372	6.52
89)		Naphthal ene	2.865	1.985	2.334	2.283	2.357	2.175	2.333	12.60
90)		1, 2, 3-Tri chl orobenz	1.283	0.915	1.054	0.933	0.951	0.883	1.003	14.84
91)	I	Tert Butyl Al coh ol -d1	-----I STD-----							
92)		Acrolei n	2.791	2.868	2.513	2.247	2.390	2.350	2.527	9.93
93)		Tert Butyl Al coh ol	1.553	1.593	1.497	1.324	1.441	1.416	1.471	6.66
94)		1, 4-Di oxane		0.166	0.179	0.166	0.176	0.173	0.172	3.57
95)		Cycl ohexanone		0.687	0.584	0.596	0.603	0.629	0.620	6.62

(#) = Out of Range

Initial Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VG611-ICC611
Lab FileID: G0018524.D

8260-30M.M

Wed Oct 23 15:34:22 2002 RP1

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG611-CC611
 Lab FileID: G0018532.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102202\G0018532.D Vial : 8
 Acq On : 22 Oct 2002 3:38 pm Operator: RickW
 Sample : CC611-40 Inst : MSVOA1
 Misc : Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8260-30M.M (RTE Integrator)
 Title : SW-846 Method 5030B/8260B & EPA 624
 Last Update : Wed Oct 23 09:36:11 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)	R. T.
1 I	Fluorobenzene	1.000	1.000	0.0	100	0.02	7.74
2	Dichlorodifluoromethane	0.314	0.316	-0.6	101	0.00	1.85
3 P	Chloromethane	0.417	0.427	-2.4	103	0.01	2.14
4 C	Vinyl Chloride	0.344	0.340	1.2	101	0.00	2.17
5	Bromomethane	0.192	0.209	-8.9	110	0.02	2.57
6	Chloroethane	0.185	0.179	3.2	99	0.01	2.67
7	Trichlorofluoromethane	0.404	0.391	3.2	101	0.02	2.93
8	Ethyl Ether	0.214	0.209	2.3	102	0.01	3.30
9 C	1,1-Dichloroethene	0.376	0.378	-0.5	106	0.01	3.58
10	Freon 113	0.211	0.211	0.0	105	0.01	3.57
11	Acetone	0.103	0.124	-20.4#	110	0.01	3.74
12	Iodomethane	0.214	0.217	-1.4	95	0.00	3.79
13	Carbon Disulfide	0.672	0.653	2.8	105	0.01	3.84
14	Methyl acetate	0.253	0.243	4.0	101	0.01	4.13
----- True		Cal c.	% Dri ft	-----			
15	Methylene Chloride	40.000	41.298	-3.2	103	0.01	4.28
----- AvgRF		CCRF	% Dev	-----			
16	trans-1,2-Dichloroethene	0.391	0.390	0.3	104	0.01	4.59
17	Acrylonitrile	0.101	0.100	1.0	100	0.01	4.72
18	Methyl Tert Butyl Ether	0.650	0.664	-2.2	102	0.02	4.58
19	Hexane	0.329	0.325	1.2	105	0.04	4.90
20 P	1,1-Dichloroethane	0.467	0.450	3.6	101	0.01	5.23
21	Vinyl acetate	0.533	0.780	-46.3#	138	0.01	5.29
22	Diisopropyl ether	0.890	0.890	0.0	103	0.06	5.27
23	ETBE	0.726	0.695	4.3	97	0.03	5.74
24	2,2-Dichloropropane	0.332	0.325	2.1	103	0.02	6.03
25	cis-1,2-Dichloroethene	0.255	0.254	0.4	102	0.01	6.06
26	2-Butanone	0.152	0.157	-3.3	106	0.01	6.12
27	Bromochloromethane	0.131	0.136	-3.8	107	0.01	6.40
28	Tetrahydrofuran	0.091	0.091	0.0	102	0.02	6.42
29 C	Chloroform	0.471	0.455	3.4	102	0.00	6.51
30	1,1,1-Trichloroethane	0.388	0.375	3.4	105	0.01	6.72
31 S	Dibromofluoromethane	0.304	0.296	2.6	98	0.01	6.76
32	Cyclohexane	0.421	0.428	-1.7	104	0.01	6.70
33	1,1-Dichloropropene	0.342	0.331	3.2	102	0.01	6.97
34	Carbon Tetrachloride	0.293	0.285	2.7	105	0.02	6.91
35 S	1,2-Dichloroethane-d4	0.418	0.404	3.3	96	0.01	7.29
36	Benzene	0.907	0.901	0.7	105	0.02	7.27
37	1,2-Dichloroethane	0.448	0.420	6.3	99	0.01	7.41
38	TAME	0.618	0.606	1.9	101	0.02	7.41

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VG611-CC611
 Lab FileID: G0018532.D

39	Tri chl oroethene	0.270	0.265	1.9	102	0.02	8.27
40	Methyl cycl ohexane	0.358	0.367	-2.5	106	0.02	8.45
41 C	1, 2-Di chl oropropane	0.268	0.270	-0.7	99	0.01	8.70
42	Di bromomethane	0.174	0.164	5.7	100	0.01	8.87
43	Bromodi chl oromethane	0.353	0.342	3.1	100	0.01	9.13
44	2-Ni trop propane	0.097	0.102	-5.2	105	0.00	9.63
45	2-Chl oroethyl vinyl ether	0.054	0.049	9.3	83	0.01	9.66
46	4-Methyl -2-pentanone	0.321	0.306	4.7	100	0.02	10.14
47	ci s-1, 3-Di chl oropropene	0.327	0.300	8.3	90	0.00	9.86
48 I	Chl orobenzene-d5	1.000	1.000	0.0	93	0.01	12.78
49 S	Tol uene-d8	1.287	1.324	-2.9	95	0.01	10.23
50 C	Tol uene	1.211	1.256	-3.7	102	0.01	10.34
51	trans-1, 3-Di chl oropropene	0.370	0.363	1.9	91	0.01	10.86
52	1, 1, 2-Tri chl oroethane	0.275	0.291	-5.8	102	0.01	11.17
53	Tetrachl oroethene	0.342	0.367	-7.3	107	0.01	11.22
54	2-hexanone	0.276	0.298	-8.0	98	0.01	11.58
55	1, 3-Di chl oropropene	0.503	0.485	3.6	95	0.01	11.46
56	Di bromochl oromethane	0.309	0.322	-4.2	97	0.01	11.79
57	1, 2-Di bromoethane	40.000	27.599	31.0#	69	0.00	11.98
58	1-Chl orohexane	0.345	0.338	2.0	92	0.01	12.78
59 P	Chl orobenzene	0.821	0.831	-1.2	99	0.01	12.83
60	1, 1, 1, 2-Tetrachl oroethane	0.295	0.307	-4.1	100	0.00	13.00
61 C	Ethyl benzene	1.252	1.249	0.2	95	0.01	12.99
62	m, p-Xyl ene	0.991	0.997	-0.6	95	0.01	13.22
63	o-Xyl ene	1.044	1.033	1.1	92	0.01	13.95
64	Styrene	0.725	0.725	0.0	91	0.01	14.01
65 P	Bromoform	0.201	0.208	-3.5	95	0.01	14.37
66 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	87	0.00	17.20
67	Isopropyl benzene	1.968	2.121	-7.8	94	0.00	14.62
68 S	4-Bromofl uorobenzene	1.086	1.136	-4.6	89	0.01	14.99
69	Bromobenzene	0.647	0.717	-10.8	97	0.00	15.24
70 P	1, 1, 2, 2-Tetrachl oroethane	0.823	0.905	-10.0	97	0.01	15.36
71	1, 2, 3-Tri chl oropropene	0.236	0.231	2.1	94	0.01	15.45
72	trans-1, 4-Di chl oro-2-Bute	0.150	0.138	8.0	72	0.01	15.48
73	n-Propyl benzene	2.540	2.557	-0.7	92	0.01	15.41
74	2-Chl orotol uene	1.789	1.858	-3.9	93	0.01	15.60
75	4-Chl orotol uene	2.053	2.086	-1.6	91	0.01	15.83
76	1, 3, 5-Tri methyl benzene	1.893	2.030	-7.2	94	0.01	15.77
77	sec-Butyl benzene	2.071	2.060	0.5	93	0.00	16.79
78	1, 3-Di chl orobenzene	1.149	1.145	0.3	88	0.01	17.05
79	4-Isopropyl tol uene	1.756	1.768	-0.7	95	0.00	17.08
80	1, 4-Di chl orobenzene	1.203	1.155	4.0	88	0.01	17.25
81	tert-Butyl benzene	1.250	1.305	-4.4	95	0.01	16.36
82	Benzyl Chl ori de	1.083	1.115	-3.0	86	0.00	17.55
83	n-Butyl benzene	1.830	1.910	-4.4	98	0.00	17.88
84	1, 2-Di chl orobenzene	1.159	1.154	0.4	91	0.01	17.98
85	1, 2, 4-Tri methyl benzene	1.927	1.989	-3.2	95	0.00	16.48
86	1, 2-Di bromo-3-Chl oropropa	0.170	0.154	9.4	80	0.01	19.41
87	1, 2, 4-Tri chl orobenzene	1.034	1.083	-4.7	98	0.01	20.60
88	Hexachl orobutadi ene	0.372	0.396	-6.5	100	0.01	20.77
89	Naphthal ene	2.333	2.552	-9.4	97	0.01	20.95
90	1, 2, 3-Tri chl orobenzene	1.003	1.079	-7.6	100	0.00	21.27
91 I	Tert Butyl Al coh ol -d10	1.000	1.000	0.0	94	0.00	4.35

Continuing Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VG611-CC611
Lab FileID: G0018532.D

92	Acrolein	2.527	2.384	5.7	99	0.01	3.54
93	Tert Butyl Alcohol	1.471	1.479	-0.5	105	0.01	4.45
94	1,4-Dioxane	0.172	0.190	-10.5	107	0.01	8.90
95	Cyclohexanone	0.620	0.593	4.4	93	0.01	14.92

(3.3 %) 3 of 91 compounds' %D > 20

(#) = Out of Range
G0018524.D 8260-30M.M

SPCC's out = 0 CCC's out = 0
Wed Oct 23 15:37:09 2002 RP1

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6142-LBS	L015011.D	1	10/22/02	ME	10/19/02	OP6142	SL830

The QC reported here applies to the following samples:

Method: SW846 8270C

F15057-1, F15057-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	354	71	51-102
	3&4-Methylphenol	1000	658	66	44-99
87-86-5	Pentachlorophenol	500	457	91	36-141
95-95-4	2,4,5-Trichlorophenol	500	473	95	46-132
88-06-2	2,4,6-Trichlorophenol	500	461	92	39-130
106-46-7	1,4-Dichlorobenzene	500	421	84	48-111
121-14-2	2,4-Dinitrotoluene	500	430	86	75-126
118-74-1	Hexachlorobenzene	500	484	97	74-115
87-68-3	Hexachlorobutadiene	500	408	82	41-105
67-72-1	Hexachloroethane	500	438	88	42-115
98-95-3	Nitrobenzene	500	457	91	66-115
110-86-1	Pyridine	500	209	42	19-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	58%	19-90%
4165-62-2	Phenol-d5	36%	10-68%
118-79-6	2,4,6-Tribromophenol	101%	36-137%
4165-60-0	Nitrobenzene-d5	92%	49-119%
321-60-8	2-Fluorobiphenyl	98%	45-118%
1718-51-0	Terphenyl-d14	88%	46-135%

Blank Spike Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6142-LBS	W012746.D	1	10/23/02	ME	10/19/02	OP6142	SW688

The QC reported here applies to the following samples:

Method: SW846 8270C

F15057-1, F15057-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	370	74	51-102
	3&4-Methylphenol	1000	674	67	44-99
87-86-5	Pentachlorophenol	500	477	95	36-141
95-95-4	2,4,5-Trichlorophenol	500	470	94	46-132
88-06-2	2,4,6-Trichlorophenol	500	465	93	39-130
106-46-7	1,4-Dichlorobenzene	500	427	85	48-111
121-14-2	2,4-Dinitrotoluene	500	475	95	75-126
118-74-1	Hexachlorobenzene	500	488	98	74-115
87-68-3	Hexachlorobutadiene	500	397	79	41-105
67-72-1	Hexachloroethane	500	440	88	42-115
98-95-3	Nitrobenzene	500	467	93	66-115
110-86-1	Pyridine	500	227	45	19-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	56%	19-90%
4165-62-2	Phenol-d5	37%	10-68%
118-79-6	2,4,6-Tribromophenol	103%	36-137%
4165-60-0	Nitrobenzene-d5	98%	49-119%
321-60-8	2-Fluorobiphenyl	94%	45-118%
1718-51-0	Terphenyl-d14	104%	46-135%

Leachate Blank Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6142-LB	L015012.D	1	10/22/02	ME	10/19/02	OP6142	SL830

The QC reported here applies to the following samples:

Method: SW846 8270C

F15057-1, F15057-2

CAS No.	Compound	Result	RL	Units	Q
95-48-7	2-Methylphenol	ND	50	ug/l	
	3&4-Methylphenol	ND	50	ug/l	
87-86-5	Pentachlorophenol	ND	250	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	50	ug/l	
118-74-1	Hexachlorobenzene	ND	50	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	ug/l	
67-72-1	Hexachloroethane	ND	50	ug/l	
98-95-3	Nitrobenzene	ND	50	ug/l	
110-86-1	Pyridine	ND	50	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	61%	19-90%
4165-62-2	Phenol-d5	37%	10-68%
118-79-6	2,4,6-Tribromophenol	93%	36-137%
4165-60-0	Nitrobenzene-d5	95%	49-119%
321-60-8	2-Fluorobiphenyl	98%	45-118%
1718-51-0	Terphenyl-d14	84%	46-135%

Leachate Blank Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6142-LB	W012747.D	1	10/23/02	ME	10/19/02	OP6142	SW688

The QC reported here applies to the following samples:

Method: SW846 8270C

F15057-1, F15057-2

CAS No.	Compound	Result	RL	Units	Q
95-48-7	2-Methylphenol	ND	50	ug/l	
	3&4-Methylphenol	ND	50	ug/l	
87-86-5	Pentachlorophenol	ND	250	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	50	ug/l	
118-74-1	Hexachlorobenzene	ND	50	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	ug/l	
67-72-1	Hexachloroethane	ND	50	ug/l	
98-95-3	Nitrobenzene	ND	50	ug/l	
110-86-1	Pyridine	ND	50	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	58%	19-90%
4165-62-2	Phenol-d5	39%	10-68%
118-79-6	2,4,6-Tribromophenol	102%	36-137%
4165-60-0	Nitrobenzene-d5	104%	49-119%
321-60-8	2-Fluorobiphenyl	93%	45-118%
1718-51-0	Terphenyl-d14	109%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6142-MS	W012761.D	1	10/23/02	ME	10/19/02	OP6142	SW688
OP6142-MSD	W012762.D	1	10/23/02	ME	10/19/02	OP6142	SW688
F15064-11	W012760.D	1	10/23/02	ME	10/19/02	OP6142	SW688

The QC reported here applies to the following samples:

Method: SW846 8270C

F15057-1, F15057-2

CAS No.	Compound	F15064-11 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	413	83	380	76	8	51-110/21
	3&4-Methylphenol	ND	1000	754	75	699	70	8	51-108/21
87-86-5	Pentachlorophenol	ND	500	472	94	438	88	7	33-147/29
95-95-4	2,4,5-Trichlorophenol	ND	500	458	92	441	88	4	57-122/26
88-06-2	2,4,6-Trichlorophenol	ND	500	454	91	443	89	2	49-122/24
106-46-7	1,4-Dichlorobenzene	ND	500	412	82	393	79	5	46-112/23
121-14-2	2,4-Dinitrotoluene	ND	500	494	99	459	92	7	67-131/20
118-74-1	Hexachlorobenzene	ND	500	461	92	446	89	3	65-123/18
87-68-3	Hexachlorobutadiene	ND	500	375	75	365	73	3	41-106/24
67-72-1	Hexachloroethane	ND	500	433	87	420	84	3	42-115/25
98-95-3	Nitrobenzene	ND	500	479	96	445	89	7	55-122/22
110-86-1	Pyridine	ND	500	218	44	160	32	31	17-100/38

CAS No.	Surrogate Recoveries	MS	MSD	F15064-11	Limits
367-12-4	2-Fluorophenol	61%	57%	57%	19-90%
4165-62-2	Phenol-d5	43%	39%	39%	10-68%
118-79-6	2,4,6-Tribromophenol	96%	94%	97%	36-137%
4165-60-0	Nitrobenzene-d5	98%	92%	98%	49-119%
321-60-8	2-Fluorobiphenyl	87%	86%	90%	45-118%
1718-51-0	Terphenyl-d14	106%	98%	98%	46-135%

Instrument Performance Check (DFTPP)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SL830-DFTPP	Injection Date:	10/22/02
Lab File ID:	L015006.D	Injection Time:	14:13
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	78211	39.6	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) ^a	Pass
69	Mass 69 relative abundance	66661	33.7	Pass
70	Less than 2.0% of mass 69	273	0.14 (0.41) ^a	Pass
127	40.0 - 60.0% of mass 198	90357	45.7	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	197515	100.0	Pass
199	5.0 - 9.0% of mass 198	13328	6.7	Pass
275	10.0 - 30.0% of mass 198	40875	20.7	Pass
365	1.0 - 100.0% of mass 198	4039	2.0	Pass
441	Present, but less than mass 443	21956	11.1 (75.1) ^b	Pass
442	40.0 - 100.0% of mass 198	149389	75.6	Pass
443	17.0 - 23.0% of mass 442	29248	14.8 (19.6) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL830-CC828	L015007.D	10/22/02	15:04	00:51	Continuing cal 75
OP6060-MB	L015008.D	10/22/02	15:36	01:23	Method Blank
ZZZZZZ	L015009.D	10/22/02	16:07	01:54	(unrelated sample)
ZZZZZZ	L015010.D	10/22/02	16:39	02:26	(unrelated sample)
OP6142-LBS	L015011.D	10/22/02	17:10	02:57	Blank Spike
OP6142-LB	L015012.D	10/22/02	17:41	03:28	Leachate Blank
F15057-1	L015013.D	10/22/02	18:13	04:00	IH-DM-006
F15057-2	L015014.D	10/22/02	18:43	04:30	IH-DM-007

Instrument Performance Check (DFTPP)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SL828-DFTPP	Injection Date:	10/21/02
Lab File ID:	L014956.D	Injection Time:	08:58
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	128790	37.1	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) ^a	Pass
69	Mass 69 relative abundance	112501	32.4	Pass
70	Less than 2.0% of mass 69	612	0.18 (0.54) ^a	Pass
127	40.0 - 60.0% of mass 198	150355	43.4	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	346712	100.0	Pass
199	5.0 - 9.0% of mass 198	23584	6.8	Pass
275	10.0 - 30.0% of mass 198	80645	23.3	Pass
365	1.0 - 100.0% of mass 198	7807	2.3	Pass
441	Present, but less than mass 443	41568	12.0 (74.5) ^b	Pass
442	40.0 - 100.0% of mass 198	285867	82.5	Pass
443	17.0 - 23.0% of mass 442	55768	16.1 (19.5) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL828-IC828	L014957.D	10/21/02	09:50	00:52	Initial cal 5
SL828-IC828	L014958.D	10/21/02	10:21	01:23	Initial cal 25
SL828-IC828	L014959.D	10/21/02	10:52	01:54	Initial cal 50
SL828-ICC828	L014960.D	10/21/02	11:24	02:26	Initial cal 75
SL828-IC828	L014961.D	10/21/02	11:55	02:57	Initial cal 100
SL828-IC828	L014962.D	10/21/02	12:26	03:28	Initial cal 125
OP6126-BS	L014964.D	10/21/02	13:27	04:29	Blank Spike
OP6126-MB	L014965.D	10/21/02	13:59	05:01	Method Blank
ZZZZZZ	L014966.D	10/21/02	14:30	05:32	(unrelated sample)
ZZZZZZ	L014967.D	10/21/02	15:02	06:04	(unrelated sample)
F15045-3	L014968.D	10/21/02	15:33	06:35	(used for QC only; not part of job F15057)
OP6126-MS	L014969.D	10/21/02	16:05	07:07	Matrix Spike
OP6126-MSD	L014970.D	10/21/02	16:37	07:39	Matrix Spike Duplicate
ZZZZZZ	L014972.D	10/21/02	17:40	08:42	(unrelated sample)
OP6060-BS	L014973.D	10/21/02	18:11	09:13	Blank Spike
OP6060-MB	L014974.D	10/21/02	18:43	09:45	Method Blank
ZZZZZZ	L014975.D	10/21/02	19:14	10:16	(unrelated sample)
ZZZZZZ	L014976.D	10/21/02	19:45	10:47	(unrelated sample)
ZZZZZZ	L014977.D	10/21/02	20:16	11:18	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	SL828-DFTPP	Injection Date:	10/21/02
Lab File ID:	L014956.D	Injection Time:	08:58
Instrument ID:	GCMSL		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	L014978.D	10/21/02	20:46	11:48	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SW688-DFTPP	Injection Date:	10/23/02
Lab File ID:	W012744.D	Injection Time:	10:21
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	84675	43.8	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) ^a	Pass
69	Mass 69 relative abundance	78216	40.5	Pass
70	Less than 2.0% of mass 69	443	0.23 (0.57) ^a	Pass
127	40.0 - 60.0% of mass 198	93915	48.6	Pass
197	Less than 1.0% of mass 198	280	0.14	Pass
198	Base peak, 100% relative abundance	193117	100.0	Pass
199	5.0 - 9.0% of mass 198	13310	6.9	Pass
275	10.0 - 30.0% of mass 198	38800	20.1	Pass
365	1.0 - 100.0% of mass 198	3379	1.7	Pass
441	Present, but less than mass 443	18320	9.5 (77.4) ^b	Pass
442	40.0 - 100.0% of mass 198	120160	62.2	Pass
443	17.0 - 23.0% of mass 442	23664	12.3 (19.7) ^c	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SW688-CC672	W012745.D	10/23/02	10:40	00:19	Continuing cal 50
OP6142-LBS	W012746.D	10/23/02	11:10	00:49	Blank Spike
OP6142-LB	W012747.D	10/23/02	11:41	01:20	Leachate Blank
ZZZZZZ	W012748.D	10/23/02	12:12	01:51	(unrelated sample)
ZZZZZZ	W012749.D	10/23/02	12:42	02:21	(unrelated sample)
ZZZZZZ	W012750.D	10/23/02	13:13	02:52	(unrelated sample)
ZZZZZZ	W012751.D	10/23/02	13:44	03:23	(unrelated sample)
ZZZZZZ	W012752.D	10/23/02	14:14	03:53	(unrelated sample)
ZZZZZZ	W012753.D	10/23/02	14:45	04:24	(unrelated sample)
ZZZZZZ	W012754.D	10/23/02	15:16	04:55	(unrelated sample)
ZZZZZZ	W012755.D	10/23/02	15:47	05:26	(unrelated sample)
ZZZZZZ	W012756.D	10/23/02	16:18	05:57	(unrelated sample)
ZZZZZZ	W012757.D	10/23/02	16:49	06:28	(unrelated sample)
ZZZZZZ	W012758.D	10/23/02	17:19	06:58	(unrelated sample)
ZZZZZZ	W012759.D	10/23/02	17:50	07:29	(unrelated sample)
F15064-11	W012760.D	10/23/02	18:20	07:59	(used for QC only; not part of job F15057)
OP6142-MS	W012761.D	10/23/02	18:51	08:30	Matrix Spike
OP6142-MSD	W012762.D	10/23/02	19:23	09:02	Matrix Spike Duplicate
ZZZZZZ	W012763.D	10/23/02	19:54	09:33	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	SW688-DFTPP	Injection Date:	10/23/02
Lab File ID:	W012744.D	Injection Time:	10:21
Instrument ID:	GCMSW		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	W012764.D	10/23/02	20:24	10:03	(unrelated sample)
ZZZZZZ	W012765.D	10/23/02	20:55	10:34	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SW672-DFTPP	Injection Date:	10/11/02
Lab File ID:	W012416.D	Injection Time:	10:29
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	108722	48.1	Pass
68	Less than 2.0% of mass 69	279	0.12 (0.28) ^a	Pass
69	Mass 69 relative abundance	98246	43.4	Pass
70	Less than 2.0% of mass 69	447	0.2 (0.45) ^a	Pass
127	40.0 - 60.0% of mass 198	115336	51.0	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	226240	100.0	Pass
199	5.0 - 9.0% of mass 198	14703	6.5	Pass
275	10.0 - 30.0% of mass 198	43275	19.1	Pass
365	1.0 - 100.0% of mass 198	3717	1.6	Pass
441	Present, but less than mass 443	19019	8.4 (78.5) ^b	Pass
442	40.0 - 100.0% of mass 198	126587	56.0	Pass
443	17.0 - 23.0% of mass 442	24242	10.7 (19.2) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SW672-IC672	W012417.D	10/11/02	10:48	00:19	Initial cal 5
SW672-IC672	W012418.D	10/11/02	11:18	00:49	Initial cal 25
SW672-ICC672	W012419.D	10/11/02	11:49	01:20	Initial cal 50
SW672-IC672	W012420.D	10/11/02	12:19	01:50	Initial cal 75
SW672-IC672	W012421.D	10/11/02	12:49	02:20	Initial cal 100
SW672-IC672	W012422.D	10/11/02	13:20	02:51	Initial cal 125
OP6072-BS	W012426.D	10/11/02	15:22	04:53	Blank Spike
OP6072-MB	W012427.D	10/11/02	15:53	05:24	Method Blank
F14913-1	W012428.D	10/11/02	16:23	05:54	(used for QC only; not part of job F15057)
F14913-2	W012429.D	10/11/02	16:54	06:25	(used for QC only; not part of job F15057)
OP6072-MS	W012430.D	10/11/02	17:25	06:56	Matrix Spike
OP6072-MSD	W012431.D	10/11/02	17:55	07:26	Matrix Spike Duplicate
F14913-1	W012432.D	10/11/02	18:25	07:56	(used for QC only; not part of job F15057)
OP6072-DUP	W012433.D	10/11/02	18:55	08:26	Duplicate
ZZZZZZ	W012434.D	10/11/02	19:25	08:56	(unrelated sample)
ZZZZZZ	W012435.D	10/11/02	19:55	09:26	(unrelated sample)
ZZZZZZ	W012436.D	10/11/02	20:25	09:56	(unrelated sample)
ZZZZZZ	W012437.D	10/11/02	20:56	10:27	(unrelated sample)
ZZZZZZ	W012438.D	10/11/02	21:26	10:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	SW672-DFTPP	Injection Date:	10/11/02
Lab File ID:	W012416.D	Injection Time:	10:29
Instrument ID:	GCMSW		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	W012439.D	10/11/02	21:55	11:26	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	SL830-CC828	Injection Date:	10/22/02
Lab File ID:	L015007.D	Injection Time:	15:04
Instrument ID:	GCMSL	Method:	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	230274	5.36	753452	6.62	326696	9.01	421124	11.55	205694	16.50	108429	19.00
Upper Limit ^a	460548	5.86	1506904	7.12	653392	9.51	842248	12.05	411388	17.00	216858	19.50
Lower Limit ^b	115137	4.86	376726	6.12	163348	8.51	210562	11.05	102847	16.00	54215	18.50

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP6060-MB	243153	5.36	826381	6.61	374296	9.00	511999	11.55	270792	16.49	145577	19.00
ZZZZZZ	234764	5.36	808696	6.62	367977	9.00	524720	11.55	279017	16.49	141494	19.00
ZZZZZZ	212143	5.36	702597	6.61	323196	9.00	458923	11.55	256402	16.49	134921	19.00
OP6142-LBS	209345	5.36	718378	6.61	324566	9.00	425966	11.55	210391	16.50	119229	19.00
OP6142-LB	197899	5.36	690649	6.61	312324	9.00	450397	11.55	259351	16.49	127611	19.00
F15057-1	215178	5.36	724969	6.61	346659	9.00	494308	11.55	278810	16.49	140061	19.00
F15057-2 ^c	200330	5.36	666278	6.61	300054	9.00	402866	11.55	192348	16.49	133959	19.00

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

- (a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
- (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.
- (c) Dilution required due to matrix interference.

Semivolatile Internal Standard Area Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	SW688-CC672	Injection Date:	10/23/02
Lab File ID:	W012745.D	Injection Time:	10:40
Instrument ID:	GCMSW	Method:	SW846 8270C

	IS 1	IS 2	IS 3	IS 4	IS 5	IS 6
	AREA	RT	AREA	RT	AREA	RT
Check Std	279853	5.20	993781	6.44	466017	8.82
Upper Limit ^a	559706	5.70	1987562	6.94	932034	9.32
Lower Limit ^b	139927	4.70	496891	5.94	233009	8.32

Lab	IS 1	IS 2	IS 3	IS 4	IS 5	IS 6
Sample ID	AREA	RT	AREA	RT	AREA	RT
OP6142-LBS	252427	5.20	869370	6.44	389613	8.81
OP6142-LB	258696	5.20	912356	6.43	428284	8.81
ZZZZZZ	324240	5.20	1179077	6.43	582371	8.81
ZZZZZZ	246799	5.20	859839	6.43	401587	8.81
ZZZZZZ	254064	5.20	897949	6.44	429474	8.81
ZZZZZZ	288768	5.20	1060783	6.43	529935	8.81
ZZZZZZ	335012	5.20	1220799	6.44	592650	8.81
ZZZZZZ	344662	5.20	1262327	6.43	617468	8.81
ZZZZZZ	262011	5.20	929626	6.43	442439	8.81
ZZZZZZ	327811	5.20	1201099	6.43	569038	8.81
ZZZZZZ	391550	5.20	1437390	6.43	715737	8.81
ZZZZZZ	300076	5.20	1072843	6.43	513159	8.81
ZZZZZZ	263330	5.20	911324	6.44	425121	8.81
ZZZZZZ	276422	5.20	958630	6.43	456353	8.81
F15064-11	235346	5.20	795426	6.44	359167	8.81
OP6142-MS	359881	5.20	1323031	6.44	639467	8.82
OP6142-MSD	305501	5.20	1123518	6.44	512459	8.82
ZZZZZZ	341038	5.20	1238372	6.44	607053	8.81
ZZZZZZ	294982	5.20	1049639	6.43	497490	8.81
ZZZZZZ	332346	5.20	1213877	6.44	585091	8.81

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Method: SW846 8270C	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
F15057-1	L015013.D	54.0	34.0	89.0	86.0	88.0	82.0
F15057-2	L015014.D	30.0	18.0	0.0* a	53.0	72.0	62.0
OP6142-LB	L015012.D	61.0	37.0	93.0	95.0	98.0	84.0
OP6142-LB	W012747.D	58.0	39.0	102.0	104.0	93.0	109.0
OP6142-LBS	L015011.D	58.0	36.0	101.0	92.0	98.0	88.0
OP6142-LBS	W012746.D	56.0	37.0	103.0	98.0	94.0	104.0
OP6142-MS	W012761.D	61.0	43.0	96.0	98.0	87.0	106.0
OP6142-MSD	W012762.D	57.0	39.0	94.0	92.0	86.0	98.0

Surrogate Compounds **Recovery Limits**

S1 = 2-Fluorophenol	19-90%
S2 = Phenol-d5	10-68%
S3 = 2,4,6-Tribromophenol	36-137%
S4 = Nitrobenzene-d5	49-119%
S5 = 2-Fluorobiphenyl	45-118%
S6 = Terphenyl-d14	46-135%

(a) Outside control limits due to dilution.

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL828-ICC828
 Lab FileID: L014960.D

Response Factor Report MSBNA02

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Tue Oct 22 09:39:09 2002
 Response via : Initial Calibration

Calibration Files

5 =L014957.D 25 =L014958.D 50 =L014959.D
 75 =L014960.D 100 =L014961.D 125 =L014962.D

Compound	5	25	50	75	100	125	Avg	%RSD
-----I STD-----								
1) I 1,4-Dichlorobenzene-d								
2) 1,4-Dioxane	0.466	0.455	0.455	0.438	0.458	0.438	0.452	2.52
3) N-nitrosodimethyl am	0.622	0.668	0.667	0.653	0.668	0.655	0.656	2.68
4) Pyridine	1.174	1.238	1.218	1.224	1.228	1.175	1.210	2.32
5) Benzaldehyde		0.702	0.593	0.507	0.437	0.380	0.524	24.32
6) Aniline	1.828	1.897	1.785	1.819	1.733	1.607	1.778	5.61
7) S 2-Fluorophenol	1.290	1.226	1.148	1.069	1.054	0.994	1.130	9.97
8) bis(2-Chloroethyl) e	1.230	1.173	1.157	1.170	1.130	1.093	1.159	3.98
9) S Phenol-d5	1.499	1.436	1.359	1.317	1.267	1.208	1.348	7.98
10) C Phenol	1.635	1.561	1.536	1.550	1.472	1.383	1.523	5.65
11) 2-Chlorophenol	1.433	1.409	1.363	1.375	1.334	1.288	1.367	3.82
12) 1,3-Dichlorobenzene	1.699	1.587	1.510	1.453	1.419	1.364	1.505	8.09
13) C 1,4-Dichlorobenzene	1.662	1.588	1.484	1.421	1.398	1.316	1.478	8.67
14) 1,2-Dichlorobenzene	1.601	1.499	1.452	1.399	1.349	1.301	1.433	7.56
15) Benzyl alcohol	0.829	0.864	0.879	0.901	0.870	0.840	0.864	3.02
16) bis(2-chloroisoprop	2.490	2.390	2.297	2.258	2.131	2.042	2.268	7.25
17) 2-Methylphenol	1.230	1.201	1.176	1.194	1.160	1.087	1.175	4.18
18) Acetophenone	1.758	1.690	1.613	1.593	1.534	1.412	1.600	7.55
19) Hexachloroethane	0.554	0.548	0.520	0.505	0.503	0.473	0.517	5.91
20) P N-Nitroso-di-n-prop	0.886	0.868	0.851	0.861	0.841	0.767	0.846	4.89
21) 3&4-Methylphenol	1.250	1.258	1.217	1.176	1.046	1.064	1.168	7.95
-----I STD-----								
22) I Naphthalene-d8								
23) S Nitrobenzene-d5	0.346	0.347	0.334	0.329	0.316	0.318	0.332	4.00
24) Nitrobenzene	0.349	0.344	0.331	0.322	0.307	0.303	0.326	5.80
25) Isophorone	0.646	0.650	0.644	0.643	0.526	0.607	0.619	7.79
26) C 2-Nitrophenol	0.187	0.209	0.210	0.211	0.206	0.201	0.204	4.60
27) 2,4-Dimethylphenol	0.369	0.352	0.333	0.324	0.319	0.312	0.335	6.55
28) bis(2-Chloroethoxy)	0.431	0.403	0.383	0.365	0.358	0.348	0.381	8.17
29) Benzoic Acid		0.213	0.248	0.270	0.292	0.287	0.262	12.34
30) C 2,4-Dichlorophenol	0.339	0.324	0.306	0.304	0.295	0.287	0.309	6.24
31) 1,2,4-Tri chlorobenz	0.375	0.348	0.321	0.309	0.304	0.294	0.325	9.51
32) Naphthalene	1.129	1.058	0.989	0.934	0.912	0.869	0.982	9.93
33) 4-Chloroaniline	0.460	0.442	0.413	0.390	0.374	0.346	0.404	10.55
34) 2,6-Dichlorophenol	0.321	0.313	0.294	0.278	0.270	0.255	0.289	8.80
35) C Hexachlorobutadiene	0.193	0.182	0.167	0.154	0.150	0.148	0.166	11.13
36) Caprolactam	0.083	0.106	0.113	0.113	0.129	0.122	0.111	14.20
37) C 4-Chloro-3-methyl ph	0.283	0.289	0.283	0.285	0.277	0.266	0.281	2.91
38) 2-Methylnaphthalene	0.748	0.712	0.677	0.645	0.639	0.594	0.669	8.25
39) 1-Methylnaphthalene	0.741	0.698	0.650	0.641	0.614	0.566	0.652	9.46
40) 1,2,4,5-Tetrachloro	0.327	0.311	0.284	0.272	0.266	0.248	0.285	10.37
-----I STD-----								
41) I Acenaphthene-d10								
42) P Hexachlorocyclopent	0.291	0.314	0.303	0.287	0.294	0.291	0.297	3.39
43) C 2,4,6-Tri chlorophen	0.440	0.445	0.433	0.409	0.424	0.395	0.424	4.55
44) 2,4,5-Tri chlorophen	0.452	0.456	0.455	0.430	0.396	0.410	0.433	5.94

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL828-ICC828
 Lab FileID: L014960.D

45)	S	2-Fluorobiphenyl	1.701	1.543	1.414	1.314	1.292	1.246	1.418	12.29
46)		1,1'-Bi phenyl	1.865	1.779	1.701	1.611	1.467	1.521	1.657	9.23
47)		2-Chloronaphthalene	1.512	1.368	1.274	1.181	1.125	1.091	1.258	12.73
48)		2-Nitroaniline	0.303	0.341	0.344	0.338	0.337	0.331	0.332	4.54
49)		Acenaphthylene	2.079	2.011	1.921	1.798	1.752	1.688	1.875	8.19
50)		Dimethyl phthalate	1.481	1.460	1.441	1.372	1.334	1.288	1.396	5.50
51)		2,6-Dinitrotoluene	0.274	0.322	0.346	0.333	0.307	0.309	0.315	7.94
52)	C	Acenaphthene	1.391	1.254	1.196	1.103	1.083	1.038	1.177	11.10
53)		3-Nitroaniline	0.347	0.355	0.383	0.364	0.362	0.356	0.361	3.40
54)	P	2,4-Dinitrophenol		0.157	0.193	0.201	0.215	0.206	0.194	11.48
55)		Dibenzofuran	1.834	1.724	1.607	1.441	1.416	1.323	1.558	12.69
56)		2,4-Dinitrotoluene	0.351	0.407	0.417	0.373	0.370	0.353	0.378	7.25
57)	P	4-Nitrophenol	0.150	0.162	0.168	0.163	0.157	0.161	0.160	3.82
58)		2,3,4,6-Tetrachloro Fluorene	0.283	0.298	0.301	0.287	0.283	0.275	0.288	3.40
59)		Fluorene	1.483	1.402	1.368	1.237	1.200	1.137	1.305	10.23
60)		4-Chlorophenyl-phen	0.692	0.638	0.620	0.569	0.521	0.514	0.592	11.81
61)		Diethyl phthalate	1.354	1.388	1.356	1.255	1.245	1.207	1.301	5.69
62)		4-Nitroaniline	0.303	0.316	0.348	0.338	0.346	0.340	0.332	5.41
63)	I	Phenanthrene-d10	-----I STD-----							
64)		4,6-Dinitro-2-methy	0.150	0.160	0.166	0.157	0.168	0.160		4.46
65)	C	n-Nitrosodiphenyl am	0.641	0.674	0.609	0.608	0.558	0.572	0.610	7.03
66)		1,2-Diphenylhydrazo	0.824	0.821	0.761	0.760	0.683	0.701	0.758	7.76
67)	S	2,4,6-Tribromopheno	0.083	0.088	0.078	0.075	0.071	0.072	0.078	8.32
68)		4-Bromophenyl-pheny	0.211	0.220	0.198	0.196	0.183	0.184	0.199	7.34
69)		Hexachlorobenzene	0.219	0.221	0.195	0.184	0.179	0.183	0.197	9.49
70)		Atrazine	0.187	0.218	0.197	0.189	0.176	0.164	0.188	9.71
71)	C	Pentachlorophenol	0.103	0.127	0.126	0.120	0.117	0.119	0.119	7.40
72)		Phenanthrene	1.268	1.235	1.137	1.068	1.002	1.003	1.119	10.23
73)		Anthracene	1.267	1.253	1.172	1.089	1.022	1.024	1.138	9.61
74)		Carbazole	1.126	1.017	1.042	0.977	0.946	0.945	1.009	6.86
75)		Di-n-butyl phthalate	1.186	1.393	1.323	1.205	1.166	1.147	1.237	7.97
76)	C	Fluoranthene	1.057	1.090	1.059	0.957	0.949	0.953	1.011	6.38
77)	I	Chrysene-d12	-----I STD-----							
78)		Benzo[a]fluoranthene	0.416	0.569	0.563	0.554	0.536	0.472	0.518	11.81
79)		Pyrene	2.006	2.172	2.180	2.264	2.146	2.033	2.133	4.56
80)	S	Terphenyl-d14	1.031	1.147	1.153	1.217	1.161	1.111	1.137	5.45
81)		Butyl benzyl phthalat	0.646	0.874	0.914	0.958	0.960	0.935	0.881	13.56
82)		3,3'-Dichlorobenzid	0.361	0.343	0.372	0.366	0.374	0.374	0.365	3.35
83)		Benzo[a]anthracene	1.193	1.293	1.332	1.327	1.327	1.298	1.295	4.07
84)		Chrysene	1.329	1.317	1.300	1.295	1.254	1.260	1.292	2.32
85)		bis(2-Ethylhexyl)ph	1.093	1.167	1.209	1.226	1.175	1.174		4.36
86)	I	Perylene-d12	-----I STD-----							
87)	C	Di-n-octyl phthalate	2.876	3.149	3.453	3.373	3.177	3.206		7.01
88)		Benzo[b]fluoranthene	1.532	1.742	1.773	1.812	1.756	1.681	1.716	5.82
89)		Benzo[k]fluoranthene	1.898	1.945	1.895	1.859	1.749	1.710	1.843	5.02
90)	C	Benzo[a]pyrene	1.345	1.536	1.538	1.557	1.537	1.466	1.497	5.38
91)		Indeno[1,2,3-cd]pyr	0.902	0.982	1.067	1.038	1.159	1.140	1.048	9.26
92)		Di benz[a,h]anthrace	0.974	1.064	1.130	1.115	1.251	1.198	1.122	8.72
93)		Benzo[g,h,i]perylene	1.195	1.173	1.143	1.172	1.234	1.191	1.185	2.56

(#) = Out of Range

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL830-CC828
 Lab FileID: L015007.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\1022202\L015007.D Vial : 2
 Acq On : 22 Oct 2002 3:04 pm Operator: marke
 Sample : cc828-75 Inst : MSBNA02
 Misc : op6126, sl 830, 1000, , , 1, 1, water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Tue Oct 22 09:39:09 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)	R. T.
1 I	1,4-Di chl orobenzene-d4	1.000	1.000	0.0	95	-0.01	5.36
2	1,4-Di oxane	0.452	0.477	-5.5	103	-0.01	2.01
3	N-ni trosodi methyl ami ne	0.656	0.618	5.8	90	0.00	2.59
4	Pyri di ne	1.210	1.082	10.6	84	0.00	2.63
5	Benzal dehyde	0.524	0.523	0.2	98	0.00	4.98
6	Ani li ne	1.778	1.564	12.0	81	-0.01	5.07
7 S	2-Fl uorophenol	1.130	1.080	4.4	96	0.00	4.22
8	bi s(2-Chl oroethyl)ether	1.159	1.116	3.7	90	-0.01	5.13
9 S	Phenol -d5	1.348	1.222	9.3	88	0.00	5.05
10 C	Phenol	1.523	1.423	6.6	87	-0.01	5.06
11	2-Chl orophenol	1.367	1.285	6.0	88	0.00	5.18
12	1,3-Di chl orobenzene	1.505	1.443	4.1	94	0.00	5.31
13 C	1,4-Di chl orobenzene	1.478	1.429	3.3	95	-0.01	5.38
14	1,2-Di chl orobenzene	1.433	1.339	6.6	91	-0.01	5.51
15	Benzyl al cohoh	0.864	0.767	11.2	81	-0.01	5.48
16	bi s(2-chl oro i sopropyl)eth	2.268	2.127	6.2	89	0.00	5.60
17	2-Methyl phenol	1.175	1.062	9.6	84	-0.01	5.58
18	Acetophenone	1.600	1.354	15.4	80	0.00	5.73
19	Hexachl oroethane	0.517	0.502	2.9	94	0.00	5.83
20 P	N-Ni trosodi -n-propyl ami n	0.846	0.696	17.7	76	-0.01	5.73
21	3&4-Methyl phenol	1.168	1.024	12.3	82	-0.01	5.71
22 I	Naphthal ene-d8	1.000	1.000	0.0	81	0.00	6.62
23 S	Ni trobenzene-d5	0.332	0.329	0.9	81	0.00	5.87
24	Ni trobenzene	0.326	0.321	1.5	81	-0.01	5.89
25	I sophorone	0.619	0.570	7.9	72	-0.02	6.13
26 C	2-Ni trophenol	0.204	0.210	-2.9	81	-0.01	6.20
27	2,4-Di methyl phenol	0.335	0.314	6.3	79	-0.01	6.23
28	bi s(2-Chl oroethoxy)methan	0.381	0.359	5.8	80	-0.01	6.33
29	Benzi c Aci d	0.262	0.237	9.5	71	0.00	6.39
30 C	2,4-Di chl orophenol	0.309	0.292	5.5	78	0.00	6.46
31	1,2,4-Tri chl orobenzene	0.325	0.314	3.4	82	-0.01	6.55
32	Naphthal ene	0.982	0.943	4.0	82	0.00	6.64
33	4-Chl oroani li ne	0.404	0.364	9.9	76	-0.01	6.69
34	2,6-Di chl orophenol	0.289	0.272	5.9	79	-0.01	6.70
35 C	Hexachl orobutadi ene	0.166	0.166	0.0	87	0.00	6.77
36	Caprol actam	0.111	0.081	27.0#	58	-0.08	7.17
37 C	4-Chl oro-3-methyl phenol	0.281	0.245	12.8	70	-0.01	7.26
38	2-Methyl naphthal ene	0.669	0.617	7.8	78	0.00	7.48
39	1-Methyl naphthal ene	0.652	0.594	8.9	75	0.00	7.62
40	1,2,4,5-Tetrachl orobenzen	0.285	0.261	8.4	78	-0.01	7.71

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL830-CC828
 Lab FileID: L015007.D

41	I	Acenaphthene-d10	1.000	1.000	0.0	68	-0.01	9.01
42	P	Hexachlorocyclopentadiene	0.297	0.349	-17.5	83	-0.01	7.69
43	C	2,4,6-Trichlorophenol	0.424	0.420	0.9	70	0.00	7.86
44		2,4,5-Trichlorophenol	0.433	0.441	-1.8	70	0.00	7.91
45	S	2-Fluorobiphenyl	1.418	1.460	-3.0	76	-0.01	7.98
46		1,1'-Biphenyl	1.657	1.683	-1.6	71	-0.01	8.13
47		2-Chloronaphthalene	1.258	1.286	-2.2	74	-0.01	8.16
48		2-Nitroaniline	0.332	0.306	7.8	62	-0.02	8.31
49		Acenaphthylene	1.875	1.832	2.3	69	-0.01	8.78
50		Dimethyl phthalate	1.396	1.260	9.7	63	-0.01	8.60
51		2,6-Dinitrotoluene	0.315	0.296	6.0	61	-0.01	8.69
52	C	Acenaphthene	1.177	1.140	3.1	70	-0.01	9.06
53		3-Nitroaniline	0.361	0.324	10.2	61	-0.02	8.95
54	P	2,4-Dinitrophenol	0.194	0.169	12.9	57	-0.02	9.12
55		Di benzofuran	1.558	1.498	3.9	71	-0.01	9.34
56		2,4-Dinitrotoluene	0.378	0.352	6.9	64	-0.02	9.34
57	P	4-Nitrophenol	0.160	0.137	14.4	57	-0.02	9.24
58		2,3,4,6-Tetrachlorophenol	0.288	0.267	7.3	63	-0.01	9.54
59		Fluorene	1.305	1.202	7.9	66	-0.01	9.91
60		4-Chlorophenylphenylether	0.592	0.565	4.6	68	-0.01	9.93
61		Diethyl phthalate	1.301	1.146	11.9	62	-0.02	9.78
62		4-Nitroaniline	0.332	0.281	15.4	57	-0.04	9.97
63	I	Phenanthrene-d10	1.000	1.000	0.0	59	-0.01	11.55
64		4,6-Dinitro-2-methylphenol	0.160	0.155	3.1	55	-0.03	10.03
65	C	n-Nitrosodiphenylamine	0.610	0.629	-3.1	61	-0.02	10.14
66		1,2-Diphenylhydrazine	0.758	0.821	-8.3	64	-0.02	10.21
67	S	2,4,6-Tribromophenol	0.078	0.083	-6.4	65	-0.02	10.32
68		4-Bromophenylphenylether	0.199	0.211	-6.0	64	-0.01	10.79
69		Hexachlorobenzene	0.197	0.200	-1.5	64	-0.02	10.86
70		Atrazine	0.188	0.185	1.6	58	-0.01	11.14
71	C	Pentachlorophenol	0.119	0.122	-2.5	60	-0.02	11.22
72		Phenanthrene	1.119	1.118	0.1	62	-0.02	11.60
73		Anthracene	1.138	1.139	-0.1	62	-0.02	11.69
74		Carbazole	1.009	0.996	1.3	60	-0.02	12.01
75		Di-n-butyl phthalate	1.237	1.271	-2.7	63	-0.01	12.77
76	C	Fluoranthene	1.011	0.997	1.4	62	-0.01	13.79
77	I	Chrysene-d12	1.000	1.000	0.0	69	-0.01	16.50
78		Benzo[a]anthracene	0.518	0.493	4.8	61	0.00	14.11
79		Pyrene	2.133	2.060	3.4	63	-0.01	14.20
80	S	Terphenyl-d14	1.137	1.115	1.9	63	-0.01	14.59
81		Butyl benzyl phthalate	0.881	0.892	-1.2	64	-0.01	15.60
82		3,3'-Dichlorobenzidine	0.365	0.379	-3.8	71	-0.01	16.50
83		Benzo[a]anthracene	1.295	1.298	-0.2	67	-0.01	16.48
84		Chrysene	1.292	1.249	3.3	67	-0.02	16.55
85		bis(2-Ethylhexyl)phthalate	1.174	1.142	2.7	65	0.00	16.76
86	I	Perylene-d12	1.000	1.000	0.0	74	-0.01	19.00
87	C	Di-n-octyl phthalate	3.206	3.068	4.3	65	0.00	17.95
88		Benzo[b]fluoranthene	1.716	1.758	-2.4	71	-0.01	18.39
89		Benzo[k]fluoranthene	1.843	1.826	0.9	72	-0.01	18.44
90	C	Benzo[a]pyrene	1.497	1.558	-4.1	74	-0.01	18.91
91		Indeno[1,2,3-cd]pyrene	1.048	1.166	-11.3	83	-0.01	20.59
92		Di benz[a,h]anthracene	1.122	1.250	-11.4	83	-0.01	20.64
93		Benzo[g,h,i]perylene	1.185	1.323	-11.6	83	-0.01	20.98

(1.1 %) 1 of 87 compounds' %D > 20

Continuing Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: SL830-CC828
Lab FileID: L015007.D

(#) = Out of Range
L014960.D 8270C.M

SPCC's out = 0 CCC's out = 0
Wed Oct 23 14:44:25 2002

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SW672-ICC672
 Lab FileID: W012419.D

Response Factor Report MSBNA01

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Fri Oct 11 13:46:24 2002
 Response via : Initial Calibration

Calibration Files

5 =W012417.D 25 =W012418.D 50 =W012419.D
 75 =W012420.D 100 =W012421.D 125 =W012422.D

Compound	5	25	50	75	100	125	Avg	%RSD
1) I 1,4-Dichlorobenzene-d	-----I STD-----							
2) 1,4-Dioxane	0.636	0.557	0.536	0.525	0.529	0.500	0.547	8.65
3) Nitrosodimethyl am	0.782	0.763	0.742	0.770	0.751	0.717	0.754	3.01
4) Pyridine	1.386	1.311	1.346	1.285	1.336	1.254	1.320	3.55
5) Benzaldehyde		0.725	0.546	0.496	0.458	0.370	0.519	25.45
6) Aniline	2.190	2.112	1.925	1.852	1.804	1.655	1.923	10.35
7) S 2-Fluorophenol	1.446	1.355	1.269	1.217	1.218	1.135	1.273	8.73
8) bis(2-Chloroethyl)e	1.480	1.393	1.330	1.312	1.325	1.248	1.348	5.89
9) S Phenol-d5	1.689	1.572	1.451	1.421	1.390	1.293	1.469	9.55
10) C Phenol	2.010	1.845	1.675	1.615	1.581	1.479	1.701	11.41
11) 2-Chlorophenol	1.545	1.509	1.471	1.451	1.457	1.354	1.464	4.43
12) 1,3-Dichlorobenzene	1.723	1.608	1.547	1.492	1.508	1.407	1.547	7.01
13) C 1,4-Dichlorobenzene	1.735	1.621	1.548	1.476	1.493	1.402	1.546	7.64
14) 1,2-Dichlorobenzene	1.593	1.509	1.446	1.419	1.408	1.329	1.450	6.28
15) Benzyl alcohol	0.904	0.911	0.887	0.894	0.907	0.852	0.892	2.42
16) bis(2-chloroisoprop	3.002	2.756	2.619	2.539	2.520	2.314	2.625	8.92
17) 2-Methylphenol	1.343	1.275	1.239	1.230	1.217	1.114	1.236	6.07
18) Acetophenone	1.900	1.847	1.741	1.784	1.765	1.652	1.782	4.82
19) Hexachloroethane	0.651	0.626	0.606	0.586	0.591	0.559	0.603	5.38
20) P N-Nitroso-di-n-prop	0.972	0.951	0.915	0.936	0.926	0.867	0.928	3.86
21) 3&4-Methylphenol	1.354	1.318	1.245	1.235	1.226	1.141	1.253	5.97
22) I Naphthalene-d8	-----I STD-----							
23) S Nitrobenzene-d5	0.306	0.346	0.366	0.372	0.374	0.362	0.355	7.22
24) Nitrobenzene	0.335	0.366	0.372	0.370	0.369	0.357	0.362	3.86
25) Isophorone	0.715	0.706	0.685	0.700	0.673	0.656	0.689	3.24
26) C 2-Nitrophenol	0.126	0.167	0.181	0.191	0.190	0.185	0.173	14.25
27) 2,4-Dimethylphenol	0.388	0.393	0.376	0.378	0.367	0.355	0.376	3.68
28) bis(2-Chloroethoxy)	0.487	0.447	0.431	0.417	0.406	0.394	0.430	7.71
29) Benzoic Acid		0.217	0.262	0.303	0.292	0.288	0.272	12.72
30) C 2,4-Dichlorophenol	0.334	0.318	0.314	0.315	0.305	0.294	0.313	4.18
31) 1,2,4-Tri chlorobenz	0.349	0.339	0.319	0.313	0.302	0.291	0.319	6.87
32) Naphthalene	1.235	1.127	1.071	1.049	1.035	0.987	1.084	8.01
33) 4-Chloroaniline	0.448	0.454	0.434	0.425	0.420	0.389	0.428	5.42
34) 2,6-Dichlorophenol	0.322	0.317	0.304	0.294	0.289	0.277	0.301	5.67
35) C Hexachlorobutadiene	0.213	0.198	0.191	0.185	0.182	0.173	0.190	7.35
36) Caprolactam	0.082	0.102	0.097	0.113	0.102	0.096	0.099	10.25
37) C 4-Chloro-3-methylph	0.308	0.310	0.298	0.306	0.298	0.281	0.300	3.53
38) 2-Methylnaphthalene	0.705	0.681	0.651	0.635	0.620	0.600	0.649	6.00
39) 1-Methylnaphthalene	0.702	0.663	0.628	0.621	0.617	0.587	0.636	6.38
40) 1,2,4,5-Tetrachloro	0.328	0.304	0.287	0.285	0.283	0.266	0.292	7.28
41) I Acenaphthene-d10	-----I STD-----							
42) P Hexachlorocyclopent	0.334	0.359	0.387	0.376	0.377	0.384	0.369	5.44
43) C 2,4,6-Tri chlorophen	0.421	0.438	0.436	0.431	0.419	0.422	0.428	1.92
44) 2,4,5-Tri chlorophen	0.438	0.472	0.467	0.458	0.453	0.447	0.456	2.78

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SW672-ICC672
 Lab FileID: W012419.D

45)	S	2-Fluorobiphenyl	1.613	1.545	1.468	1.412	1.403	1.413	1.476	5.84
46)		1,1'-Bi phenyl	1.749	1.643	1.590	1.526	1.496	1.493	1.583	6.32
47)		2-Chloronaphthalene	1.476	1.376	1.323	1.254	1.256	1.240	1.321	6.96
48)		2-Nitroaniline		0.340	0.361	0.398	0.378	0.377	0.371	5.85
49)		Acenaphthylene	1.947	1.883	1.829	1.725	1.733	1.687	1.801	5.68
50)		Dimethyl phthalate	1.474	1.450	1.368	1.393	1.332	1.322	1.390	4.46
51)		2,6-Dinitrotoluene		0.248	0.264	0.279	0.269	0.269	0.266	4.33
52)	C	Acenaphthene	1.269	1.214	1.163	1.132	1.111	1.101	1.165	5.61
53)		3-Nitroaniline		0.301	0.307	0.342	0.314	0.311	0.315	5.05
54)	P	2,4-Dinitrophenol		0.082	0.109	0.145	0.133	0.142	0.122	21.72
			----- Linear regression ----- Coefficient = 0.9903							
			Response Ratio = -0.09318 + 0.15657 *A							
55)		Dibenzofuran	1.816	1.740	1.668	1.656	1.590	1.569	1.673	5.54
56)		2,4-Dinitrotoluene		0.327	0.353	0.401	0.375	0.376	0.367	7.57
57)	P	4-Nitrophenol	0.142	0.188	0.186	0.203	0.188	0.184	0.182	11.32
58)		2,3,4,6-Tetrachloro	0.233	0.298	0.288	0.301	0.290	0.288	0.283	8.81
59)		Fluorene	1.465	1.402	1.317	1.336	1.274	1.245	1.340	6.09
60)		4-Chlorophenyl-phen	0.724	0.678	0.623	0.618	0.598	0.585	0.638	8.33
61)		Diethyl phthalate	1.352	1.373	1.290	1.344	1.248	1.221	1.305	4.70
62)		4-Nitroaniline		0.302	0.291	0.331	0.294	0.289	0.301	5.71
63)	I	Phenanthrene-d10	-----I STD-----							
64)		4,6-Dinitro-2-methy	0.099	0.120	0.148	0.144	0.149	0.132		16.66
			----- Linear regression ----- Coefficient = 0.9965							
			Response Ratio = -0.08463 + 0.16271 *A							
65)	C	n-Nitrosodiphenyl am	0.647	0.638	0.634	0.618	0.628	0.638	0.634	1.55
66)		1,2-Diphenylhydrazin	0.981	0.968	0.954	0.916	0.951	0.948	0.953	2.30
67)	S	2,4,6-Tribromopheno	0.080	0.092	0.091	0.088	0.092	0.092	0.089	5.13
68)		4-Bromophenyl-pheny	0.222	0.220	0.212	0.207	0.213	0.210	0.214	2.82
69)		Hexachlorobenzene	0.223	0.207	0.200	0.197	0.201	0.197	0.204	4.77
70)		Atrazine	0.217	0.222	0.206	0.211	0.203	0.193	0.209	4.93
71)	C	Pentachlorophenol		0.137	0.137	0.146	0.143	0.142	0.141	2.77
72)		Phenanthrene	1.299	1.213	1.165	1.167	1.173	1.112	1.188	5.32
73)		Anthracene	1.258	1.257	1.200	1.211	1.198	1.162	1.214	3.07
74)		Carbazole	1.131	1.148	1.076	1.087	1.048	1.018	1.085	4.53
75)		Di-n-butyl phthalate	1.306	1.445	1.359	1.393	1.339	1.321	1.361	3.77
76)	C	Fluoranthene	1.171	1.211	1.114	1.145	1.099	1.047	1.131	5.08
77)	I	Chrysene-d12	-----I STD-----							
78)		Benzo[a]fluoranthene	0.495	0.595	0.497	0.524	0.471	0.410	0.499	12.20
79)		Pyrene	1.843	1.811	1.839	1.848	1.841	1.897	1.846	1.52
80)	S	Terphenyl-d14	1.092	1.047	1.050	1.063	1.077	1.092	1.070	1.85
81)		Butyl benzyl phthalat	0.697	0.792	0.823	0.830	0.810	0.829	0.797	6.37
82)		3,3'-Dichlorobenzid	0.344	0.400	0.395	0.391	0.384	0.372	0.381	5.36
83)		Benzo[a]anthracene	1.287	1.300	1.299	1.298	1.267	1.271	1.287	1.15
84)		Chrysene	1.339	1.279	1.273	1.234	1.228	1.237	1.265	3.32
85)		bis(2-Ethylhexyl)ph	0.830	1.049	1.063	1.079	1.086	1.114	1.037	10.02
86)	I	Perylene-d12	-----I STD-----							
87)	C	Di-n-octyl phthalate	2.263	2.933	3.021	3.275	3.254	3.318	3.011	13.19
88)		Benzo[b]fluoranthene	1.614	1.739	1.704	1.718	1.754	1.686	1.703	2.92
89)		Benzo[k]fluoranthene	1.738	1.745	1.675	1.749	1.740	1.724	1.728	1.59
90)	C	Benzo[a]pyrene	1.370	1.469	1.440	1.474	1.501	1.484	1.456	3.22
91)		Indeno[1,2,3-cd]pyr	0.948	1.046	1.108	1.091	1.178	1.166	1.089	7.75
92)		Di benz[a,h]anthrace	1.020	1.146	1.155	1.133	1.227	1.215	1.149	6.45
93)		Benzo[g,h,i]perylene	1.125	1.117	1.148	1.103	1.236	1.198	1.155	4.49

(#) = Out of Range

Initial Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: SW672-ICC672
Lab FileID: W012419.D

8270C.M

Mon Oct 14 15:00:37 2002

MSBNA01

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SW688-CC672
 Lab FileID: W012745.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\102302\W012745.D Vial : 2
 Acq On : 23 Oct 2002 10:40 am Operator: marke
 Sample : cc672-50 Inst : MSBNA01
 Misc : op6142,sw688,30.0,,,1,1,soil Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Thu Oct 24 08:54:20 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)	R. T.
1 I	1,4-Di chl orobenzene-d4	1.000	1.000	0.0	120	0.00	5.20
2	1,4-Di oxane	0.547	0.511	6.6	114	-0.07	1.87
3	N-ni trosodi methyl ami ne	0.754	0.734	2.7	118	-0.04	2.53
4	Pyri di ne	1.320	1.246	5.6	111	-0.05	2.53
5	Benzal dehyde	0.519	0.438	15.6	96	0.00	4.82
6	Ani li ne	1.923	1.921	0.1	119	0.00	4.95
7 S	2-Fl uorophenol	1.273	1.223	3.9	115	-0.01	4.13
8	bi s(2-Chl oroethyl)ether	1.348	1.379	-2.3	124	0.00	4.99
9 S	Phenol -d5	1.469	1.451	1.2	120	0.00	4.93
10 C	Phenol	1.701	1.652	2.9	118	0.00	4.94
11	2-Chl orophenol	1.464	1.477	-0.9	120	0.00	5.05
12	1,3-Di chl orobenzene	1.547	1.523	1.6	118	0.00	5.17
13 C	1,4-Di chl orobenzene	1.546	1.508	2.5	117	0.00	5.21
14	1,2-Di chl orobenzene	1.450	1.431	1.3	118	0.00	5.38
15	Benzyl al cohoh	0.892	0.904	-1.3	122	0.00	5.34
16	bi s(2-chl oroi sopropyl)eth	2.625	2.919	-11.2	133	0.00	5.47
17	2-Methyl phenol	1.236	1.253	-1.4	121	0.00	5.45
18	Acetophenone	1.782	1.777	0.3	122	0.00	5.58
19	Hexachl oroethane	0.603	0.602	0.2	119	0.00	5.67
20 P	N-Ni troso-di -n-propyl ami n	0.928	0.949	-2.3	124	0.00	5.60
21	3&4-Methyl phenol	1.253	1.270	-1.4	122	0.00	5.58
22 I	Naphthal ene-d8	1.000	1.000	0.0	123	0.00	6.44
23 S	Ni trobenzene-d5	0.355	0.382	-7.6	128	-0.01	5.72
24	Ni trobenzene	0.362	0.381	-5.2	126	0.00	5.74
25	I sophorone	0.689	0.695	-0.9	125	0.00	5.97
26 C	2-Ni trophenol	0.173	0.200	-15.6	135	0.00	6.05
27	2,4-Di methyl phenol	0.376	0.371	1.3	121	0.00	6.08
28	bi s(2-Chl oroethoxy)methan	0.430	0.435	-1.2	124	0.00	6.18
29	Benzi c Aci d	0.272	0.269	1.1	126	0.00	6.26
30 C	2,4-Di chl orophenol	0.313	0.314	-0.3	123	0.00	6.30
31	1,2,4-Tri chl orobenzene	0.319	0.319	0.0	123	0.00	6.39
32	Naphthal ene	1.084	1.073	1.0	123	0.00	6.46
33	4-Chl oroani li ne	0.428	0.435	-1.6	123	0.00	6.53
34	2,6-Di chl orophenol	0.301	0.307	-2.0	124	0.00	6.55
35 C	Hexachl orobutadi ene	0.190	0.188	1.1	121	0.00	6.67
36	Caprol actam	0.099	0.093	6.1	118	0.00	6.98
37 C	4-Chl oro-3-methyl phenol	0.300	0.297	1.0	122	0.00	7.10
38	2-Methyl naphthal ene	0.649	0.643	0.9	121	0.00	7.29
39	1-Methyl naphthal ene	0.636	0.631	0.8	123	0.00	7.43
40	1,2,4,5-Tetrachl orobenzen	0.292	0.293	-0.3	125	0.00	7.56

Continuing Calibration Summary

Job Number: F15057
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41	I	Acenaphthene-d10	1.000	1.000	0.0	126	0.00	8.82
42	P	Hexachlorocyclopentadiene	0.369	0.405	-9.8	131	-0.01	7.60
43	C	2,4,6-Trichlorophenol	0.428	0.438	-2.3	126	-0.01	7.70
44		2,4,5-Trichlorophenol	0.456	0.451	1.1	121	0.00	7.75
45	S	2-Fluorobiphenyl	1.476	1.457	1.3	125	-0.01	7.81
46		1,1'-Biphenyl	1.583	1.563	1.3	124	-0.01	7.93
47		2-Chloronaphthalene	1.321	1.285	2.7	122	0.00	7.95
48		2-Nitroaniline	0.371	0.375	-1.1	130	-0.01	8.14
49		Acenaphthylene	1.801	1.746	3.1	120	0.00	8.58
50		Dimethylphthalate	1.390	1.297	6.7	119	0.00	8.48
51		2,6-Dinitrotoluene	0.266	0.281	-5.6	134	0.00	8.57
52	C	Acenaphthene	1.165	1.139	2.2	123	0.00	8.87
53		3-Nitroaniline	0.315	0.314	0.3	129	0.00	8.78
			----- True	Cal c.	% Dri ft	-----		
54	P	2,4-Dinitrophenol	100.000	121.192	-21.2#	175	0.00	8.94
			----- AvgRF	CCRF	% Dev	-----		
55		Dibenzofuran	1.673	1.601	4.3	121	0.00	9.12
56		2,4-Dinitrotoluene	0.367	0.366	0.3	130	0.00	9.19
57	P	4-Nitrophenol	0.182	0.164	9.9	111	0.00	9.07
58		2,3,4,6-Tetrachlorophenol	0.283	0.286	-1.1	125	0.00	9.40
59		Fluorene	1.340	1.267	5.4	121	0.00	9.69
60		4-Chlorobiphenyl-phenylether	0.638	0.606	5.0	122	0.00	9.71
61		Diethylphthalate	1.305	1.186	9.1	116	0.00	9.64
62		4-Nitroaniline	0.301	0.271	10.0	117	0.00	9.79
63	I	Phenanthrene-d10	1.000	1.000	0.0	111	0.00	11.30
			----- True	Cal c.	% Dri ft	-----		
64		4,6-Dinitro-2-methylphenol	100.000	118.804	-18.8	148	0.00	9.88
			----- AvgRF	CCRF	% Dev	-----		
65	C	n-Nitrosodiphenylamine	0.634	0.658	-3.8	115	0.00	9.93
66		1,2-Diphenylhydrazine	0.953	1.008	-5.8	117	0.00	9.97
67	S	2,4,6-Tribromophenol	0.089	0.096	-7.9	118	0.00	10.13
68		4-Bromobiphenyl-phenylether	0.214	0.235	-9.8	123	0.00	10.54
69		Hexachlorobenzene	0.204	0.215	-5.4	119	0.00	10.78
70		Atrazine	0.209	0.200	4.3	108	0.00	10.95
71	C	Pentachlorophenol	0.141	0.148	-5.0	120	0.00	11.10
72		Phenanthrene	1.188	1.198	-0.8	114	0.00	11.34
73		Anthracene	1.214	1.228	-1.2	114	0.00	11.42
74		Carbazole	1.085	1.021	5.9	105	0.00	11.74
75		Di-n-butylphthalate	1.361	1.300	4.5	106	0.01	12.58
76	C	Fluoranthene	1.131	1.012	10.5	101	0.01	13.52
77	I	Chrysene-d12	1.000	1.000	0.0	84	0.00	16.22
78		Benzo[a]pyrene	0.499	0.505	-1.2	86	-0.01	13.82
79		Pyrene	1.846	2.122	-15.0	97	-0.02	13.92
80	S	Terphenyl-d14	1.070	1.236	-15.5	99	0.00	14.32
81		Butylbenzylphthalate	0.797	0.805	-1.0	82	0.00	15.37
82		3,3'-Dichlorobenzidine	0.381	0.353	7.3	75	0.00	16.23
83		Benzo[a]anthracene	1.287	1.255	2.5	81	0.00	16.19
84		Chrysene	1.265	1.251	1.1	83	0.00	16.27
85		bis(2-Ethylhexyl)phthalate	1.037	1.017	1.9	81	0.01	16.57
86	I	Perylene-d12	1.000	1.000	0.0	74	0.00	18.73
87	C	Di-n-octylphthalate	3.011	2.821	6.3	69	0.00	17.68
88		Benzo[b]fluoranthene	1.703	1.619	4.9	71	0.00	18.12
89		Benzo[k]fluoranthene	1.728	1.734	-0.3	77	0.00	18.16

Continuing Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: SW688-CC672
Lab FileID: W012745.D

90 C	Benzo[a]pyrene	1.456	1.481	-1.7	77	0.00	18.63
91	Indeno[1,2,3-cd]pyrene	1.089	1.085	0.4	73	0.00	20.32
92	Di benz[a,h]anthracene	1.149	1.150	-0.1	74	0.00	20.36
93	Benzo[g,h,i]perylene	1.155	1.205	-4.3	78	-0.01	20.67

(1.1 %) 1 of 87 compounds' %D > 20

(#) = Out of Range
W012419.D 8270C.M

SPCC's out = 0 CCC's out = 0
Thu Oct 24 10:47:08 2002 MSBNA01

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- DDT/Endrin Breakdown Checks
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6148-LBS	ST17233.D	1	10/22/02	SKW	10/21/02	OP6148	GST623

The QC reported here applies to the following samples:

Method: SW846 8081A

F15057-1, F15057-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
58-89-9	gamma-BHC (Lindane)	5	5.0	100	71-132
72-20-8	Endrin	5	5.4	108	44-156
76-44-8	Heptachlor	5	5.2	104	64-132
1024-57-3	Heptachlor epoxide	5	5.3	106	73-134
72-43-5	Methoxychlor	5	5.2	104	71-135

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	92%	52-131%
2051-24-3	Decachlorobiphenyl	120%	16-153%

Blank Spike Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6151-BS	MN16308.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625

The QC reported here applies to the following samples:

Method: SW846 8082

F15057-1, F15057-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	141	106	73-121
11096-82-5	Aroclor 1260	133	145	109	79-130

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	101%	50-134%
2051-24-3	Decachlorobiphenyl	107%	48-147%

Blank Spike Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6167-LBS	DD07497.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281

The QC reported here applies to the following samples:

Method: SW846 8081A

F15057-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
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CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	114%	52-131%
2051-24-3	Decachlorobiphenyl	118%	16-153%

Leachate Blank Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6148-LB	ST17234.D	1	10/22/02	SKW	10/21/02	OP6148	GST623

The QC reported here applies to the following samples:

Method: SW846 8081A

F15057-1, F15057-2

CAS No.	Compound	Result	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.50	ug/l	
12789-03-6	Chlordane	ND	5.0	ug/l	
72-20-8	Endrin	ND	1.0	ug/l	
76-44-8	Heptachlor	ND	0.50	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.50	ug/l	
72-43-5	Methoxychlor	ND	1.0	ug/l	
8001-35-2	Toxaphene	ND	25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	104%	52-131%
2051-24-3	Decachlorobiphenyl	123%	16-153%

Leachate Blank Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6167-LB	DD07498.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281

The QC reported here applies to the following samples:

Method: SW846 8081A

F15057-2

CAS No.	Compound	Result	RL	Units	Q
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CAS No.	Surrogate Recoveries	Result	RL
877-09-8	Tetrachloro-m-xylene	99%	52-131%
2051-24-3	Decachlorobiphenyl	113%	16-153%

Method Blank Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6151-MB	MN16309.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625

The QC reported here applies to the following samples:

Method: SW846 8082

F15057-1, F15057-2

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	33	ug/kg	
11104-28-2	Aroclor 1221	ND	33	ug/kg	
11141-16-5	Aroclor 1232	ND	33	ug/kg	
53469-21-9	Aroclor 1242	ND	33	ug/kg	
12672-29-6	Aroclor 1248	ND	33	ug/kg	
11097-69-1	Aroclor 1254	ND	33	ug/kg	
11096-82-5	Aroclor 1260	ND	33	ug/kg	
	Total PCBs	ND	67	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	104%	50-134%
2051-24-3	Decachlorobiphenyl	109%	48-147%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6148-MS	ST17255.D	1	10/23/02	SKW	10/21/02	OP6148	GST623
OP6148-MSD	ST17256.D	1	10/23/02	SKW	10/21/02	OP6148	GST623
F15071-2	ST17253.D	1	10/23/02	SKW	10/21/02	OP6148	GST623

The QC reported here applies to the following samples:

Method: SW846 8081A

F15057-1, F15057-2

CAS No.	Compound	F15071-2 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	5	5.4	108	5.8	116	7	59-139/23
72-20-8	Endrin	ND	5	6.1	122	6.7	134	9	61-152/25
76-44-8	Heptachlor	ND	5	5.2	104	5.6	112	7	60-132/23
1024-57-3	Heptachlor epoxide	ND	5	5.4	108	5.9	118	9	68-136/21
72-43-5	Methoxychlor	ND	5	5.6	112	6.1	122	9	56-145/27

CAS No.	Surrogate Recoveries	MS	MSD	F15071-2	Limits
877-09-8	Tetrachloro-m-xylene	94%	103%	98%	52-131%
2051-24-3	Decachlorobiphenyl	116%	123%	123%	16-153%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6151-MS	MN16313.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625
OP6151-MSD	MN16314.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625
F15061-1 ^a	MN16312.D	1	10/22/02	NJ	10/21/02	OP6151	GMN625

The QC reported here applies to the following samples:

Method: SW846 8082

F15057-1, F15057-2

CAS No.	Compound	F15061-1 ug/kg	Spike Q ug/kg	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	152	117	77	124	84	6	47-145/21
11096-82-5	Aroclor 1260	110	152	215	69	229	80	6	41-160/27

CAS No.	Surrogate Recoveries	MS	MSD	F15061-1	Limits
877-09-8	Tetrachloro-m-xylene	82%	86%	73%	50-134%
2051-24-3	Decachlorobiphenyl	89%	95%	95%	48-147%

(a) All hits confirmed by dual column analysis.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6167-MS	DD07502.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281
OP6167-MSD	DD07503.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281
F15071-4	DD07501.D	1	10/24/02	SKW	10/23/02	OP6167	GDD281

The QC reported here applies to the following samples:

Method: SW846 8081A

F15057-2

CAS No.	Compound	F15071-4 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
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CAS No.	Surrogate Recoveries	MS	MSD	F15071-4	Limits
877-09-8	Tetrachloro-m-xylene	116%	109%	90%	52-131%
2051-24-3	Decachlorobiphenyl	133%	125%	100%	16-153%

DDT/Endrin Breakdown Check

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	GST623-DDT	Injection Date:	10/22/02
Lab File ID:	ST17232.D	Injection Time:	19:06
Instrument ID:	GCST		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	6345	10499
4,4'-DDE	1954	3805
4,4'-DDT	316488	233637
DDT Breakdown ^a	2.6 %	5.8 %
Endrin aldehyde	15962	11628
Endrin ketone	11870	12596
Endrin	300643	296199
Endrin Breakdown ^b	8.5 %	7.6 %

(a) Calculated as: $(DDD + DDE) / (DDD + DDE + DDT) \times 100$
 (b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP6148-LBS	ST17233.D	10/22/02	19:28	00:22	Blank Spike
OP6148-LB	ST17234.D	10/22/02	19:49	00:43	Leachate Blank
F15057-1	ST17235.D	10/22/02	20:11	01:05	IH-DM-006
F15057-2	ST17236.D	10/22/02	20:32	01:26	IH-DM-007
ZZZZZZ	ST17237.D	10/22/02	20:54	01:48	(unrelated sample)
ZZZZZZ	ST17238.D	10/22/02	21:15	02:09	(unrelated sample)
ZZZZZZ	ST17239.D	10/22/02	21:37	02:31	(unrelated sample)
ZZZZZZ	ST17240.D	10/22/02	21:58	02:52	(unrelated sample)
ZZZZZZ	ST17241.D	10/22/02	22:20	03:14	(unrelated sample)
ZZZZZZ	ST17242.D	10/22/02	22:41	03:35	(unrelated sample)
GST623-CC623	ST17243.D	10/22/02	23:03	03:57	Continuing cal 40
ZZZZZZ	ST17244.D	10/22/02	23:24	04:18	(unrelated sample)
ZZZZZZ	ST17245.D	10/22/02	23:46	04:40	(unrelated sample)
ZZZZZZ	ST17246.D	10/23/02	00:07	05:01	(unrelated sample)
ZZZZZZ	ST17247.D	10/23/02	00:29	05:23	(unrelated sample)
ZZZZZZ	ST17248.D	10/23/02	00:51	05:45	(unrelated sample)
ZZZZZZ	ST17249.D	10/23/02	01:12	06:06	(unrelated sample)
ZZZZZZ	ST17250.D	10/23/02	01:33	06:27	(unrelated sample)
ZZZZZZ	ST17251.D	10/23/02	01:55	06:49	(unrelated sample)
ZZZZZZ	ST17252.D	10/23/02	02:17	07:11	(unrelated sample)
F15071-2	ST17253.D	10/23/02	02:38	07:32	(used for QC only; not part of job F15057)
GST623-CC623	ST17254.D	10/23/02	03:00	07:54	Continuing cal 40
OP6148-MS	ST17255.D	10/23/02	03:21	08:15	Matrix Spike
OP6148-MSD	ST17256.D	10/23/02	03:43	08:37	Matrix Spike Duplicate

DDT/Endrin Breakdown Check

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GST623-DDT	Injection Date:	10/22/02
Lab File ID:	ST17232.D	Injection Time:	19:06
Instrument ID:	GCST		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP6150-BS	ST17257.D	10/23/02	04:04	08:58	Blank Spike
OP6150-MB	ST17258.D	10/23/02	04:26	09:20	Method Blank
F15076-1	ST17259.D	10/23/02	04:47	09:41	(used for QC only; not part of job F15057)
OP6150-MS	ST17260.D	10/23/02	05:09	10:03	Matrix Spike
OP6150-MSD	ST17261.D	10/23/02	05:30	10:24	Matrix Spike Duplicate
GST623-ECC623	ST17262.D	10/23/02	05:52	10:46	Ending cal 20

DDT/Endrin Breakdown Check

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	GDD281-DDT	Injection Date:	10/24/02
Lab File ID:	DD07496.D	Injection Time:	13:33
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1074	2674
4,4'-DDE	0	0
4,4'-DDT	138938	290428

DDT Breakdown ^a	0.8 %	0.9 %
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Endrin aldehyde	1364	3040
Endrin ketone	2715	4727
Endrin	154254	347698

Endrin Breakdown ^b	2.6 %	2.2 %
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(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP6167-LBS	DD07497.D	10/24/02	13:58	00:25	Blank Spike
OP6167-LB	DD07498.D	10/24/02	14:23	00:50	Leachate Blank
F15057-2	DD07499.D	10/24/02	14:48	01:15	IH-DM-007
ZZZZZZ	DD07500.D	10/24/02	15:13	01:40	(unrelated sample)
F15071-4	DD07501.D	10/24/02	15:38	02:05	(used for QC only; not part of job F15057)
OP6167-MS	DD07502.D	10/24/02	16:03	02:30	Matrix Spike
OP6167-MSD	DD07503.D	10/24/02	16:28	02:55	Matrix Spike Duplicate
ZZZZZZ	DD07504.D	10/24/02	16:53	03:20	(unrelated sample)
ZZZZZZ	DD07505.D	10/24/02	17:18	03:45	(unrelated sample)
ZZZZZZ	DD07506.D	10/24/02	17:43	04:10	(unrelated sample)
GDD281-CC281	DD07507.D	10/24/02	18:08	04:35	Continuing cal 40
ZZZZZZ	DD07508.D	10/24/02	18:33	05:00	(unrelated sample)
ZZZZZZ	DD07509.D	10/24/02	18:58	05:25	(unrelated sample)
ZZZZZZ	DD07510.D	10/24/02	19:23	05:50	(unrelated sample)
ZZZZZZ	DD07511.D	10/24/02	19:48	06:15	(unrelated sample)
ZZZZZZ	DD07512.D	10/24/02	20:13	06:40	(unrelated sample)
ZZZZZZ	DD07513.D	10/24/02	20:38	07:05	(unrelated sample)
ZZZZZZ	DD07514.D	10/24/02	21:03	07:30	(unrelated sample)
ZZZZZZ	DD07515.D	10/24/02	21:28	07:55	(unrelated sample)
ZZZZZZ	DD07516.D	10/24/02	21:53	08:20	(unrelated sample)
GDD281-CC281	DD07517.D	10/24/02	22:18	08:45	Continuing cal 40
OP6165-BS	DD07518.D	10/24/02	22:43	09:10	Blank Spike
OP6165-MB	DD07519.D	10/24/02	23:08	09:35	Method Blank
ZZZZZZ	DD07520.D	10/24/02	23:33	10:00	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GDD281-DDT	Injection Date:	10/24/02
Lab File ID:	DD07496.D	Injection Time:	13:33
Instrument ID:	GCDD		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD281-ECC281	DD07526.D	10/25/02	02:03	12:30	Ending cal 20

DDT/Endrin Breakdown Check

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GST623-DDT	Injection Date:	10/22/02
Lab File ID:	ST17222.D	Injection Time:	15:31
Instrument ID:	GCST		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	9293	13710
4,4'-DDE	4046	6986
4,4'-DDT	319779	239077

DDT Breakdown ^a	4 %	8 %
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Endrin aldehyde	28739	19266
Endrin ketone	17817	17566
Endrin	311274	306823

Endrin Breakdown ^b	13 %	10.7 %
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(a) Calculated as: $(\text{DDD} + \text{DDE}) / (\text{DDD} + \text{DDE} + \text{DDT}) \times 100$

(b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GST623-IC623	ST17223.D	10/22/02	15:53	00:22	Initial cal 20
GST623-IC623	ST17224.D	10/22/02	16:14	00:43	Initial cal 5
GST623-IC623	ST17225.D	10/22/02	16:36	01:05	Initial cal 10
GST623-ICC623	ST17226.D	10/22/02	16:57	01:26	Initial cal 40
GST623-IC623	ST17227.D	10/22/02	17:19	01:48	Initial cal 60
GST623-IC623	ST17228.D	10/22/02	17:40	02:09	Initial cal 80

DDT/Endrin Breakdown Check

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GDD281-DDT	Injection Date:	10/24/02
Lab File ID:	DD07486.D	Injection Time:	09:23
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	1022	3982
4,4'-DDE	0	0
4,4'-DDT	152162	326663

DDT Breakdown ^a	0.7 %	1.2 %
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Endrin aldehyde	3231	6824
Endrin ketone	3505	4615
Endrin	167981	390815

Endrin Breakdown ^b	3.9 %	2.8 %
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(a) Calculated as: $(\text{DDD} + \text{DDE}) / (\text{DDD} + \text{DDE} + \text{DDT}) \times 100$

(b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD281-IC281	DD07487.D	10/24/02	09:48	00:25	Initial cal 5
GDD281-IC281	DD07488.D	10/24/02	10:13	00:50	Initial cal 10
GDD281-IC281	DD07489.D	10/24/02	10:38	01:15	Initial cal 20
GDD281-ICC281	DD07490.D	10/24/02	11:03	01:40	Initial cal 40
GDD281-IC281	DD07491.D	10/24/02	11:28	02:05	Initial cal 60
GDD281-IC281	DD07492.D	10/24/02	11:53	02:30	Initial cal 80

Semivolatile Surrogate Recovery Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8081A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F15057-1	ST17235.D	94.0	120.0
F15057-2	DD07499.D	59.0	2.0* ^b
F15057-2	ST17236.D	65.0	0.0* ^c
OP6148-LB	ST17234.D	104.0	123.0
OP6148-LBS	ST17233.D	92.0	120.0
OP6148-MS	ST17255.D	94.0	116.0
OP6148-MSD	ST17256.D	103.0	123.0
OP6167-LB	DD07498.D	99.0	113.0
OP6167-LBS	DD07497.D	114.0	118.0
OP6167-MS	DD07502.D	116.0	133.0
OP6167-MSD	DD07503.D	109.0	125.0

Surrogate Compounds	Recovery Limits
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S1 = Tetrachloro-m-xylene	52-131%
S2 = Decachlorobiphenyl	16-153%

- (a) Recovery from GC signal #1
- (b) Confirmed by re-extraction and reanalysis.
- (c) Outside control limits due to matrix interference.

Semivolatile Surrogate Recovery Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8082	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F15057-1	MN16315.D	61.0	75.0
F15057-2	MN16317.D	71.0	64.0
OP6151-BS	MN16308.D	101.0	107.0
OP6151-MB	MN16309.D	104.0	109.0
OP6151-MS	MN16313.D	82.0	89.0
OP6151-MSD	MN16314.D	86.0	95.0

Surrogate Compounds	Recovery Limits
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S1 = Tetrachloro-m-xylene	50-134%
S2 = Decachlorobiphenyl	48-147%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std: GMN625-CC625	Injection Date: 10/22/02
Lab File ID: MN16316.D	Injection Time: 18:32
Instrument ID: GCMN	Method: SW846 8082

S1 ^a	S1 ^b	S2 ^a	S2 ^b
RT	RT	RT	RT

Check Std	5.89	6.12	16.39	15.73
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
F15057-2	MN16317.D	10/22/02	18:55		6.12		15.73
GMN625-ECC625	MN16318.D	10/22/02	19:17	5.89	6.12	16.39	15.73

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GMN625-ICC625	Injection Date:	10/22/02
Lab File ID:	MN16299.D	Injection Time:	12:00
Instrument ID:	GCMN	Method:	SW846 8082

S1 ^a	S2 ^a
RT	RT

Check Std	6.12	15.74
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
OP6151-BS	MN16308.D	10/22/02	15:30	6.12	15.74
OP6151-MB	MN16309.D	10/22/02	15:53	6.12	15.73
F15061-1	MN16312.D	10/22/02	17:01	6.12	15.74
OP6151-MS	MN16313.D	10/22/02	17:24	6.12	15.73
OP6151-MSD	MN16314.D	10/22/02	17:46	6.12	15.73
F15057-1	MN16315.D	10/22/02	18:09	6.12	15.74

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	GST623-ICC623	Injection Date:	10/22/02
Lab File ID:	ST17226.D	Injection Time:	16:57
Instrument ID:	GCST	Method:	SW846 8081A

S1 ^a	S2 ^a
RT	RT

Check Std	5.80	15.54
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
OP6148-LBS	ST17233.D	10/22/02	19:28	5.80	15.54
OP6148-LB	ST17234.D	10/22/02	19:49	5.80	15.53
F15057-1	ST17235.D	10/22/02	20:11	5.80	15.54
F15057-2	ST17236.D	10/22/02	20:32	5.80	0.00
ZZZZZZ	ST17237.D	10/22/02	20:54	5.80	15.53
ZZZZZZ	ST17238.D	10/22/02	21:15	5.80	15.53
ZZZZZZ	ST17239.D	10/22/02	21:37	5.80	15.53
ZZZZZZ	ST17240.D	10/22/02	21:58	5.80	15.53
ZZZZZZ	ST17241.D	10/22/02	22:20	5.80	15.53
ZZZZZZ	ST17242.D	10/22/02	22:41	5.80	15.53

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	GDD281-ICC281	Injection Date:	10/24/02
Lab File ID:	DD07490.D	Injection Time:	11:03
Instrument ID:	GCDD	Method:	SW846 8081A

S1 ^a	S2 ^a
RT	RT

Check Std	5.43	14.46
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
OP6167-LBS	DD07497.D	10/24/02	13:58	5.43	14.47
OP6167-LB	DD07498.D	10/24/02	14:23	5.43	14.46
F15057-2	DD07499.D	10/24/02	14:48	5.43	14.46
ZZZZZZ	DD07500.D	10/24/02	15:13	5.43	14.46
F15071-4	DD07501.D	10/24/02	15:38	5.43	14.46
OP6167-MS	DD07502.D	10/24/02	16:03	5.43	14.46
OP6167-MSD	DD07503.D	10/24/02	16:28	5.43	14.46
ZZZZZZ	DD07504.D	10/24/02	16:53	5.43	14.46
ZZZZZZ	DD07505.D	10/24/02	17:18	5.43	14.46
ZZZZZZ	DD07506.D	10/24/02	17:43	5.43	14.46

Surrogate
Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	GST623-CC623	Injection Date:	10/23/02
Lab File ID:	ST17254.D	Injection Time:	03:00
Instrument ID:	GCST	Method:	SW846 8081A

S1 ^a	S1 ^b	S2 ^a	S2 ^b
RT	RT	RT	RT

Check Std	5.80	5.81	15.53	14.78
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
OP6148-MS	ST17255.D	10/23/02	03:21	5.80		15.53	
OP6148-MSD	ST17256.D	10/23/02	03:43	5.80		15.53	
OP6150-BS	ST17257.D	10/23/02	04:04	5.80		15.53	
OP6150-MB	ST17258.D	10/23/02	04:26	5.80		15.53	
F15076-1	ST17259.D	10/23/02	04:47	5.80		15.53	
OP6150-MS	ST17260.D	10/23/02	05:09	5.80		15.53	
OP6150-MSD	ST17261.D	10/23/02	05:30	5.80		15.53	
GST623-ECC623	ST17262.D	10/23/02	05:52	5.80	5.81	15.53	14.77

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN625-ICC625
Lab FileID: MN16299.D

Response Factor Report ECD 2

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
Title : PCB's by EPA-608 / SW846-8082
Last Update : Tue Oct 22 15:31:08 2002

Calibration Files

50 =MN16297.D 200 =MN16298.D 400 =MN16299.D
600 =MN16300.D 800 =MN16301.D 1000 =MN16302.D

Compound	50	200	400	600	800	1000	Avg		%RSD
1) S Tetrachloro-m-xylene	5.046	4.922	4.872	4.605	4.410	4.385	4.707	E3	5.94
2) L1 AR1016-A	9.959	9.681	9.129	8.338	7.887	7.681	8.779	E1	10.83
3) L1 AR1016-B	1.539	1.410	1.316	1.198	1.120	1.088	1.278	E2	13.77
4) L1 AR1016-C	3.260	3.084	2.939	2.738	2.564	2.556	2.857	E2	10.04
5) L1 AR1016-D	1.656	1.565	1.493	1.396	1.311	1.303	1.454	E2	9.78
6) L1 AR1016-E	1.150	1.148	1.149	1.099	1.041	1.053	1.107	E2	4.54
7) L1 AR1016-F	1.456	1.344	1.331	1.254	1.173	1.186	1.291	E2	8.35
8) L2 AR1221-A							2.046	E1	0.00
9) L2 AR1221-B							1.320	E1	0.00
10) L2 AR1221-C							5.962	E1	0.00
11) L2 AR1221-D							4.060	E1	0.00
12) L2 AR1221-E							1.253	E2	0.00
13) L3 AR1232-A							1.114	E2	0.00
14) L3 AR1232-B							7.083	E1	0.00
15) L3 AR1232-C							1.412	E2	0.00
16) L3 AR1232-D							6.975	E1	0.00
17) L3 AR1232-E							6.453	E1	0.00
18) L3 AR1232-F							6.421	E1	0.00
19) L4 AR1242-A							8.665	E1	0.00
20) L4 AR1242-B							1.292	E2	0.00
21) L4 AR1242-C							2.804	E2	0.00
22) L4 AR1242-D							1.407	E2	0.00
23) L4 AR1242-E							1.269	E2	0.00
24) L4 AR1242-F							1.637	E2	0.00
25) L5 AR1248-A							1.834	E2	0.00
26) L5 AR1248-B							2.039	E2	0.00
27) L5 AR1248-C							1.912	E2	0.00
28) L5 AR1248-D							2.858	E2	0.00
29) L5 AR1248-E							2.409	E2	0.00
30) L5 AR1248-F							1.353	E2	0.00
31) L6 AR1254-A							2.301	E2	0.00
32) L6 AR1254-B							2.447	E2	0.00
33) L6 AR1254-C							3.593	E2	0.00
34) L6 AR1254-D							3.241	E2	0.00
35) L6 AR1254-E							1.999	E2	0.00
36) L6 AR1254-F							3.052	E2	0.00
37) L7 AR1260-A	2.601	2.458	2.217	1.975	1.985	2.086	2.221	E2	11.65
38) L7 AR1260-B	3.907	3.568	2.942	2.786	2.902	3.089	3.199	E2	13.80
39) L7 AR1260-C	3.155	3.049	2.983	2.863	2.802	2.853	2.951	E2	4.59
40) L7 AR1260-D	3.085	3.074	3.038	2.896	2.740	2.809	2.940	E2	4.99
41) L7 AR1260-E	2.639	2.543	2.537	2.398	2.270	2.322	2.451	E2	5.86
42) L7 AR1260-F	5.840	6.132	6.118	5.822	5.463	5.593	5.828	E2	4.64
43) L8 AR1268-A							2.894	E2	0.00
44) L8 AR1268-B							8.751	E2	0.00
45) L8 AR1268-C							7.256	E2	0.00
46) L8 AR1268-D							6.408	E2	0.00
47) L8 AR1268-E							2.305	E2	0.00
48) L8 AR1268-F							1.399	E3	0.00

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN625-ICC625
 Lab FileID: MN16299.D

49) SC Decachl orobi phenyl 4.484 4.185 4.095 3.868 3.548 3.677 3.976 E3 8.71

Signal #2 Calibration Files

50 =MN16297.D 200 =MN16298.D 400 =MN16299.D
 600 =MN16300.D 800 =MN16301.D 1000 =MN16302.D

Compound	50	200	400	600	800	1000	Avg		%RSD
1) S Tetrachl oro-m-xyl en	7.602	7.268	7.134	6.736	6.445	6.333	6.920	E3	7.19
2) L1 AR1016-A	1.754	1.537	1.433	1.316	1.246	1.210	1.416	E2	14.49
3) L1 AR1016-B	2.549	2.223	2.046	1.890	1.782	1.727	2.036	E2	15.21
4) L1 AR1016-C	4.297	3.982	3.834	3.591	3.442	3.366	3.752	E2	9.44
5) L1 AR1016-D	2.300	2.159	2.067	1.948	1.867	1.830	2.029	E2	8.93
6) L1 AR1016-E	1.640	1.668	1.655	1.596	1.546	1.538	1.607	E2	3.47
7) L1 AR1016-F	1.930	1.838	1.771	1.686	1.597	1.597	1.736	E2	7.74
8) L2 AR1221-A							5.017	E1	0.00
9) L2 AR1221-B							1.641	E1	0.00
10) L2 AR1221-C							9.567	E1	0.00
11) L2 AR1221-D							6.720	E1	0.00
12) L2 AR1221-E							2.143	E2	0.00
13) L3 AR1232-A							1.912	E2	0.00
14) L3 AR1232-B							1.064	E2	0.00
15) L3 AR1232-C							1.753	E2	0.00
16) L3 AR1232-D							9.792	E1	0.00
17) L3 AR1232-E							8.060	E1	0.00
18) L3 AR1232-F							7.683	E1	0.00
19) L4 AR1242-A							1.432	E2	0.00
20) L4 AR1242-B							2.075	E2	0.00
21) L4 AR1242-C							3.704	E2	0.00
22) L4 AR1242-D							2.024	E2	0.00
23) L4 AR1242-E							1.753	E2	0.00
24) L4 AR1242-F							1.846	E2	0.00
25) L5 AR1248-A							2.342	E2	0.00
26) L5 AR1248-B							2.784	E2	0.00
27) L5 AR1248-C							1.997	E2	0.00
28) L5 AR1248-D							3.189	E2	0.00
29) L5 AR1248-E							2.227	E2	0.00
30) L5 AR1248-F							1.390	E2	0.00
31) L6 AR1254-A							2.464	E2	0.00
32) L6 AR1254-B							3.324	E2	0.00
33) L6 AR1254-C							3.858	E2	0.00
34) L6 AR1254-D							2.505	E2	0.00
35) L6 AR1254-E							2.182	E2	0.00
36) L6 AR1254-F							2.929	E2	0.00
37) L7 AR1260-A	2.914	2.754	2.729	2.581	2.454	2.484	2.653	E2	6.69
38) L7 AR1260-B	2.611	3.330	3.341	3.145	3.025	2.882	3.056	E2	9.19
39) L7 AR1260-C	2.948	3.039	3.083	2.965	2.888	2.912	2.973	E2	2.52
40) L7 AR1260-D	2.401	2.361	2.366	2.276	2.168	2.228	2.300	E2	3.96
41) L7 AR1260-E	2.305	2.409	2.459	2.353	2.249	2.291	2.344	E2	3.35
42) L7 AR1260-F	5.049	5.025	5.159	4.958	4.754	4.870	4.969	E2	2.87
43) L8 AR1268-A							2.117	E2	0.00
44) L8 AR1268-B							7.013	E2	0.00
45) L8 AR1268-C							6.996	E2	0.00
46) L8 AR1268-D							5.868	E2	0.00
47) L8 AR1268-E							2.142	E2	0.00
48) L8 AR1268-F							1.626	E3	0.00
49) SC Decachl orobi phenyl	5.455	4.898	4.706	4.438	4.086	4.202	4.631	E3	10.91

(#) = Out of Range ### Number of calibration levels exceeded format ###

Initial Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN625-ICC625
Lab FileID: MN16299.D

8082.M

Wed Oct 23 09:11:59 2002 RPT1

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN625-CC625
 Lab FileID: MN16316.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1022PCB\MN16316.D\ECD1A.CH Vial : 21
 Signal #2 : C:\HPCHEM\2\DATA\1022PCB\MN16316.D\ECD2B.CH
 Acq On : 22 Oct 2002 6:32 pm Operator: nareshj
 Sample : CC625-400 Inst : ECD 2
 Misc : op6151,gmn625,30.0,,,10,1,soil Multiplr: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Tue Oct 22 15:31:08 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S Tetrachloro-m-xylene	40.000	24.242	39.4#	59	0.00
2 L1 AR1016-A	400.000	307.337	23.2#	74	0.00
3 L1 AR1016-B	400.000	383.602	4.1	93	0.00
4 L1 AR1016-C	400.000	358.241	10.4	87	0.00
5 L1 AR1016-D	400.000	281.692	29.6#	69	0.00
6 L1 AR1016-E	400.000	233.152	41.7#	56	0.00
7 L1 AR1016-F	400.000	262.005	34.5#	64	0.00
37 L7 AR1260-A	400.000	330.319	17.4#	83	0.00
38 L7 AR1260-B	400.000	338.690	15.3#	92	0.00
39 L7 AR1260-C	400.000	333.318	16.7#	82	0.00
40 L7 AR1260-D	400.000	337.474	15.6#	82	0.00
41 L7 AR1260-E	400.000	342.084	14.5	83	0.00
42 L7 AR1260-F	400.000	352.232	11.9	84	0.00
49 SC Decachlorobiphenyl	40.000	36.086	9.8	88	0.00

Signal #2

1 S Tetrachloro-m-xylene	40.000	41.446	-3.6	100	0.00
2 L1 AR1016-A	400.000	417.445	-4.4	103	0.00
3 L1 AR1016-B	400.000	392.444	1.9	98	0.00
4 L1 AR1016-C	400.000	388.330	2.9	95	0.00
5 L1 AR1016-D	400.000	379.388	5.2	93	0.00
6 L1 AR1016-E	400.000	376.152	6.0	91	0.00
7 L1 AR1016-F	400.000	357.085	10.7	88	0.00
37 L7 AR1260-A	400.000	346.903	13.3	84	0.00
38 L7 AR1260-B	400.000	372.785	6.8	85	0.00
39 L7 AR1260-C	400.000	365.623	8.6	88	0.00
40 L7 AR1260-D	400.000	360.487	9.9	88	0.00
41 L7 AR1260-E	400.000	379.142	5.2	90	0.00
42 L7 AR1260-F	400.000	424.841	-6.2	102	0.00
49 SC Decachlorobiphenyl	40.000	39.210	2.0	96	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1022PCB\MN16316.D\ECD1A.CH Vial : 21
 Signal #2 : C:\HPCHEM\2\DATA\1022PCB\MN16316.D\ECD2B.CH
 Acq On : 22 Oct 2002 6:32 pm Operator: nareshj
 Sample : CC625-400 Inst : ECD 2
 Misc : op6151,gmn625,30.0,,,10,1,soil Multiplr: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN625-CC625
 Lab FileID: MN16316.D

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
 Title : PCB' s by EPA-608 / SW846-8082
 Last Update : Tue Oct 22 15:31:08 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.07#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.14#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.70#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.80#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.81#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.52#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.27#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.49#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.25#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-10.28#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-6.81#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-7.52#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-8.26#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-8.49#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-9.24#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-9.91#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-8.26#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-9.24#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-9.44#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-9.91#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-10.28#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-10.92#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-9.90#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-10.19#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-10.92#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-11.25#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-11.50#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-12.00#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-12.58#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-13.58#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-13.67#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-14.18#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-14.80#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-15.63#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.10#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.01#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.73#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.80#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.81#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.45#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.25#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.47#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.15#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-9.88#

Continuing Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN625-CC625
Lab FileID: MN16316.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-6.80#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-7.45#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-8.24#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-8.47#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-9.14#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-9.87#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-8.24#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-9.14#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-9.28#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-9.87#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-10.19#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-10.81#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-9.76#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-10.17#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-10.80#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-11.24#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-11.50#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-11.89#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-12.41#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-13.43#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-13.50#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-13.87#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-14.59#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-15.25#

(#) = Out of Range
MN16299.D 8082.M

SPCC's out = 0 CCC's out = 0
Wed Oct 23 09:12:16 2002 RPT1

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN625-ECC625
 Lab FileID: MN16318.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1022PCB\MN16318.D\ECD1A.CH Vial : 23
 Signal #2 : C:\HPCHEM\2\DATA\1022PCB\MN16318.D\ECD2B.CH
 Acq On : 22 Oct 2002 7:17 pm Operator: nareshj
 Sample : ECC625-400 Inst : ECD 2
 Misc : op6151, gmn625, 30.0, , , 10, 1, soil Multiplr: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Tue Oct 22 15:31:08 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S Tetrachloro-m-xylene	40.000	44.312	-10.8	107	0.00
2 L1 AR1016-A	400.000	436.753	-9.2	105	0.00
3 L1 AR1016-B	400.000	426.529	-6.6	104	0.00
4 L1 AR1016-C	400.000	419.280	-4.8	102	0.00
5 L1 AR1016-D	400.000	414.608	-3.7	101	0.00
6 L1 AR1016-E	400.000	419.173	-4.8	101	0.00
7 L1 AR1016-F	400.000	399.953	0.0	97	0.00
37 L7 AR1260-A	400.000	378.801	5.3	95	0.00
38 L7 AR1260-B	400.000	381.257	4.7	104	0.00
39 L7 AR1260-C	400.000	366.051	8.5	91	0.00
40 L7 AR1260-D	400.000	365.205	8.7	88	0.00
41 L7 AR1260-E	400.000	363.164	9.2	88	0.00
42 L7 AR1260-F	400.000	376.792	5.8	90	0.00
49 SC Decachlorobiphenyl	40.000	37.427	6.4	91	0.00

Signal #2

1 S Tetrachloro-m-xylene	40.000	44.011	-10.0	107	0.00
2 L1 AR1016-A	400.000	431.112	-7.8	106	0.00
3 L1 AR1016-B	400.000	424.575	-6.1	106	0.00
4 L1 AR1016-C	400.000	422.605	-5.7	103	0.00
5 L1 AR1016-D	400.000	420.012	-5.0	103	0.00
6 L1 AR1016-E	400.000	422.095	-5.5	102	0.00
7 L1 AR1016-F	400.000	404.073	-1.0	99	0.00
37 L7 AR1260-A	400.000	390.323	2.4	95	0.00
38 L7 AR1260-B	400.000	401.028	-0.3	92	0.00
39 L7 AR1260-C	400.000	394.255	1.4	95	0.00
40 L7 AR1260-D	400.000	388.720	2.8	94	0.00
41 L7 AR1260-E	400.000	404.635	-1.2	96	0.00
42 L7 AR1260-F	400.000	411.216	-2.8	99	0.00
49 SC Decachlorobiphenyl	40.000	40.680	-1.7	100	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1022PCB\MN16318.D\ECD1A.CH Vial : 23
 Signal #2 : C:\HPCHEM\2\DATA\1022PCB\MN16318.D\ECD2B.CH
 Acq On : 22 Oct 2002 7:17 pm Operator: nareshj
 Sample : ECC625-400 Inst : ECD 2
 Misc : op6151, gmn625, 30.0, , , 10, 1, soil Multiplr: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN625-ECC625
 Lab FileID: MN16318.D

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
 Title : PCB' s by EPA-608 / SW846-8082
 Last Update : Tue Oct 22 15:31:08 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.07#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.14#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.70#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.80#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.81#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.52#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.27#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.49#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.25#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-10.28#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-6.81#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-7.52#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-8.26#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-8.49#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-9.24#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-9.91#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-8.26#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-9.24#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-9.44#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-9.91#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-10.28#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-10.92#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-9.90#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-10.19#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-10.92#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-11.25#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-11.50#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-12.00#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-12.58#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-13.58#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-13.67#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-14.18#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-14.80#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-15.63#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.10#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.01#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.73#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.80#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.81#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.45#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.25#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.47#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.15#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-9.88#

Continuing Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN625-ECC625
Lab FileID: MN16318.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-6.80#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-7.45#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-8.24#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-8.47#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-9.14#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-9.87#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-8.24#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-9.14#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-9.28#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-9.87#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-10.19#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-10.81#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-9.76#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-10.17#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-10.80#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-11.24#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-11.50#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-11.89#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-12.41#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-13.43#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-13.50#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-13.87#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-14.59#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-15.25#

(#) = Out of Range
MN16299.D 8082.M

SPCC's out = 0 CCC's out = 0
Wed Oct 23 09:12:19 2002 RPT1

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GST623-ICC623
 Lab FileID: ST17226.D

Response Factor Report ECD 3

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 23 09:52:26 2002
 Response via : Initial Calibration

Calibration Files

5 =ST17224.D 10 =ST17225.D 20 =ST17223.D
 40 =ST17226.D 60 =ST17227.D 80 =ST17228.D c200 =ST17230.D

Compound	5	10	20	40	60	80	c200	Avg	%RSD
1)S Tetrachloro-m-xyl	3.893	4.854	4.722	5.309	5.281	5.223		4.880	E3 11.08
2) alpha-BHC	6.015	7.771	8.070	9.434	9.893	9.841		8.504	E3 17.83
3) gamma-BHC (Lindan	5.889	6.793	7.448	8.481	8.754	8.825		7.698	E3 15.54
4) beta-BHC	2.816	3.284	3.067	3.302	3.345	3.407		3.203	E3 6.93
5) Heptachlor	5.162	6.189	6.726	7.484	7.711	7.913		6.864	E3 15.38
6) delta-BHC	5.694	6.752	7.346	8.300	8.637	9.185		7.652	E3 17.01
7) Aldrin	4.722	5.728	6.231	6.770	7.140	7.234		6.304	E3 15.25
8) Heptachlor Epoxid	4.833	5.817	5.806	6.270	6.554	6.754		6.005	E3 11.49
9) gamma-Chlordane	4.718	5.642	5.772	6.235	6.631	6.733		5.955	E3 12.57
10) alpha-Chlordane	4.899	5.564	5.632	6.322	6.693	6.748		5.976	E3 12.25
11) Endosulfan I	4.409	5.185	5.292	5.813	6.314	5.975		5.498	E3 12.39
12) 4,4'-DDE	4.303	5.398	5.592	6.440	6.707	7.022		5.910	E3 17.08
13) Dieldrin	4.641	5.497	5.686	6.551	6.814	7.041		6.038	E3 15.25
14) Endrin	4.007	4.931	5.065	5.762	6.164	6.246		5.363	E3 16.03
15) 4,4'-DDD	4.091	5.028	5.086	5.617	5.952	6.021		5.299	E3 13.68
16) Endosulfan II	4.733	5.354	5.439	5.777	6.106	6.198		5.601	E3 9.73
17) 4,4'-DDT	4.477	5.252	5.383	5.801	6.497	6.445		5.643	E3 13.68
18) Endrin Aldehyde	4.003	4.169	4.277	4.403	4.479	4.600		4.322	E3 5.02
19) Endosulfan Sulfat	4.626	5.063	4.990	5.172	5.717	5.600		5.195	E3 7.80
20) Methoxychlor	2.078	2.334	2.344	2.322	2.451	2.482		2.335	E3 6.10
21) Endrin Ketone	4.232	4.698	4.620	4.852	5.182	5.261		4.808	E3 7.92
22)L1Chlordane-A							2.095	2.095	E2 0.00
23)L1Chlordane-B							2.776	2.776	E2 0.00
24)L1Chlordane-C							6.805	6.805	E2 0.00
25)L1Chlordane-D							3.878	3.878	E2 0.00
26)L1Chlordane-E							5.394	5.394	E2 0.00
27)L1Chlordane-F							2.690	2.690	E2 0.00
28)H Toxaphene								6.753	E4 0.00
29)SCDecachlorobipheny	1.806	2.030	2.013	1.900	2.266	2.173		2.031	E3 8.35

Signal #2

1)S Tetrachloro-m-xyl	5.797	6.695	6.200	6.447	6.270	6.215		6.271	E3 4.75
2) alpha-BHC	0.835	0.927	0.935	1.009	1.046	1.059		0.968	E4 8.83
3) gamma-BHC (Lindan	8.145	9.049	8.606	9.247	9.613	9.837		9.083	E3 6.94
4) beta-BHC	4.178	4.299	3.961	3.932	3.885	3.974		4.038	E3 4.03
5) Heptachlor	7.196	7.959	7.427	7.783	8.073	8.065		7.751	E3 4.69
6) delta-BHC	7.582	8.400	8.112	8.659	8.994	9.288		8.506	E3 7.23
7) Aldrin	6.864	7.430	6.989	7.251	7.370	7.342		7.208	E3 3.18
8) Heptachlor Epoxid	6.680	6.953	6.526	6.630	6.835	6.782		6.734	E3 2.27
9) gamma-Chlordane	6.247	6.546	6.136	6.307	6.500	6.529		6.377	E3 2.69
10) alpha-Chlordane	6.272	6.597	6.122	6.142	6.335	6.283		6.292	E3 2.72
11) Endosulfan I	5.971	6.238	5.717	5.922	5.949	5.981		5.963	E3 2.79
12) 4,4'-DDE	5.752	6.212	5.906	5.992	6.320	6.425		6.101	E3 4.26
13) Dieldrin	6.154	6.557	6.165	6.287	6.487	6.560		6.368	E3 2.98
14) Endrin	5.540	5.953	5.506	5.530	5.784	5.721		5.672	E3 3.14
15) 4,4'-DDD	5.447	5.683	5.370	5.360	5.669	5.670		5.533	E3 2.84
16) Endosulfan II	5.907	6.087	5.699	5.762	5.861	5.872		5.865	E3 2.28

Initial Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GST623-ICC623
Lab FileID: ST17226.D

17)	4, 4' -DDT	4.398	4.638	4.434	4.523	4.826	4.872		4.615	E3	4.32
18)	Endrin Aldehyde	2.812	2.637	2.496	2.304	2.323	2.376		2.491	E3	8.05
19)	Endosulfan Sulfate	4.301	4.239	3.977	3.721	3.821	3.785		3.974	E3	6.17
20)	Methoxychlor	2.192	2.240	2.096	1.953	2.063	2.058		2.100	E3	4.89
21)	Endrin Ketone	3.908	3.849	3.722	3.537	3.732	3.677		3.737	E3	3.50
22)	L1Chlordane-A							2.683	2.683	E2	0.00
23)	L1Chlordane-B							3.518	3.518	E2	0.00
24)	L1Chlordane-C							6.601	6.601	E2	0.00
25)	L1Chlordane-D							9.104	9.104	E2	0.00
26)	L1Chlordane-E							2.912	2.912	E2	0.00
27)	L1Chlordane-F							1.379	1.379	E2	0.00
28)	H Toxaphene								7.566	E4	0.00
29)	SCDecachlorobiphenyl	1.937	1.923	1.772	1.575	1.757	1.651		1.769	E3	8.13

(#) = Out of Range ### Number of calibration levels exceeded format ###

8081A.M

Wed Oct 23 10:50:36 2002

GCECD2

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GST623-CC623
 Lab FileID: ST17243.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1022PEST\ST17243.D\ECD1B.CH Vial : 6
 Signal #2 : C:\HPCHEM\1\DATA\1022PEST\ST17243.D\ECD2A.CH
 Acq On : 22 Oct 2002 11:03 pm Operator: stephw
 Sample : CC623-40 Inst : ECD 3
 Misc : op6148,gst623,100,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 23 09:52:26 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	38.375	4.1	88	0.00
2	alpha-BHC	40.000	40.328	-0.8	91	0.00
3	gamma-BHC (Lindane)	40.000	40.175	-0.4	91	0.00
4	beta-BHC	40.000	37.918	5.2	92	0.00
5	Heptachlor	40.000	40.611	-1.5	93	0.00
6	delta-BHC	40.000	39.150	2.1	90	0.00
7	Aldrin	40.000	40.482	-1.2	94	0.00
8	Heptachlor Epoxide	40.000	39.243	1.9	94	0.00
9	gamma-Chlordane	40.000	41.929	-4.8	100	0.00
10	alpha-Chlordane	40.000	38.956	2.6	92	0.00
11	Endosulfan I	40.000	40.159	-0.4	95	0.00
12	4,4'-DDE	40.000	40.260	-0.6	92	0.00
13	Dieldrin	40.000	41.363	-3.4	95	0.00
14	Endrin	40.000	43.304	-8.3	101	0.00
15	4,4'-DDD	40.000	41.371	-3.4	98	0.00
16	Endosulfan II	40.000	40.284	-0.7	98	0.00
17	4,4'-DDT	40.000	39.141	2.1	95	0.00
18	Endrin Aldehyde	40.000	36.456	8.9	89	0.00
19	Endosulfan Sulfate	40.000	38.449	3.9	97	0.00
20	Methoxychlor	40.000	40.057	-0.1	101	0.00
21	Endrin Ketone	40.000	37.771	5.6	94	0.00
29 SC	Decachlorobiphenyl	40.000	40.760	-1.9	109	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	37.773	5.6	92	0.00
2	alpha-BHC	40.000	38.772	3.1	93	0.00
3	gamma-BHC (Lindane)	40.000	38.873	2.8	95	0.00
4	beta-BHC	40.000	37.572	6.1	96	0.00
5	Heptachlor	40.000	37.759	5.6	94	0.00
6	delta-BHC	40.000	38.325	4.2	94	0.00
7	Aldrin	40.000	38.244	4.4	95	0.00
8	Heptachlor Epoxide	40.000	37.966	5.1	96	0.00
9	gamma-Chlordane	40.000	38.128	4.7	96	0.00
10	alpha-Chlordane	40.000	38.605	3.5	99	0.00
11	Endosulfan I	40.000	37.955	5.1	96	0.00
12	4,4'-DDE	40.000	39.177	2.1	100	0.00
13	Dieldrin	40.000	39.816	0.5	101	0.00
14	Endrin	40.000	41.933	-4.8	108	0.00
15	4,4'-DDD	40.000	39.399	1.5	102	0.00
16	Endosulfan II	40.000	38.791	3.0	99	0.00

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GST623-CC623
 Lab FileID: ST17243.D

17	4, 4' -DDT	40.000	38.164	4.6	97	0.00
18	Endrin Aldehyde	40.000	36.147	9.6	98	0.00
19	Endosulfan Sulfate	40.000	39.675	0.8	106	0.00
20	Methoxychlor	40.000	40.499	-1.2	109	0.00
21	Endrin Ketone	40.000	39.638	0.9	105	0.00
29 SC	Decachlorobiphenyl	40.000	43.209	-8.0	121	-0.01

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\1\DATA\1022PEST\ST17243.D\ECD1B.CH Vial : 6
 Signal #2 : C:\HPCHEM\1\DATA\1022PEST\ST17243.D\ECD2A.CH
 Acq On : 22 Oct 2002 11:03 pm Operator: stephw
 Sample : CC623-40 Inst : ECD 3
 Misc : op6148,gst623,100,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 23 09:52:26 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.89#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.14#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.80#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.84#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.05#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.47#
28 H Toxaphene	-1.000	0.000	0.0	0	-11.46#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.05#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.29#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.25#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.33#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.41#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.58#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.11#

(#) = Out of Range
 ST17226.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Wed Oct 23 10:51:25 2002 GCECD2

Initial Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD281-ICC281
 Lab FileID: DD07490.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\8081A_P.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Oct 24 14:34:18 2002
 Response via : Initial Calibration

Calibration Files

5 =DD07487.D 10 =DD07488.D 20 =DD07489.D
 40 =DD07490.D 60 =DD07491.D 80 =DD07492.D c200 =DD07494.D

Compound	5	10	20	40	60	80	c200	Avg	%RSD
1)S Tetrachloro-m-xyl	2.370	2.518	2.449	2.302	2.504	2.357		2.417	E3 3.60
2) alpha-BHC	3.681	3.806	3.964	3.819	4.467	4.373		4.018	E3 8.09
3) gamma-BHC (Lindan)	3.429	3.602	3.554	3.510	3.891	3.807		3.632	E3 4.94
4) beta-BHC	1.591	1.652	1.607	1.419	1.527	1.415		1.535	E3 6.50
5) Heptachlor	3.195	3.145	2.975	2.879	3.101	3.009		3.051	E3 3.86
6) delta-BHC	2.851	3.083	3.157	2.969	3.449	3.193		3.117	E3 6.60
7) Aldrin	2.648	2.586	2.562	2.389	2.644	2.590		2.570	E3 3.70
8) Heptachlor Epoxid	2.317	2.482	2.406	2.280	2.618	2.460		2.427	E3 5.04
9) gamma-Chlordane	2.270	2.432	2.438	2.354	2.717	2.527		2.456	E3 6.29
10) alpha-Chlordane	2.390	2.640	2.584	2.498	2.933	2.769		2.636	E3 7.35
11) Endosulfan I	2.240	2.517	2.444	2.399	2.796	2.629		2.504	E3 7.69
12) 4,4'-DDE	1.937	2.187	2.239	2.361	2.772	2.688		2.364	E3 13.39
13) Dieldrin	2.375	2.646	2.715	2.770	3.277	2.991		2.796	E3 11.04
14) Endrin	2.237	2.441	2.566	2.644	3.009	2.943		2.640	E3 11.17
15) 4,4'-DDD	1.632	1.876	1.953	2.052	2.384	2.310		2.034	E3 13.77
16) Endosulfan II	2.273	2.497	2.510	2.529	2.915	2.756		2.580	E3 8.70
17) 4,4'-DDT	2.084	2.278	2.386	2.401	2.791	2.763		2.450	E3 11.32
18) Endrin Aldehyde	1.988	2.105	2.113	2.063	2.242	2.208		2.120	E3 4.41
19) Endosulfan Sulfate	2.697	2.977	2.981	2.812	3.261	3.048		2.963	E3 6.57
20) Methoxychlor	1.128	1.254	1.315	1.313	1.384	1.334		1.288	E3 6.90
21) Endrin Ketone	2.494	2.690	2.728	2.726	3.029	3.004		2.778	E3 7.33
22)L1Chlordane-A							1.177	1.177	E2 0.00
23)L1Chlordane-B							1.559	1.559	E2 0.00
24)L1Chlordane-C							3.699	3.699	E2 0.00
25)L1Chlordane-D							2.620	2.620	E2 0.00
26)L1Chlordane-E							6.535	6.535	E1 0.00
27)L1Chlordane-F							1.253	1.253	E2 0.00
28)H Toxaphene							3.365	3.365	E4 0.00
29)SCDecachlorobiphenyl	1.476	1.577	1.509	1.399	1.481	1.465		1.484	E3 3.91

Signal #2

1)S Tetrachloro-m-xyl	5.476	5.605	5.739	5.440	6.056	5.948		5.710	E3 4.40
2) alpha-BHC	0.887	0.955	1.010	0.996	1.165	1.147		1.027	E4 10.64
3) gamma-BHC (Lindan)	0.853	0.920	0.974	0.948	1.104	1.055		0.976	E4 9.35
4) beta-BHC	3.984	4.107	4.118	3.886	4.347	4.055		4.083	E3 3.81
5) Heptachlor	0.876	0.924	0.951	0.912	1.056	1.007		0.954	E4 6.96
6) delta-BHC	0.760	0.845	0.900	0.880	1.031	0.996		0.902	E4 11.01
7) Aldrin	7.653	8.092	8.434	8.229	9.540	9.031		8.496	E3 8.03
8) Heptachlor Epoxid	7.064	7.281	7.236	7.106	8.041	7.652		7.397	E3 5.11
9) gamma-Chlordane	6.604	6.864	6.958	6.878	7.759	7.410		7.079	E3 5.99
10) alpha-Chlordane	6.405	6.693	6.575	6.450	7.384	6.969		6.746	E3 5.52
11) Endosulfan I	5.936	6.116	6.171	6.032	6.872	6.609		6.289	E3 5.85
12) 4,4'-DDE	5.385	5.697	5.811	5.803	6.890	6.520		6.018	E3 9.41
13) Dieldrin	6.158	6.624	6.642	6.580	7.532	7.104		6.773	E3 7.05
14) Endrin	5.731	6.035	6.012	6.068	6.938	6.631		6.236	E3 7.25
15) 4,4'-DDD	4.507	4.777	4.724	4.861	5.565	5.337		4.962	E3 8.13
16) Endosulfan II	5.535	5.972	5.820	5.948	6.598	6.209		6.014	E3 6.00

Initial Calibration Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GDD281-ICC281
Lab FileID: DD07490.D

17)	4, 4' -DDT	5.009	5.117	5.030	5.117	5.756	5.650	5.280	E3	6.30	
18)	Endrin Aldehyde	3.078	3.340	3.264	3.138	3.381	3.310	3.252	E3	3.67	
19)	Endosulfan Sulfat	4.250	4.900	4.833	4.714	5.240	5.046	4.831	E3	6.98	
20)	Methoxychlor	2.066	2.520	2.409	2.430	2.596	2.529	2.425	E3	7.78	
21)	Endrin Ketone	4.049	4.575	4.509	4.523	5.037	4.786	4.580	E3	7.19	
22)	L1Chlordane-A							3.073	3.073	E2	0.00
23)	L1Chlordane-B							4.316	4.316	E2	0.00
24)	L1Chlordane-C							7.916	7.916	E2	0.00
25)	L1Chlordane-D							6.675	6.675	E2	0.00
26)	L1Chlordane-E							4.642	4.642	E2	0.00
27)	L1Chlordane-F							2.762	2.762	E2	0.00
28)	H Toxaphene							5.246	5.246	E4	0.00
29)	SCDecachlorobiphenyl	2.559	2.881	2.749	2.763	2.881	2.760	2.766	E3	4.27	

(#) = Out of Range ### Number of calibration levels exceeded format ###

8081A_P.M

Fri Oct 25 09:54:25 2002

GCECD2

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD281-CC281
 Lab FileID: DD07507.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1024PEST\DD07507.D\ECD1B.CH Vial : 6
 Signal #2 : C:\HPCHEM\2\DATA\1024PEST\DD07507.D\ECD2A.CH
 Acq On : 24 Oct 2002 6:08 pm Operator: stephw
 Sample : CC281-40 Inst : ECD 4
 Misc : op6167,gdd281,100,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A_P.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Oct 24 14:34:18 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	39.736	0.7	104	0.00
2	alpha-BHC	40.000	41.489	-3.7	109	0.00
3	gamma-BHC (Lindane)	40.000	40.358	-0.9	104	0.00
4	beta-BHC	40.000	39.256	1.9	106	0.00
5	Heptachlor	40.000	39.063	2.3	103	0.00
6	delta-BHC	40.000	40.137	-0.3	105	0.00
7	Aldrin	40.000	38.392	4.0	103	0.00
8	Heptachlor Epoxide	40.000	39.417	1.5	105	0.00
9	gamma-Chlordane	40.000	40.036	-0.1	104	0.00
10	alpha-Chlordane	40.000	40.013	-0.0	106	0.00
11	Endosulfan I	40.000	39.931	0.2	104	0.00
12	4,4'-DDE	40.000	41.214	-3.0	103	0.00
13	Dieldrin	40.000	40.566	-1.4	102	0.00
14	Endrin	40.000	41.472	-3.7	104	0.00
15	4,4'-DDD	40.000	42.267	-5.7	105	0.00
16	Endosulfan II	40.000	40.669	-1.7	104	0.00
17	4,4'-DDT	40.000	41.558	-3.9	106	0.00
18	Endrin Aldehyde	40.000	38.622	3.4	99	0.00
19	Endosulfan Sulfate	40.000	39.511	1.2	104	0.00
20	Methoxychlor	40.000	41.487	-3.7	102	0.00
21	Endrin Ketone	40.000	40.395	-1.0	103	0.00
29 SC	Decachlorobiphenyl	40.000	41.245	-3.1	109	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	40.962	-2.4	107	0.00
2	alpha-BHC	40.000	42.578	-6.4	110	0.00
3	gamma-BHC (Lindane)	40.000	41.704	-4.3	107	0.00
4	beta-BHC	40.000	40.017	-0.0	105	0.00
5	Heptachlor	40.000	40.713	-1.8	106	0.00
6	delta-BHC	40.000	41.221	-3.1	106	0.00
7	Aldrin	40.000	40.944	-2.4	106	0.00
8	Heptachlor Epoxide	40.000	40.237	-0.6	105	0.00
9	gamma-Chlordane	40.000	40.531	-1.3	104	0.00
10	alpha-Chlordane	40.000	40.609	-1.5	106	0.00
11	Endosulfan I	40.000	40.105	-0.3	105	0.00
12	4,4'-DDE	40.000	41.394	-3.5	107	0.00
13	Dieldrin	40.000	40.629	-1.6	105	0.00
14	Endrin	40.000	41.017	-2.5	105	0.00
15	4,4'-DDD	40.000	41.736	-4.3	107	0.00
16	Endosulfan II	40.000	39.716	0.7	100	0.00

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD281-CC281
 Lab FileID: DD07507.D

17	4, 4' -DDT	40.000	39.309	1.7	101	0.00
18	Endrin Aldehyde	40.000	38.744	3.1	100	0.00
19	Endosulfan Sulfate	40.000	41.094	-2.7	105	0.00
20	Methoxychlor	40.000	42.014	-5.0	105	0.00
21	Endrin Ketone	40.000	40.964	-2.4	104	0.00
29 SC	Decachlorobiphenyl	40.000	42.036	-5.1	105	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1024PEST\DD07507.D\ECD1B.CH Vial : 6
 Signal #2 : C:\HPCHEM\2\DATA\1024PEST\DD07507.D\ECD2A.CH
 Acq On : 24 Oct 2002 6:08 pm Operator: stephw
 Sample : CC281-40 Inst : ECD 4
 Misc : op6167,gdd281,100,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A_P.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Oct 24 14:34:18 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.44#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-7.68#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.33#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.54#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.60#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.00#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.30#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.90#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.12#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.99#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.10#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.12#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.16#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.10#

(#) = Out of Range
 DD07490.D 8081A_P.M

SPCC's out = 0 CCC's out = 0
 Fri Oct 25 09:55:05 2002 GCECD2

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GST623-CC623
 Lab FileID: ST17254.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1022PEST\ST17254.D\ECD1B.CH Vial : 6
 Signal #2 : C:\HPCHEM\1\DATA\1022PEST\ST17254.D\ECD2A.CH
 Acq On : 23 Oct 2002 3:00 am Operator: stephw
 Sample : CC623-40 Inst : ECD 3
 Misc : op6148,gst623,100,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 23 09:52:26 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	40.596	-1.5	93	0.00
2	alpha-BHC	40.000	42.098	-5.2	95	0.00
3	gamma-BHC (Lindane)	40.000	42.567	-6.4	97	0.00
4	beta-BHC	40.000	40.031	-0.1	97	0.00
5	Heptachlor	40.000	42.169	-5.4	97	0.00
6	delta-BHC	40.000	42.310	-5.8	98	0.00
7	Aldrin	40.000	42.733	-6.8	99	0.00
8	Heptachlor Epoxide	40.000	40.608	-1.5	97	0.00
9	gamma-Chlordane	40.000	42.504	-6.3	101	0.00
10	alpha-Chlordane	40.000	41.610	-4.0	98	0.00
11	Endosulfan I	40.000	42.911	-7.3	101	0.00
12	4,4'-DDE	40.000	41.759	-4.4	96	0.00
13	Dieldrin	40.000	43.012	-7.5	99	0.00
14	Endrin	40.000	45.174	-12.9	105	0.00
15	4,4'-DDD	40.000	42.288	-5.7	100	0.00
16	Endosulfan II	40.000	41.386	-3.5	100	0.00
17	4,4'-DDT	40.000	42.003	-5.0	102	0.00
18	Endrin Aldehyde	40.000	38.208	4.5	94	0.00
19	Endosulfan Sulfate	40.000	41.285	-3.2	104	0.00
20	Methoxychlor	40.000	41.058	-2.6	103	0.00
21	Endrin Ketone	40.000	40.509	-1.3	100	0.00
29 SC	Decachlorobiphenyl	40.000	41.556	-3.9	111	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	41.263	-3.2	100	0.00
2	alpha-BHC	40.000	42.634	-6.6	102	0.00
3	gamma-BHC (Lindane)	40.000	42.681	-6.7	105	0.00
4	beta-BHC	40.000	40.804	-2.0	105	0.00
5	Heptachlor	40.000	42.624	-6.6	106	0.00
6	delta-BHC	40.000	42.475	-6.2	104	0.00
7	Aldrin	40.000	42.945	-7.4	107	0.00
8	Heptachlor Epoxide	40.000	42.255	-5.6	107	0.00
9	gamma-Chlordane	40.000	43.487	-8.7	110	0.00
10	alpha-Chlordane	40.000	42.305	-5.8	108	0.00
11	Endosulfan I	40.000	42.561	-6.4	107	0.00
12	4,4'-DDE	40.000	43.455	-8.6	111	0.00
13	Dieldrin	40.000	42.849	-7.1	109	0.00
14	Endrin	40.000	46.262	-15.7#	119	0.00
15	4,4'-DDD	40.000	43.793	-9.5	113	0.00
16	Endosulfan II	40.000	42.852	-7.1	109	0.00

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GST623-CC623
 Lab FileID: ST17254.D

17	4, 4' -DDT	40.000	43.829	-9.6	112	0.00
18	Endrin Aldehyde	40.000	40.393	-1.0	109	0.00
19	Endosulfan Sulfate	40.000	44.427	-11.1	119	0.00
20	Methoxychlor	40.000	47.913	-19.8#	129	0.00
21	Endrin Ketone	40.000	45.425	-13.6	120	0.00
29 SC	Decachlorobiphenyl	40.000	50.142	-25.4	141	-0.01

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\1\DATA\1022PEST\ST17254.D\ECD1B.CH Vial : 6
 Signal #2 : C:\HPCHEM\1\DATA\1022PEST\ST17254.D\ECD2A.CH
 Acq On : 23 Oct 2002 3:00 am Operator: stephw
 Sample : CC623-40 Inst : ECD 3
 Misc : op6148,gst623,100,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 23 09:52:26 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.89#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.14#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.80#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.84#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.05#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.47#
28 H Toxaphene	-1.000	0.000	0.0	0	-11.46#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.05#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.29#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.25#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.33#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.41#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.58#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.11#

(#) = Out of Range
 ST17226.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Wed Oct 23 10:51:28 2002 GCECD2

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GST623-ECC623
 Lab FileID: ST17262.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\1022PEST\ST17262.D\ECD1B.CH Vial : 3
 Signal #2 : C:\HPCHEM\1\DATA\1022PEST\ST17262.D\ECD2A.CH
 Acq On : 23 Oct 2002 5:52 am Operator: stephw
 Sample : ECC623-20 Inst : ECD 3
 Misc : op6150,gst623,30.8,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 23 09:52:26 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	20.000	19.220	3.9	99	0.00
2	alpha-BHC	20.000	18.261	8.7	96	0.00
3	gamma-BHC (Lindane)	20.000	19.205	4.0	99	0.00
4	beta-BHC	20.000	19.746	1.3	103	0.00
5	Heptachlor	20.000	18.923	5.4	97	0.00
6	delta-BHC	20.000	19.108	4.5	100	0.00
7	Aldrin	20.000	19.660	1.7	99	0.00
8	Heptachlor Epoxide	20.000	19.843	0.8	103	0.00
9	gamma-Chlordane	20.000	19.999	0.0	103	0.00
10	alpha-Chlordane	20.000	19.694	1.5	104	0.00
11	Endosulfan I	20.000	18.922	5.4	98	0.00
12	4,4'-DDE	20.000	19.234	3.8	102	0.00
13	Dieldrin	20.000	19.238	3.8	102	0.00
14	Endrin	20.000	20.477	-2.4	108	0.00
15	4,4'-DDD	20.000	19.538	2.3	102	0.00
16	Endosulfan II	20.000	18.588	7.1	96	0.00
17	4,4'-DDT	20.000	19.639	1.8	103	0.00
18	Endrin Aldehyde	20.000	18.389	8.1	93	0.00
19	Endosulfan Sulfate	20.000	18.886	5.6	98	0.00
20	Methoxychlor	20.000	19.830	0.9	99	0.00
21	Endrin Ketone	20.000	18.907	5.5	98	0.00
29 SC	Decachlorobiphenyl	20.000	22.133	-10.7	112	0.00

Signal #2

1 S	Tetrachloro-m-xylene	20.000	20.408	-2.0	103	0.00
2	alpha-BHC	20.000	20.285	-1.4	105	0.00
3	gamma-BHC (Lindane)	20.000	20.536	-2.7	108	0.00
4	beta-BHC	20.000	21.111	-5.6	108	0.00
5	Heptachlor	20.000	21.012	-5.1	110	0.00
6	delta-BHC	20.000	21.019	-5.1	110	0.00
7	Aldrin	20.000	20.920	-4.6	108	0.00
8	Heptachlor Epoxide	20.000	21.194	-6.0	109	0.00
9	gamma-Chlordane	20.000	21.503	-7.5	112	0.00
10	alpha-Chlordane	20.000	21.920	-9.6	113	0.00
11	Endosulfan I	20.000	21.543	-7.7	112	0.00
12	4,4'-DDE	20.000	21.324	-6.6	110	0.00
13	Dieldrin	20.000	21.335	-6.7	110	0.00
14	Endrin	20.000	23.331	-16.7#	120	0.00
15	4,4'-DDD	20.000	22.148	-10.7	114	0.00
16	Endosulfan II	20.000	22.429	-12.1	115	0.00

Continuing Calibration Summary

Job Number: F15057
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GST623-ECC623
 Lab FileID: ST17262.D

17	4, 4' -DDT	20.000	21.781	-8.9	113	0.00
18	Endrin Aldehyde	20.000	21.612	-8.1	108	0.00
19	Endosulfan Sulfate	20.000	24.217	-21.1#	121	-0.01
20	Methoxychlor	20.000	25.256	-26.3#	127	-0.01
21	Endrin Ketone	20.000	24.142	-20.7#	121	-0.01
29 SC	Decachlorobiphenyl	20.000	27.869	-39.3#	139	-0.02

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\1\DATA\1022PEST\ST17262.D\ECD1B.CH Vial : 3
 Signal #2 : C:\HPCHEM\1\DATA\1022PEST\ST17262.D\ECD2A.CH
 Acq On : 23 Oct 2002 5:52 am Operator: stephw
 Sample : ECC623-20 Inst : ECD 3
 Misc : op6150,gst623,30.8,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 23 09:52:26 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.89#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.14#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.80#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.84#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.05#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.47#
28 H Toxaphene	-1.000	0.000	0.0	0	-11.46#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.05#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.29#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.25#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.33#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.41#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.58#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.11#

(#) = Out of Range
 ST17223.D 8081A.M

SPCC's out = 0 CCC's out = 1
 Wed Oct 23 10:50:52 2002 GCECD2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC Date Analyzed: 10/22/02 Methods: SW846 6010B
Analyst: DM Run ID: MA3032
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:18	MA3032-ICV1	1		
10:21	MA3032-ICB1	1		
10:23	MA3032-CRI 1	1		
10:25	MA3032-CRI 2	1		
10:27	MA3032-ICSA1	1		
10:29	MA3032-ICSA2	1		
10:31	MA3032-IC SAB1	1		
10:40	MA3032-CCV1	1		
10:46	MA3032-CCB1	1		
10:50	MP4833-MB1	1		
10:53	MP4833-B1	1		
10:59	F15092-1	1		(sample used for QC only; not part of login F15057)
11:03	MP4833-D1	1		
11:06	MP4833-SD1	5		
11:10	MP4833-S1	1		
11:13	MP4833-S2	1		
11:19	ZZZZZZ	1		
11:23	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:30	MA3032-CCV2	1		
11:36	MA3032-CCB2	1		
11:39	ZZZZZZ	1		
11:43	ZZZZZZ	1		
11:46	ZZZZZZ	1		
11:50	ZZZZZZ	1		
11:53	ZZZZZZ	1		
11:57	ZZZZZZ	1		
12:00	ZZZZZZ	1		
12:04	ZZZZZZ	1		
12:07	ZZZZZZ	1		
12:11	ZZZZZZ	1		
12:14	MA3032-CCV3	1		
12:19	MA3032-CCB3	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC Date Analyzed: 10/22/02 Methods: SW846 6010B
Analyst: DM Run ID: MA3032
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
12: 23	ZZZZZZ	1		
12: 26	MP4830-MB1	1		
12: 30	MP4830-B1	1		
12: 36	F15071-1	1		(sample used for QC only; not part of login F15057)
12: 39	MP4830-D1	1		
12: 43	MP4830-SD1	5		
12: 46	MP4830-S1	1		
12: 51	ZZZZZZ	1		
12: 54	ZZZZZZ	1		
12: 58	ZZZZZZ	1		
13: 01	MA3032-CCV4	1		
13: 07	MA3032-CCB4	1		
13: 11	ZZZZZZ	1		
13: 14	ZZZZZZ	1		
13: 18	ZZZZZZ	1		
13: 21	ZZZZZZ	1		
13: 25	ZZZZZZ	1		
13: 28	MP4830-MB2	1		
13: 32	MP4830-B2	1		
13: 38	MP4831-MB1	1		
13: 41	MP4831-B1	1		
13: 46	F15057-1	1		
13: 50	MA3032-CCV5	1		
13: 54	MA3032-CCB5	1		
13: 57	MP4831-D1	1		
14: 00	MP4831-SD1	5		
14: 03	MP4831-S1	1		
14: 08	ZZZZZZ	1		
14: 11	ZZZZZZ	1		
14: 14	ZZZZZZ	1		
14: 18	ZZZZZZ	1		
14: 21	ZZZZZZ	1		
14: 24	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC Date Analyzed: 10/22/02 Methods: SW846 6010B
Analyst: DM Run ID: MA3032
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
14:27	ZZZZZZ	1		
14:31	MA3032-CCV6	1		
14:36	MA3032-CCB6	1		
14:39	MP4831-MB2	1		
14:43	MP4831-B2	1		
14:48	MP4832-MB1	1		
14:52	MP4832-B1	1		
14:56	F15057-2	1		
14:59	MP4832-D1	1		
15:03	MP4832-SD1	5		
15:06	MP4832-S1	1		
15:09	MP4832-MB2	1		
15:12	MP4832-B2	1		
----->	Last reportable sample/prep for job F15057			
15:15	MA3032-CCV7	1		
15:21	MA3032-CCB7	1		
----->	Last reportable CCB for job F15057			
	Refer to raw data for calibration curve and standards.			

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC
QC Limits: result < RL

Date Analyzed: 10/22/02
Run ID: MA3032

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5								
Arsenic	10	2.8	4.8	<10	0.61	<10	-0.97	<10	-1.3	<10
Barium	200	.49	-0.32	<200	-1.2	<200	-1.1	<200	-1.1	<200
Beryllium	5.0	.26								
Cadmium	5.0	.26	-0.25	<5.0	-1.4	<5.0	-1.4	<5.0	-1.4	<5.0
Calcium	1000	3.8								
Chromium	10	.43	-0.38	<10	-0.91	<10	-1.1	<10	-1.2	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1								
Lead	5.0	1.2	2.5	<5.0	1.2	<5.0	0.94	<5.0	2.6	<5.0
Magnesium	5000	9.9								
Manganese	15	.16								
Molybdenum	50	.75								
Nickel	40	1.1								
Potassium	5000	14								
Selenium	10	2	7.0	<10	6.6	<10	6.2	<10	6.7	<10
Silver	10	.55	-0.10	<10	-0.30	<10	-0.060	<10	0.16	<10
Sodium	5000	150	anr							
Thallium	10	1.5								
Tin	50	2.2								
Vanadium	50	.47								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC
QC Limits: result < RL

Date Analyzed: 10/22/02
Run ID: MA3032

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	6.6								
Antimony	5.0	1.5								
Arsenic	10	2.8	-1.6	<10	1.3	<10	1.7	<10	1.9	<10
Barium	200	.49	-1.2	<200	-0.74	<200	-1.2	<200	-0.68	<200
Beryllium	5.0	.26								
Cadmium	5.0	.26	-1.3	<5.0	-1.2	<5.0	-1.4	<5.0	-1.3	<5.0
Calcium	1000	3.8								
Chromium	10	.43	-0.88	<10	0.66	<10	-0.93	<10	-1.2	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1								
Lead	5.0	1.2	0.71	<5.0	2.4	<5.0	1.6	<5.0	1.2	<5.0
Magnesium	5000	9.9								
Manganese	15	.16								
Molybdenum	50	.75								
Nickel	40	1.1								
Potassium	5000	14								
Selenium	10	2	2.5	<10	8.0	<10	3.4	<10	4.4	<10
Silver	10	.55	0.13	<10	-0.18	<10	0.020	<10	0.050	<10
Sodium	5000	150	anr							
Thallium	10	1.5								
Tin	50	2.2								
Vanadium	50	.47								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 10/22/02
Run ID: MA3032

Methods: SW846 6010B
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	2080	104.0	2000	2020	101.0	2000	2050	102.5
Barium	2000	2070	103.5	2000	2000	100.0	2000	2020	101.0
Beryllium									
Cadmium	2000	2160	108.0	2000	2090	104.5	2000	2100	105.0
Calcium									
Chromium	2000	2010	100.5	2000	1950	97.5	2000	1950	97.5
Cobalt									
Copper	anr								
Iron									
Lead	2000	2070	103.5	2000	2020	101.0	2000	2020	101.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	2000	2120	106.0	2000	2070	103.5	2000	2090	104.5
Silver	250	267	106.8	250	258	103.2	250	257	102.8
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC Limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 10/22/02
Run ID: MA3032

Methods: SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	2140	107.0	2000	2080	104.0	2000	2100	105.0
Barium	2000	2110	105.5	2000	2030	101.5	2000	2040	102.0
Beryllium									
Cadmium	2000	2200	110.0	2000	2130	106.5	2000	2140	107.0
Calcium									
Chromium	2000	2050	102.5	2000	1980	99.0	2000	1990	99.5
Cobalt									
Copper	anr								
Iron									
Lead	2000	2110	105.5	2000	2040	102.0	2000	2040	102.0
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	2000	2190	109.5	2000	2140	107.0	2000	2160	108.0
Silver	250	267	106.8	250	256	102.4	250	256	102.4
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC Limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 10/22/02
Run ID: MA3032

Methods: SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum						
Antimony						
Arsenic	2000	2130	106.5	2000	2130	106.5
Barium	2000	2050	102.5	2000	2050	102.5
Beryllium						
Cadmium	2000	2150	107.5	2000	2150	107.5
Calcium						
Chromium	2000	1990	99.5	2000	1990	99.5
Cobalt						
Copper	anr					
Iron						
Lead	2000	2040	102.0	2000	2040	102.0
Magnesium						
Manganese						
Molybdenum						
Nickel						
Potassium						
Selenium	2000	2170	108.5	2000	2180	109.0
Silver	250	254	101.6	250	254	101.6
Sodium	anr					
Thallium						
Tin						
Vanadium						
Zinc						

(*) Outside of QC Limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

File ID: IR1022M5.ASC
 QC Limits: 70 to 130 % Recovery

Date Analyzed: 10/22/02
 Run ID: MA3032

Methods: SW846 6010B
 Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec	CRI Results	% Rec
Aluminum	400					
Antimony	10					
Arsenic	20				18.4	92.0
Barium	400				403	100.8
Beryllium	10					
Cadmium	10				9.5	95.0
Calcium	2000					
Chromium	20				19.6	98.0
Cobalt	100					
Copper	50					
Iron	600					
Lead	10				12.6	126.0
Magnesium	10000					
Manganese	30					
Molybdenum	100					
Nickel	80					
Potassium	10000					
Selenium	10				13.3	130.0
Silver	20				19.4	97.0
Sodium	10000					
Thallium	20					
Tin	100					
Vanadium	100					
Zinc	40					

(*) Outside of QC Limits
 (anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1022M5.ASC Date Analyzed: 10/22/02 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA3032 Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSA Results	% Rec	ICSAB Results	% Rec
Aluminum	500000	500000			515000	103.0	501000	100.2
Antimony		1000			1.2		1030	103.0
Arsenic		1000			0.060		1020	102.0
Barium		500			1.3		522	104.4
Beryllium		500			-2.4		510	102.0
Cadmium		1000			1.8		978	97.8
Calcium	500000	500000			479000H	95.8	465000H	93.0
Chromium		500			1.3		472	94.4
Cobalt		500			-1.1		473	94.6
Copper		500			-2.3		528	105.6
Iron	200000	200000			205000	102.5	198000	99.0
Lead		1000			4.8		967	96.7
Magnesium	500000	500000			541000	108.2	522000	104.4
Manganese		500			-1.6		500	100.0
Molybdenum		1000			-8.7		984	98.4
Nickel		1000			2.0		964	96.4
Potassium					669		296	
Selenium		1000			0.67		982	98.2
Silver		1000			-0.45		1090H	109.0
Sodium					126		198	
Thallium		1000			0.50		972	97.2
Tin		1000			-3.8		1010	101.0
Vanadium		500			2.8		507	101.4
Zinc		1000			-4.8		945	94.5

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21023W1.PRN
Analyst: DM
Parameters: Hg

Date Analyzed: 10/23/02
Run ID: MA3034
Methods: SW846 7470A

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:04	MA3034-ICV1	1		
13:06	MA3034-ICB1	1		
13:08	MA3034-CRI 1	1		
13:10	MA3034-CCV1	1		
13:12	MA3034-CCB1	1		
13:13	MP4834-MB1	1		
13:15	MP4834-B1	1		
13:18	F15057-1	1		
13:19	MP4834-D1	1		
13:24	MP4834-S1	1		
13:26	ZZZZZ	1		
13:28	ZZZZZ	1		
13:29	ZZZZZ	1		
13:32	ZZZZZ	1		
13:35	ZZZZZ	1		
13:37	MA3034-CCV2	1		
13:39	MA3034-CCB2	1		
13:42	ZZZZZ	1		
13:44	ZZZZZ	1		
13:46	MP4834-MB2	1		
13:48	MP4834-B2	1		
13:49	MP4839-MB1	1		
13:51	MP4839-B1	1		
13:53	F15057-2	1		
13:55	MP4839-D1	1		
13:57	MP4839-S1	1		
13:58	MP4839-MB2	1		
14:00	MA3034-CCV3	1		
14:02	MA3034-CCB3	1		
14:03	MP4839-B2	1		
----->	Last reportable sample/prep for job F15057			
14:06	MA3034-CCV4	1		
14:07	MA3034-CCB4	1		
----->	Last reportable CCB for job F15057			
	Refer to raw data for calibration curve and standards.			

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21023W1.PRN Date Analyzed: 10/23/02 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA3034 Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Mercury	1.0	.022	0.012	<1.0	0.027	<1.0	0.030	<1.0	0.020	<1.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21023W1.PRN Date Analyzed: 10/23/02 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA3034 Units: ug/l

Metal	RL	IDL	CCB raw	final
Mercury	1.0	.022	-0.017	<1.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21023W1.PRN Date Analyzed: 10/23/02 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA3034 Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	3.1	103.3	3.0	3.0	100.0	3.0	3.1	103.3

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21023W1.PRN Date Analyzed: 10/23/02 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA3034 Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	3.1	103.3	3.0	3.1	103.3

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21023W1.PRN
QC Limits: to % Recovery

Date Analyzed: 10/23/02
Run ID: MA3034

Methods: SW846 7470A
Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Mercury	0.20		0.19	95.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4831
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 10/21/02 10/21/02

Metal	RL	IDL	MB raw	fi nal	MB raw	fi nal
Aluminum	0.20	.0066				
Antimony	0.0050	.0015				
Arsenic	0.010	.0028	-0.00012	<0.010	-0.0046	<0.010
Barium	1.0	.00049	-0.00093	<1.0	0.018	<1.0
Beryllium	0.0050	.00026				
Cadmium	0.0050	.00026	-0.0019	<0.0050	-0.0017	<0.0050
Calcium	5.0	.0038				
Chromium	0.010	.00043	-0.0014	<0.010	-0.00097	<0.010
Cobalt	0.050	.0005				
Copper	0.025	.00044				
Iron	0.30	.0071				
Lead	0.010	.0012	0.0025	<0.010	0.0022	<0.010
Magnesium	5.0	.0099				
Manganese	0.015	.00016				
Molybdenum	0.050	.00075				
Nickel	0.040	.0011				
Potassium	5.0	.014				
Selenium	0.010	.002	0.0037	<0.010	0.0064	<0.010
Silver	0.010	.00055	0.000060	<0.010	0.00016	<0.010
Sodium	5.0	.15				
Thallium	0.010	.0015				
Tin	0.050	.0022				
Vanadium	0.050	.00047				
Zinc	0.10	.00059				

Associated samples MP4831: F15057-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4831
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/21/02 10/21/02

Metal	F15057-1 Original	DUP	RPD	QC Limits	F15057-1 Original	MS	Spike lot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.011	0.0085	25.6	0-29	0.011	4.5	4.0	112.2	75-120
Barium	0.94	0.92	2.2	0-20	0.94	5.0	4.0	101.5	72-120
Beryllium									
Cadmium	0.18	0.18	0.0	0-20	0.18	0.28	0.10	100.0	72-120
Calcium									
Chromium	13.1	12.8	2.3	0-47	13.1	13.4	0.400	75.0	69-122
Cobalt									
Copper									
Iron									
Lead	0.12	0.11	8.7	0-44	0.12	1.1	1.0	98.0	70-126
Magnesium									
Manganese									
Molybdenum									
Nickel									
Selenium	0.0056	0.0021	90.9 (a)	0-36	0.0056	4.7	4.0	117.4	74-120
Silver	0.0	0.0	NC	0-20	0.0	0.11	0.10	110.0	52-126
Sodium									
Tin									
Vanadium									

Associated samples MP4831: F15057-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4831
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/21/02 10/21/02

Metal	BSP Result	Spike lot MPFLICP	% Rec	QC Limits	BSP Result	Spike lot MPFLICP	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	3.9	4.0	97.5	80-120	4.4	4.0	110.0	80-120
Barium	4.0	4.0	100.0	80-120	4.0	4.0	100.0	80-120
Beryllium								
Cadmium	0.10	0.10	100.0	80-120	0.10	0.10	100.0	80-120
Calcium								
Chromium	0.40	0.40	100.0	80-120	0.40	0.40	100.0	80-120
Cobalt								
Copper								
Iron								
Lead	1.0	1.0	100.0	80-120	1.0	1.0	100.0	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium	4.0	4.0	100.0	80-120	4.6	4.0	115.0	80-120
Silver	0.098	0.10	98.0	80-120	0.11	0.10	110.0	80-120
Sodium								
Thallium								
Tin								
Vanadium								
Zinc								

Associated samples MP4831: F15057-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4831
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/21/02

Metal	F15057-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	10.6	0.00	100.0(a)	0-10
Barium	940	936	0.4	0-10
Beryllium				
Cadmium	181	182	0.6	0-10
Calcium				
Chromium	13100	13400	2.3	0-10
Cobalt				
Copper				
Iron				
Lead	116	122	5.1	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Selenium	5.61	12.4	120.7(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Tin				
Vanadium				

Associated samples MP4831: F15057-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4832
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 10/21/02 10/21/02

Metal	RL	IDL	MB raw	fi nal	MB raw	fi nal
Aluminum	0.20	.0066				
Antimony	0.0050	.0015				
Arsenic	0.010	.0028	0.0014	<0.010	-0.0044	<0.010
Barium	1.0	.00049	-0.00070	<1.0	0.0050	<1.0
Beryllium	0.0050	.00026				
Cadmium	0.0050	.00026	-0.0019	<0.0050	-0.0020	<0.0050
Calcium	5.0	.0038				
Chromium	0.010	.00043	-0.00060	<0.010	-0.0010	<0.010
Cobalt	0.050	.0005				
Copper	0.025	.00044				
Iron	0.30	.0071				
Lead	0.010	.0012	0.0017	<0.010	0.0055	<0.010
Magnesium	5.0	.0099				
Manganese	0.015	.00016				
Molybdenum	0.050	.00075				
Nickel	0.040	.0011				
Selenium	0.020	.002	0.0074	<0.020	0.018	<0.020
Silver	0.010	.00055	-0.00018	<0.010	-0.00042	<0.010
Sodium	5.0	.15				
Tin	0.050	.0022				
Vanadium	0.050	.00047				

Associated samples MP4832: F15057-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4832
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/21/02 10/21/02

Metal	F15057-2 Original	DUP	RPD	QC Limits	F15057-2 Original	MS	Spike lot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.0	0.0	NC	0-29	0.0	42.1	40.0	105.3	75-120
Barium	0.24	0.23	4.3	0-20	0.24	42.2	40.0	104.9	72-120
Beryllium									
Cadmium	0.0	0.0	NC	0-20	0.0	1.1	1.0	110.0	72-120
Calcium									
Chromium	0.0	0.0	NC	0-47	0.0	4.2	4.0	105.0	69-122
Cobalt									
Copper									
Iron									
Lead	0.058	0.049	16.8	0-44	0.058	10.5	10.0	104.4	70-126
Magnesium									
Manganese									
Molybdenum									
Nickel									
Selenium	0.12	0.078	42.4 (a)	0-36	0.12	42.7	40.0	106.5	74-120
Silver	0.0	0.0	NC	0-20	0.0	1.0	1.0	100.0	52-126
Sodium									
Tin									
Vanadium									

Associated samples MP4832: F15057-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4832
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/21/02 10/21/02

Metal	BSP Result	Spike lot MPFLICP	% Rec	QC Limits	BSP Result	Spike lot MPFLICP	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	4.1	4.0	102.5	80-120	4.1	4.0	102.5	80-120
Barium	4.2	4.0	105.0	80-120	4.1	4.0	102.5	80-120
Beryllium								
Cadmium	0.11	0.10	110.0	80-120	0.10	0.10	100.0	80-120
Calcium								
Chromium	0.42	0.40	105.0	80-120	0.41	0.40	102.5	80-120
Cobalt								
Copper								
Iron								
Lead	1.0	1.0	100.0	80-120	1.0	1.0	100.0	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel								
Selenium	4.1	4.0	102.5	80-120	4.4	4.0	110.0	80-120
Silver	0.10	0.10	100.0	80-120	0.097	0.10	97.0	80-120
Sodium								
Tin								
Vanadium								

Associated samples MP4832: F15057-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4832
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/21/02

Metal	F15057-2 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	0.00	0.00	NC	0-10
Barium	23.7	16.6	29.9 (a)	0-10
Beryllium				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron				
Lead	5.82	9.27	59.3 (a)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Selenium	12.1	22.5	85.6 (a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Tin				
Vanadium				

Associated samples MP4832: F15057-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4834
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 10/22/02 10/22/02

Metal	RL	IDL	MB raw	final	MB raw	final
Mercury	0.0010	.000022	0.000047	<0.0010	-0.0016	<0.010

Associated samples MP4834: F15057-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4834
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/22/02 10/22/02

Metal	F15057-1 Original	DUP	RPD	QC Limits	F15057-1 Original	MS	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	0.030	0.030	100.0	62-131

Associated samples MP4834: F15057-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4834
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/22/02 10/22/02

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0031	0.0030	103.3	80-120	0.030	0.030	100.0	80-120

Associated samples MP4834: F15057-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (nr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4839
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 10/22/02 10/22/02

Metal	RL	IDL	MB raw	final	MB raw	final
Mercury	0.0010	.000022	-0.00017	<0.0010	-0.0025	<0.010

Associated samples MP4839: F15057-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4839
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/22/02 10/22/02

Metal	F15057-2 Original	DUP	RPD	QC Limits	F15057-2 Original	MS	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	0.021	0.030	70.0	62-131

Associated samples MP4839: F15057-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F15057
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4839
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/22/02 10/22/02

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0031	0.0030	103.3	80-120	0.031	0.030	103.3	80-120

Associated samples MP4839: F15057-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (nr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Percent Solids Raw Data Summary

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Log in Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Cyanide Reactivity	GP3601/GN10507	1.5	<1.5	mg/kg		
Sulfide Reactivity	GP3599/GN10498	50	<50	mg/kg		

Associated Samples:

Batch GP3599: F15057-1, F15057-2

Batch GP3601: F15057-1, F15057-2

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F15057
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Cyanide Reactivity	GP3601/GN10507	F15071-1	mg/kg	<1.9	<1.9	0.0	0-20%
Ignitability (Flashpoint)	GN10501	F15057-1	Deg. F	65	130	67.0*(a)	0-2%
Solids, Percent	GN10468	F15035-1	%	78.9	79.4	0.6	0-5%
Sulfide Reactivity	GP3599/GN10498	F15071-1	mg/kg	<64	<64	0.0	0-15.1%

Associated Samples:

Batch GN10468: F15057-1, F15057-2

Batch GN10501: F15057-1

Batch GP3599: F15057-1, F15057-2

Batch GP3601: F15057-1, F15057-2

(a) Very limited sample amounts; high RPD due to possible sample nonhomogeneity.

Percent Solids Raw Data Summary

Job Number: F15057
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: F15057-1 Analyzed: 18-OCT-02 by SJL Method: EPA 160.3 M
ClientID: IH-DM-006

Wet Weight (Total)	5.98	g
Tare Weight	.98	g
Dry Weight (Total)	3.99	g
Solids, Percent	60.2	%

Sample: F15057-2 Analyzed: 18-OCT-02 by SJL Method: EPA 160.3 M
ClientID: IH-DM-007

Wet Weight (Total)	6.64	g
Tare Weight	.97	g
Dry Weight (Total)	3.86	g
Solids, Percent	51	%

GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Gulf Coast, Inc.)

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Surrogate Recovery Summaries**
- **GC Surrogate Retention Time Summaries**
- **Initial and Continuing Calibration Summaries**

Blank Spike Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1501-BS	GG07130.D	1	10/24/02	JH	10/23/02	OP1501	GGG255

The QC reported here applies to the following samples:

Method: SW846 8151

F15057-1, F15057-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	20	16.2	81	50-150 ^a
93-72-1	2,4,5-TP (Silvex)	4	3.4	85	50-150 ^a

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	98%	10-150%

(a) Advisory control limits.

Duplicate Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1501-DUP	GG07134.D	1	10/24/02	JH	10/23/02	OP1501	GGG255
F15057-1	GG07132.D	1	10/24/02	JH	10/23/02	OP1501	GGG255

The QC reported here applies to the following samples:

Method: SW846 8151

F15057-1, F15057-2

CAS No.	Compound	F15057-1 ug/l	DUP Q	ug/l	Q	RPD	Limits
94-75-7	2,4-D	ND		ND		nc	
93-72-1	2,4,5-TP (Silvex)	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F15057-1	Limits
19719-28-9	2,4-DCAA	108%	103%	10-150%

Leachate Blank Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1501-LB	GG07131.D	1	10/24/02	JH	10/23/02	OP1501	GGG255

The QC reported here applies to the following samples:

Method: SW846 8151

F15057-1, F15057-2

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	10	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
19719-28-9	2,4-DCAA	76%	10-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F15057
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1501-MS	GG07135.D	1	10/24/02	JH	10/23/02	OP1501	GGG255
OP1501-MSD	GG07136.D	1	10/24/02	JH	10/23/02	OP1501	GGG255
F15057-1	GG07132.D	1	10/24/02	JH	10/23/02	OP1501	GGG255

The QC reported here applies to the following samples:

Method: SW846 8151

F15057-1, F15057-2

CAS No.	Compound	F15057-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	20	11.4	57	12.7	64	11	50-150/30 ^a
93-72-1	2,4,5-TP (Silvex)	ND	4	2.1	53	2.1	53	0	50-150/30 ^a

CAS No.	Surrogate Recoveries	MS	MSD	F15057-1	Limits
19719-28-9	2,4-DCAA	104%	112%	103%	10-150%

(a) Advisory control limits.

Semivolatile Surrogate Recovery Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Method: SW846 8151	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
F15057-1	GG07132.D	103.0
F15057-2	GG07133.D	66.0
OP1501-BS	GG07130.D	98.0
OP1501-DUP	GG07134.D	108.0
OP1501-LB	GG07131.D	76.0
OP1501-MS	GG07135.D	104.0
OP1501-MSD	GG07136.D	112.0

Surrogate Compounds	Recovery Limits
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S1 = 2,4-DCAA	10-150%
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(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Check Std: GGG255-ICC256	Injection Date: 10/24/02
Lab File ID: GG07129.D	Injection Time: 14:47
Instrument ID: GCGG	Method: SW846 8151

S1^a S1^b
RT RT

Check Std	10.37	10.26
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT
OP1501-BS	GG07130.D	10/24/02	15:20	10.36	
OP1501-LB	GG07131.D	10/24/02	15:46	10.36	
F15057-1	GG07132.D	10/24/02	16:13	10.33	
F15057-2	GG07133.D	10/24/02	16:39	10.36	
OP1501-DUP	GG07134.D	10/24/02	17:05	10.33	
OP1501-MS	GG07135.D	10/24/02	17:32	10.33	
OP1501-MSD	GG07136.D	10/24/02	17:58	10.33	
GGG255-ECC256	GG07137.D	10/24/02	18:24	10.26	10.37

Surrogate Compounds

S1 = 2,4-DCAA

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG255-ICC256
Lab FileID: GG07129.D

Response Factor Report GC GG

Method : C:\HPCHEM\2\METHODS\0C242H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Oct 24 15:13:36 2002

Calibration Files

1 =GG07123.D 2 =GG07124.D 3 =GG07129.D
4 =GG07126.D 5 =GG07127.D 6 =GG07128.D

Compound	1	2	3	4	5	6	Avg		%RSD
1) Dalapon	9.841	9.817	8.507	8.669	8.307	7.806	8.825	E3	9.41
2) 4-Nitrophenol	4.850	3.942	3.896	4.372	4.181	3.507	4.125	E3	11.16
3) S DCAA	4.499	3.941	3.799	4.176	4.111	3.500	4.004	E3	8.55
4) Dicamba	2.020	2.456	2.255	2.419	2.429	2.196	2.296	E4	7.44
5) MCPP	6.501						6.501	E3	0.00
6) MCPA	9.632						9.632	E3	0.00
7) Dichlorprop	5.127	4.559	4.307	4.954	4.812	4.115	4.646	E3	8.38
8) 2,4-D	1.917	1.501	1.684	2.712	2.640	1.948	2.067	E3	24.17
9) Pentachlorophenol	1.653	1.342	1.345	1.414	1.389	1.239	1.397	E5	9.95
10) 2,4,5-TP (SILVEX)	1.914	1.830	1.872	2.820	2.851	2.081	2.228	E4	21.47
11) 2,4,5-T	1.968	1.763	1.785	2.947	3.029	2.122	2.269	E4	25.24
12) 2,4-DB	2.770	2.161	2.027	2.927	2.992	1.952	2.471	E3	19.25
13) Dinoseb	1.740	1.363	1.299	1.907	1.866	1.255	1.572	E4	19.00
14) Picloram	1.421	0.997	1.108	2.492	2.438	1.335	1.632	E4	40.64

Signal #2 Calibration Files

1 =GG07123.D 2 =GG07124.D 3 =GG07129.D
4 =GG07126.D 5 =GG07127.D 6 =GG07128.D

Compound	1	2	3	4	5	6	Avg		%RSD
1) Dalapon	2.012	1.948	1.710	1.864	1.774	1.534	1.807	E4	9.59
2) 4-Nitrophenol	1.457	1.158	1.070	1.225	1.158	0.993	1.177	E4	13.51
3) S DCAA	9.213	7.105	6.033	7.660	7.350	6.224	7.264	E3	15.80
4) Dicamba	5.671	4.608	3.419	5.267	4.952	4.338	4.709	E4	16.74
5) MCPP	8.944						8.944	E3	0.00
6) MCPA	1.446						1.446	E4	0.00
7) Dichlorprop	1.191	0.887	0.864	1.101	1.027	0.855	0.988	E4	14.23
8) 2,4-D	1.336	0.981	0.970	1.205	1.127	0.904	1.087	E4	15.16
9) Pentachlorophenol	2.104	1.713	1.837	2.386	2.286	1.822	2.025	E5	13.60
10) 2,4,5-TP (SILVEX)	6.457	5.027	5.676	7.563	7.140	5.453	6.219	E4	16.10
11) 2,4,5-T	4.769	3.619	3.494	5.133	4.963	3.457	4.239	E4	18.74
12) 2,4-DB	6.244	4.445	4.490	6.033	5.764	4.122	5.183	E3	17.96
13) Dinoseb	7.044	5.240	5.065	6.337	5.901	4.400	5.664	E4	16.84
14) Picloram	3.904	2.481	2.176	5.679	5.052	2.742	3.672	E4	39.48

(#) = Out of Range

0C242H.M

Thu Oct 24 16:11:52 2002

RPT1

Continuing Calibration Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG255-ECC256
Lab FileID: GG07137.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG255\GG07137.D\ECD1A.CH Vial : 17
Signal #2 : C:\HPCHEM\2\DATA\GGG255\GG07137.D\ECD2B.CH
Acq On : 24 Oct 2002 6:24 pm Operator: jennifer
Sample : ecc256-3 Inst : GC GG
Misc : op1501, ggg255, Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\0C242H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Oct 24 15:36:50 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	Dalapon	300.000	372.396	-24.1#	129	0.00
2	4-Nitrophenol	300.000	306.433	-2.1	108	0.02
3 S	DCAA	300.000	305.860	-2.0	107	0.00
4	Dicamba	60.000	75.016	-25.0#	127	0.00
7	Dichloroprop	300.000	300.592	-0.2	108	0.00
8	2,4-D	300.000	214.570	28.5#	88	0.00
9	Pentachlorophenol	15.000	14.000	6.7	97	0.00
10	2,4,5-TP (SILVEX)	60.000	48.408	19.3#	96	0.00
11	2,4,5-T	60.000	48.493	19.2#	103	0.00
12	2,4-DB	600.000	443.584	26.1#	90	0.00
13	Dinoseb	60.000	43.152	28.1#	87	0.00
14	Picloram	60.000	32.953	45.1#	81	0.00

Signal #2

1	Dalapon	300.000	370.999	-23.7#	131	0.00
2	4-Nitrophenol	300.000	318.427	-6.1	117	0.02
3 S	DCAA	300.000	308.286	-2.8	124	0.00
4	Dicamba	60.000	71.701	-19.5#	165	0.00
7	Dichloroprop	300.000	313.292	-4.4	119	0.00
8	2,4-D	300.000	290.466	3.2	108	0.00
9	Pentachlorophenol	15.000	14.655	2.3	108	0.00
10	2,4,5-TP (SILVEX)	60.000	54.782	8.7	100	0.00
11	2,4,5-T	60.000	45.428	24.3#	92	0.00
12	2,4-DB	600.000	493.033	17.8#	95	0.00
13	Dinoseb	60.000	49.313	17.8#	92	0.00
14	Picloram	60.000	33.931	43.4#	95	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\GGG255\GG07137.D\ECD1A.CH Vial : 17
Signal #2 : C:\HPCHEM\2\DATA\GGG255\GG07137.D\ECD2B.CH
Acq On : 24 Oct 2002 6:24 pm Operator: jennifer
Sample : ecc256-3 Inst : GC GG
Misc : op1501, ggg255, Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\0C242H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Oct 24 15:36:50 2002

Continuing Calibration Summary

Job Number: F15057
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG255-ECC256
Lab FileID: GG07137.D

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
5	MCP	-1.000	0.000	0.0	0	-10.67#
6	MCPA	-1.000	0.000	0.0	0	-11.04#

Signal #2

5	MCP	-1.000	0.000	0.0	0	-10.56#
6	MCPA	-1.000	0.000	0.0	0	-10.99#

(#) = Out of Range
GG07129.D 0C242H.M

SPCC's out = 0 CCC's out = 0
Fri Oct 25 08:29:20 2002 RPT1

General Chemistry

QC Data Summaries

(Accutest Laboratories Gulf Coast, Inc.)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F15057
Account: ALSE - Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Ignitability (Flashpoint)	GN3440	T3386-1	Deg. F	210	210	0.0	0-20%

Associated Samples:
Batch GN3440: F15057-2

Technical Report for

Shaw E & I, Inc.

Indian Head

809401

Accutest Job Number: F18741

Report to:

Shaw E & I, Inc.

natasha.sullivan@shawgrp.com

ATTN: Natasha Sullivan

Total number of pages in report: 229



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certifications: FL (DOH E83510), NC (573), NJ (FL002), MA (FL946), IA (366), LA (03051), KS (E-10327), SC, AK
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Sample Summary

Shaw E & I, Inc.

Job No: F18741

Indian Head
Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F18741-1	07/24/03	08:00 ED	07/25/03	AQ	Ground Water	IH-GW-008
F18741-2	07/24/03	09:20 ED	07/25/03	SO	Soil	IH-DS-009

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0017514.D	1	08/05/03	KW	n/a	n/a	VC772
Run #2	C0017528.D	2.5	08/06/03	KW	n/a	n/a	VC773

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	105 ^a	2.5	1.3	ug/l	
108-88-3	Toluene	10.2	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.4	2.0	0.50	ug/l	J
1330-20-7	Xylene (total)	9.4	6.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%	91%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	96%	78-125%
2037-26-5	Toluene-D8	106%	107%	87-113%
460-00-4	4-Bromofluorobenzene	95%	96%	84-117%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8260B SW846 1311 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
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Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016854.D	10	08/05/03	KW	07/29/03	OP8089	VB745
Run #2							

Run #1	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		86-115%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	107%		84-117%
17060-07-0	1,2-Dichloroethane-D4	106%		78-125%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8270C SW846 1311 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
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Run #1	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018151.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #1	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		19-90%
4165-62-2	Phenol-d5	41%		10-68%
118-79-6	2,4,6-Tribromophenol	95%		36-137%
4165-60-0	Nitrobenzene-d5	84%		49-119%
321-60-8	2-Fluorobiphenyl	85%		45-118%
1718-51-0	Terphenyl-d14	88%		46-135%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8015 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003329.D	1	07/29/03	JG	n/a	n/a	GHH175
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	0.350	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	105%		64-130%	
98-08-8	aaa-Trifluorotoluene	99%		59-136%	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09768.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		52-131%
2051-24-3	Decachlorobiphenyl	116%		16-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8082 SW846 3510C Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AB26567.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963
Run #2							

Run #	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.42	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.42	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.26	ug/l	
12672-29-6	Aroclor 1248 ^b	0.51	0.53	0.26	ug/l	J
11097-69-1	Aroclor 1254	ND	0.53	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.26	ug/l	
	Total PCBs	0.51	1.1		ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		51-129%
2051-24-3	Decachlorobiphenyl	53%		21-148%

- (a) All hits confirmed by dual column analysis.
- (b) Best match available.

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
RL = Reporting Limit		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8015 M SW846 3510C Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF09478.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448
Run #2							

Run #	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28) ^a	1.13	0.27	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	76%		62-118%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8151 SW846 3510C Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14505.D	1	08/01/03	ATX	07/26/03	T:OP2358	T:GGG431
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		10-143%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.15 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.0012 U	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.0045 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit **IDL = Instrument Detection Limit**
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	< 1.5	1.5	mg/l	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	07/30/03	LL	SW846 1010
Sulfide Reactivity	< 50	50	mg/l	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides ^a	< 0.20	0.20	mg/l	4	08/06/03	ANJ	SW846 9020

(a) Dilution required due to matrix interference.

RL = Reporting Limit

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Method: SW846 8260B SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016722.D	10	07/29/03	KW	07/28/03	OP8082	VB740
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	117%		84-117%
17060-07-0	1,2-Dichloroethane-D4	95%		78-125%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261.6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Method: SW846 8260B Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H021619.D	1	07/29/03	NAF	n/a	n/a	VH784
Run #2							

Run #	Initial Weight
Run #1	4.29 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.4	3.0	ug/kg	
108-88-3	Toluene	ND	7.4	3.0	ug/kg	
100-41-4	Ethylbenzene	ND	7.4	3.0	ug/kg	
1330-20-7	Xylene (total)	ND	22	6.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	114%		79-121%
460-00-4	4-Bromofluorobenzene	114%		77-133%
17060-07-0	1,2-Dichloroethane-D4	100%		72-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Method: SW846 8270C SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018153.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		19-90%
4165-62-2	Phenol-d5	39%		10-68%
118-79-6	2,4,6-Tribromophenol	88%		36-137%
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	79%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Method: SW846 8015 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003292.D	1	07/26/03	RM	n/a	n/a	GHH172
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.61 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	94%		57-144%	
98-08-8	aaa-Trifluorotoluene	85%		65-132%	

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09770.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		52-131%
2051-24-3	Decachlorobiphenyl	118%		16-153%

ND = Not detected MDL - Method Detection Limit J = Indicates an estimated value
 MCL = Maximum Contamination Level (40 CFR 261 6/96) B = Indicates analyte found in associated method blank
 E = Indicates value exceeds calibration range N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Method: SW846 8082 SW846 3550B Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB26533.D	1	07/31/03	NJ	07/29/03	OP8088	GAB962
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	22	11	ug/kg	
11104-28-2	Aroclor 1221	ND	22	17	ug/kg	
11141-16-5	Aroclor 1232	ND	22	17	ug/kg	
53469-21-9	Aroclor 1242	ND	22	11	ug/kg	
12672-29-6	Aroclor 1248	ND	22	11	ug/kg	
11097-69-1	Aroclor 1254	ND	22	11	ug/kg	
11096-82-5	Aroclor 1260	ND	22	11	ug/kg	
	Total PCBs	ND	43		ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		50-134%
2051-24-3	Decachlorobiphenyl	109%		48-147%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	ZF09406.D	2	07/29/03	SM	07/28/03	OP8071	GZF445
Run #2							

	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	36.4	21	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	96%		64-121%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14689.D	1	08/07/03	ATX	07/30/03	T:OP2376	T:GGG437
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	71%		10-143%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96)		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.73 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.015 B	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.021 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit **IDL = Instrument Detection Limit** **U = Indicates a result < IDL**
MCL = Maximum Contamination Level (40 CFR 261 6/96) **B = Indicates a result > = IDL but < RL**

Report of Analysis

Client Sample ID: IH-DS-009		Date Sampled: 07/24/03
Lab Sample ID: F18741-2		Date Received: 07/25/03
Matrix: SO - Soil		Percent Solids: 79.0
Project: Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	5.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	< 1.9	1.9	mg/kg	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	07/30/03	LL	SW846 1010
Solids, Percent	79		%	1	07/29/03	LE	EPA 160.3 M
Sulfide Reactivity	< 63	63	mg/kg	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides	< 10	10	mg/kg	1	07/29/03	ANJ	SW846 9023

RL = Reporting Limit

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB740-BS	B016710.D	10	07/29/03	KW	n/a	n/a	VB740

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	250	233	93	76-123
108-90-7	Chlorobenzene	250	223	89	78-115
67-66-3	Chloroform	250	226	90	74-123
56-23-5	Carbon tetrachloride	250	229	92	68-137
75-35-4	1,1-Dichloroethylene	250	267	107	64-136
107-06-2	1,2-Dichloroethane	250	227	91	66-118
106-46-7	p-Dichlorobenzene	250	245	98	74-117
78-93-3	Methyl ethyl ketone	1250	1030	82	65-124
127-18-4	Tetrachloroethylene	250	243	97	75-124
79-01-6	Trichloroethylene	250	226	90	75-122
75-01-4	Vinyl chloride	250	255	102	62-142

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	98%	86-115%
17060-07-0	1,2-Dichloroethane-D4	95%	78-125%
2037-26-5	Toluene-D8	96%	87-113%
460-00-4	4-Bromofluorobenzene	106%	84-117%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB745-BS	B016841.D	10	08/05/03	KW	n/a	n/a	VB745

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	250	280	112	76-123
108-90-7	Chlorobenzene	250	260	104	78-115
67-66-3	Chloroform	250	285	114	74-123
56-23-5	Carbon tetrachloride	250	289	116	68-137
75-35-4	1,1-Dichloroethylene	250	322	129	64-136
107-06-2	1,2-Dichloroethane	250	288	115	66-118
106-46-7	p-Dichlorobenzene	250	272	109	74-117
78-93-3	Methyl ethyl ketone	1250	1460	117	65-124
127-18-4	Tetrachloroethylene	250	301	120	75-124
79-01-6	Trichloroethylene	250	257	103	75-122
75-01-4	Vinyl chloride	250	308	123	62-142

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	106%	86-115%
17060-07-0	1,2-Dichloroethane-D4	112%	78-125%
2037-26-5	Toluene-D8	98%	87-113%
460-00-4	4-Bromofluorobenzene	98%	84-117%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC772-BS	C0017495.D	1	08/05/03	KW	n/a	n/a	VC772

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
100-41-4	Ethylbenzene	25	26.5	106	76-117
108-88-3	Toluene	25	26.5	106	76-118
1330-20-7	Xylene (total)	75	80.7	108	78-120

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	92%	86-115%
17060-07-0	1,2-Dichloroethane-D4	97%	78-125%
2037-26-5	Toluene-D8	106%	87-113%
460-00-4	4-Bromofluorobenzene	97%	84-117%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC773-BS	C0017522.D	1	08/06/03	KW	n/a	n/a	VC773

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	25	28.7	115	76-123

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	91%	86-115%
17060-07-0	1,2-Dichloroethane-D4	98%	78-125%
2037-26-5	Toluene-D8	106%	87-113%
460-00-4	4-Bromofluorobenzene	95%	84-117%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH784-BS	H021606.D	1	07/29/03	NAF	n/a	n/a	VH784

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	53.2	106	73-123
100-41-4	Ethylbenzene	50	54.7	109	73-116
108-88-3	Toluene	50	47.3	95	72-116
1330-20-7	Xylene (total)	150	160	107	74-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	95%	70-130%
2037-26-5	Toluene-D8	89%	79-121%
460-00-4	4-Bromofluorobenzene	98%	77-133%
17060-07-0	1,2-Dichloroethane-D4	94%	72-133%

Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18645-2DUP	B016716.D	10	07/29/03	KW	n/a	n/a	VB740
F18645-2	B016715.D	10	07/29/03	KW	07/24/03	OP8060	VB740

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	F18645-2 ug/l	DUP Q	ug/l	Q	RPD	Limits
71-43-2	Benzene	ND	ND			nc	
108-90-7	Chlorobenzene	ND	ND			nc	
67-66-3	Chloroform	ND	ND			nc	
56-23-5	Carbon tetrachloride	ND	ND			nc	
75-35-4	1,1-Dichloroethylene	ND	ND			nc	
107-06-2	1,2-Dichloroethane	ND	ND			nc	
106-46-7	p-Dichlorobenzene	ND	ND			nc	
78-93-3	Methyl ethyl ketone	ND	ND			nc	
127-18-4	Tetrachloroethylene	ND	ND			nc	
79-01-6	Trichloroethylene	ND	ND			nc	
75-01-4	Vinyl chloride	ND	ND			nc	

CAS No.	Surrogate Recoveries	DUP	F18645-2	Limits
1868-53-7	Dibromofluoromethane	98%	96%	86-115%
17060-07-0	1,2-Dichloroethane-D4	92%	90%	78-125%
2037-26-5	Toluene-D8	97%	97%	87-113%
460-00-4	4-Bromofluorobenzene	115%	116%	84-117%

Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18763-1DUP	B016725.D	10	07/29/03	KW	n/a	n/a	VB740
F18763-1	B016724.D	10	07/29/03	KW	07/28/03	OP8082	VB740

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	F18763-1 ug/l	DUP Q	ug/l	Q	RPD	Limits
71-43-2	Benzene	ND	ND			nc	
108-90-7	Chlorobenzene	ND	ND			nc	
67-66-3	Chloroform	ND	ND			nc	
56-23-5	Carbon tetrachloride	ND	ND			nc	
75-35-4	1,1-Dichloroethylene	ND	ND			nc	
107-06-2	1,2-Dichloroethane	ND	ND			nc	
106-46-7	p-Dichlorobenzene	ND	ND			nc	
78-93-3	Methyl ethyl ketone	ND	ND			nc	
127-18-4	Tetrachloroethylene	ND	ND			nc	
79-01-6	Trichloroethylene	ND	ND			nc	
75-01-4	Vinyl chloride	ND	ND			nc	

CAS No.	Surrogate Recoveries	DUP	F18763-1	Limits
1868-53-7	Dibromofluoromethane	100%	99%	86-115%
17060-07-0	1,2-Dichloroethane-D4	97%	97%	78-125%
2037-26-5	Toluene-D8	97%	97%	87-113%
460-00-4	4-Bromofluorobenzene	117%	117%	84-117%

Leachate Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8082-LB	B016717.D	10	07/29/03	KW	07/28/03	OP8082	VB740

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	20	5.0	ug/l	
67-66-3	Chloroform	ND	20	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	20	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	5.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	25	ug/l	
127-18-4	Tetrachloroethylene	ND	20	5.0	ug/l	
79-01-6	Trichloroethylene	ND	20	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	98%	86-115%
17060-07-0	1,2-Dichloroethane-D4	93%	78-125%
2037-26-5	Toluene-D8	97%	87-113%
460-00-4	4-Bromofluorobenzene	115%	84-117%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VB745-MB	B016842.D	10	08/05/03	KW	n/a	n/a	VB745

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	10	5.0	ug/l	
108-90-7	Chlorobenzene	ND	20	5.0	ug/l	
67-66-3	Chloroform	ND	20	5.0	ug/l	
56-23-5	Carbon tetrachloride	ND	20	5.0	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	5.0	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	5.0	ug/l	
106-46-7	p-Dichlorobenzene	ND	20	5.0	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	25	ug/l	
127-18-4	Tetrachloroethylene	ND	20	5.0	ug/l	
79-01-6	Trichloroethylene	ND	20	5.0	ug/l	
75-01-4	Vinyl chloride	ND	10	5.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	105%	86-115%
17060-07-0	1,2-Dichloroethane-D4	106%	78-125%
2037-26-5	Toluene-D8	98%	87-113%
460-00-4	4-Bromofluorobenzene	109%	84-117%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC772-MB	C0017496.D	1	08/05/03	KW	n/a	n/a	VC772

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	Result	RL	MDL	Units	Q
100-41-4	Ethylbenzene	ND	2.0	0.50	ug/l	
108-88-3	Toluene	ND	2.0	0.50	ug/l	
1330-20-7	Xylene (total)	ND	6.0	1.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	93%	86-115%
17060-07-0	1,2-Dichloroethane-D4	97%	78-125%
2037-26-5	Toluene-D8	108%	87-113%
460-00-4	4-Bromofluorobenzene	100%	84-117%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC773-MB	C0017523.D	1	08/06/03	KW	n/a	n/a	VC773

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	1.0	0.50	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	90%	86-115%
17060-07-0	1,2-Dichloroethane-D4	94%	78-125%
2037-26-5	Toluene-D8	107%	87-113%
460-00-4	4-Bromofluorobenzene	96%	84-117%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VH784-MB	H021607.D	1	07/29/03	NAF	n/a	n/a	VH784

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	5.0	2.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	2.0	ug/kg	
108-88-3	Toluene	ND	5.0	2.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	4.5	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	96%	70-130%
2037-26-5	Toluene-D8	93%	79-121%
460-00-4	4-Bromofluorobenzene	104%	77-133%
17060-07-0	1,2-Dichloroethane-D4	94%	72-133%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18645-1MS	B016713.D	10	07/29/03	KW	n/a	n/a	VB740
F18645-1MSD	B016714.D	10	07/29/03	KW	n/a	n/a	VB740
F18645-1	B016712.D	10	07/29/03	KW	07/24/03	OP8060	VB740

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	F18645-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	250	250	100	242	97	3	71-127/8
108-90-7	Chlorobenzene	ND	250	236	94	228	91	3	77-113/6
67-66-3	Chloroform	ND	250	242	97	232	93	4	72-125/11
56-23-5	Carbon tetrachloride	ND	250	240	96	233	93	3	61-140/13
75-35-4	1,1-Dichloroethylene	ND	250	262	105	246	98	6	60-141/14
107-06-2	1,2-Dichloroethane	ND	250	235	94	230	92	2	64-121/9
106-46-7	p-Dichlorobenzene	ND	250	257	103	252	101	2	72-116/7
78-93-3	Methyl ethyl ketone	ND	1250	1060	85	1040	83	2	63-128/16
127-18-4	Tetrachloroethylene	ND	250	258	103	248	99	4	74-123/11
79-01-6	Trichloroethylene	ND	250	237	95	237	95	0	71-124/9
75-01-4	Vinyl chloride	ND	250	280	112	274	110	2	53-149/22

CAS No.	Surrogate Recoveries	MS	MSD	F18645-1	Limits
1868-53-7	Dibromofluoromethane	98%	97%	96%	86-115%
17060-07-0	1,2-Dichloroethane-D4	94%	95%	88%	78-125%
2037-26-5	Toluene-D8	96%	95%	99%	87-113%
460-00-4	4-Bromofluorobenzene	106%	103%	114%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18731-7MS	C0017504.D	1	08/05/03	KW	n/a	n/a	VC772
F18731-7MSD	C0017505.D	1	08/05/03	KW	n/a	n/a	VC772
F18731-7 ^a	C0017503.D	1	08/05/03	KW	n/a	n/a	VC772

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	F18731-7 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
100-41-4	Ethylbenzene	ND	25	25.6	102	24.9	100	3	72-119/7
108-88-3	Toluene	ND	25	25.6	102	24.9	100	3	73-119/10
1330-20-7	Xylene (total)	ND	75	78.0	104	76.1	101	2	73-123/8

CAS No.	Surrogate Recoveries	MS	MSD	F18731-7	Limits
1868-53-7	Dibromofluoromethane	92%	93%	93%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	101%	99%	78-125%
2037-26-5	Toluene-D8	106%	106%	107%	87-113%
460-00-4	4-Bromofluorobenzene	93%	93%	97%	84-117%

(a) Confirmation run.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18741-1MS	B016855.D	10	08/05/03	KW	n/a	n/a	VB745
F18741-1MSD	B016856.D	10	08/05/03	KW	n/a	n/a	VB745
F18741-1	B016854.D	10	08/05/03	KW	07/29/03	OP8089	VB745

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	F18741-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	250	274	110	263	105	4	71-127/8
108-90-7	Chlorobenzene	ND	250	250	100	248	99	1	77-113/6
67-66-3	Chloroform	ND	250	276	110	273	109	1	72-125/11
56-23-5	Carbon tetrachloride	ND	250	278	111	271	108	3	61-140/13
75-35-4	1,1-Dichloroethylene	ND	250	322	129	272	109	17*	60-141/14
107-06-2	1,2-Dichloroethane	ND	250	281	112	277	111	1	64-121/9
106-46-7	p-Dichlorobenzene	ND	250	261	104	258	103	1	72-116/7
78-93-3	Methyl ethyl ketone	ND	1250	1470	118	1450	116	1	63-128/16
127-18-4	Tetrachloroethylene	ND	250	279	112	279	112	0	74-123/11
79-01-6	Trichloroethylene	ND	250	234	94	238	95	2	71-124/9
75-01-4	Vinyl chloride	ND	250	309	124	320	128	3	53-149/22

CAS No.	Surrogate Recoveries	MS	MSD	F18741-1	Limits
1868-53-7	Dibromofluoromethane	106%	106%	106%	86-115%
17060-07-0	1,2-Dichloroethane-D4	114%	113%	106%	78-125%
2037-26-5	Toluene-D8	96%	97%	99%	87-113%
460-00-4	4-Bromofluorobenzene	93%	92%	107%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18758-1MS	C0017531.D	1	08/06/03	KW	n/a	n/a	VC773
F18758-1MSD	C0017532.D	1	08/06/03	KW	n/a	n/a	VC773
F18758-1	C0017530.D	1	08/06/03	KW	n/a	n/a	VC773

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-1

CAS No.	Compound	F18758-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	25	28.2	113	27.3	109	3	71-127/8

CAS No.	Surrogate Recoveries	MS	MSD	F18758-1	Limits
1868-53-7	Dibromofluoromethane	93%	93%	95%	86-115%
17060-07-0	1,2-Dichloroethane-D4	99%	96%	96%	78-125%
2037-26-5	Toluene-D8	106%	106%	105%	87-113%
460-00-4	4-Bromofluorobenzene	96%	99%	102%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18765-1MS	H021614.D	1	07/29/03	NAF	n/a	n/a	VH784
F18765-1MSD	H021615.D	1	07/29/03	NAF	n/a	n/a	VH784
F18765-1	H021610.D	1	07/29/03	NAF	n/a	n/a	VH784

The QC reported here applies to the following samples:

Method: SW846 8260B

F18741-2

CAS No.	Compound	F18765-1 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	56.3	54.3	96	53.3	96	2	64-125/21
100-41-4	Ethylbenzene	ND	56.3	55.3	98	55.1	100	0	58-123/22
108-88-3	Toluene	ND	56.3	58.4	104	49.0	89	18	60-128/24
1330-20-7	Xylene (total)	ND	169	162	96	162	98	0	57-127/27

CAS No.	Surrogate Recoveries	MS	MSD	F18765-1	Limits
1868-53-7	Dibromofluoromethane	99%	101%	101%	70-130%
2037-26-5	Toluene-D8	110%	94%	93%	79-121%
460-00-4	4-Bromofluorobenzene	105%	103%	108%	77-133%
17060-07-0	1,2-Dichloroethane-D4	87%	88%	102%	72-133%

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB740-BFB	Injection Date: 07/29/03
Lab File ID: B016707.D	Injection Time: 10:25
Instrument ID: GCMSB	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	28397	35.8	Pass
75	30.0 - 60.0% of mass 95	43634	55.1	Pass
95	Base peak, 100% relative abundance	79234	100.0	Pass
96	5.0 - 9.0% of mass 95	5545	7.0	Pass
173	Less than 2.0% of mass 174	223	0.28 (0.3) ^a	Pass
174	50.0 - 100.0% of mass 95	73450	92.7	Pass
175	5.0 - 9.0% of mass 174	5100	6.4 (6.9) ^a	Pass
176	95.0 - 101.0% of mass 174	71032	89.6 (96.7) ^a	Pass
177	5.0 - 9.0% of mass 176	4974	6.3 (7.0) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VB740-CC730	B016709.D	07/29/03	11:24	00:59	Continuing cal 40
VB740-BS	B016710.D	07/29/03	11:51	01:26	Blank Spike
OP8060-LB	B016711.D	07/29/03	12:19	01:54	Leachate Blank
F18645-1	B016712.D	07/29/03	12:54	02:29	(used for QC only; not part of job F18741)
F18645-1MS	B016713.D	07/29/03	13:21	02:56	Matrix Spike
F18645-1MSD	B016714.D	07/29/03	13:48	03:23	Matrix Spike Duplicate
F18645-2	B016715.D	07/29/03	14:17	03:52	(used for QC only; not part of job F18741)
F18645-2DUP	B016716.D	07/29/03	14:46	04:21	Duplicate
OP8082-LB	B016717.D	07/29/03	15:15	04:50	Leachate Blank
ZZZZZZ	B016718.D	07/29/03	15:44	05:19	(unrelated sample)
ZZZZZZ	B016719.D	07/29/03	16:13	05:48	(unrelated sample)
ZZZZZZ	B016720.D	07/29/03	16:43	06:18	(unrelated sample)
ZZZZZZ	B016721.D	07/29/03	17:12	06:47	(unrelated sample)
F18741-2	B016722.D	07/29/03	17:41	07:16	IH-DS-009
ZZZZZZ	B016723.D	07/29/03	18:10	07:45	(unrelated sample)
F18763-1	B016724.D	07/29/03	18:39	08:14	(used for QC only; not part of job F18741)
F18763-1DUP	B016725.D	07/29/03	19:09	08:44	Duplicate

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VH784-BFB	Injection Date:	07/29/03
Lab File ID:	H021604.D	Injection Time:	11:14
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	18333	22.5	Pass
75	30.0 - 60.0% of mass 95	42480	52.2	Pass
95	Base peak, 100% relative abundance	81411	100.0	Pass
96	5.0 - 9.0% of mass 95	5234	6.4	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	50723	62.3	Pass
175	5.0 - 9.0% of mass 174	3477	4.3 (6.9) ^a	Pass
176	95.0 - 101.0% of mass 174	49885	61.3 (98.3) ^a	Pass
177	5.0 - 9.0% of mass 176	2933	3.6 (5.9) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VH784-CC783	H021605.D	07/29/03	11:29	00:15	Continuing cal 40
VH784-BS	H021606.D	07/29/03	12:04	00:50	Blank Spike
VH784-MB	H021607.D	07/29/03	12:34	01:20	Method Blank
ZZZZZZ	H021609.D	07/29/03	13:36	02:22	(unrelated sample)
F18765-1	H021610.D	07/29/03	14:06	02:52	(used for QC only; not part of job F18741)
ZZZZZZ	H021611.D	07/29/03	14:37	03:23	(unrelated sample)
ZZZZZZ	H021612.D	07/29/03	15:07	03:53	(unrelated sample)
ZZZZZZ	H021613.D	07/29/03	15:37	04:23	(unrelated sample)
F18765-1MS	H021614.D	07/29/03	16:08	04:54	Matrix Spike
F18765-1MSD	H021615.D	07/29/03	16:38	05:24	Matrix Spike Duplicate
ZZZZZZ	H021616.D	07/29/03	17:08	05:54	(unrelated sample)
ZZZZZZ	H021617.D	07/29/03	17:39	06:25	(unrelated sample)
ZZZZZZ	H021618.D	07/29/03	18:09	06:55	(unrelated sample)
F18741-2	H021619.D	07/29/03	18:39	07:25	IH-DS-009
ZZZZZZ	H021620.D	07/29/03	19:09	07:55	(unrelated sample)
ZZZZZZ	H021621.D	07/29/03	19:40	08:26	(unrelated sample)
ZZZZZZ	H021622.D	07/29/03	20:10	08:56	(unrelated sample)
ZZZZZZ	H021623.D	07/29/03	20:40	09:26	(unrelated sample)
ZZZZZZ	H021624.D	07/29/03	21:10	09:56	(unrelated sample)
ZZZZZZ	H021625.D	07/29/03	21:41	10:27	(unrelated sample)
ZZZZZZ	H021626.D	07/29/03	22:11	10:57	(unrelated sample)
ZZZZZZ	H021627.D	07/29/03	22:41	11:27	(unrelated sample)
ZZZZZZ	H021628.D	07/29/03	23:12	11:58	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VC772-BFB	Injection Date:	08/05/03
Lab File ID:	C0017492.D	Injection Time:	08:56
Instrument ID:	GCMSC		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	30285	25.8	Pass
75	30.0 - 60.0% of mass 95	53386	45.5	Pass
95	Base peak, 100% relative abundance	117221	100.0	Pass
96	5.0 - 9.0% of mass 95	8437	7.2	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	99229	84.7	Pass
175	5.0 - 9.0% of mass 174	7078	6.0 (7.1) ^a	Pass
176	95.0 - 101.0% of mass 174	97648	83.3 (98.4) ^a	Pass
177	5.0 - 9.0% of mass 176	6545	5.6 (6.7) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VC772-CC766	C0017494.D	08/05/03	09:43	00:47	Continuing cal 40
VC772-BS	C0017495.D	08/05/03	10:12	01:16	Blank Spike
VC772-MB	C0017496.D	08/05/03	10:41	01:45	Method Blank
ZZZZZZ	C0017497.D	08/05/03	11:12	02:16	(unrelated sample)
ZZZZZZ	C0017498.D	08/05/03	11:44	02:48	(unrelated sample)
ZZZZZZ	C0017499.D	08/05/03	12:16	03:20	(unrelated sample)
ZZZZZZ	C0017500.D	08/05/03	12:45	03:49	(unrelated sample)
ZZZZZZ	C0017501.D	08/05/03	13:14	04:18	(unrelated sample)
ZZZZZZ	C0017502.D	08/05/03	13:43	04:47	(unrelated sample)
F18731-7	C0017503.D	08/05/03	14:12	05:16	(used for QC only; not part of job F18741)
F18731-7MS	C0017504.D	08/05/03	14:41	05:45	Matrix Spike
F18731-7MSD	C0017505.D	08/05/03	15:10	06:14	Matrix Spike Duplicate
ZZZZZZ	C0017506.D	08/05/03	15:39	06:43	(unrelated sample)
ZZZZZZ	C0017507.D	08/05/03	16:08	07:12	(unrelated sample)
ZZZZZZ	C0017508.D	08/05/03	16:37	07:41	(unrelated sample)
ZZZZZZ	C0017509.D	08/05/03	17:06	08:10	(unrelated sample)
ZZZZZZ	C0017510.D	08/05/03	17:35	08:39	(unrelated sample)
ZZZZZZ	C0017511.D	08/05/03	18:04	09:08	(unrelated sample)
ZZZZZZ	C0017512.D	08/05/03	18:33	09:37	(unrelated sample)
ZZZZZZ	C0017513.D	08/05/03	19:02	10:06	(unrelated sample)
F18741-1	C0017514.D	08/05/03	19:32	10:36	IH-GW-008
ZZZZZZ	C0017516.D	08/05/03	20:35	11:39	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VB745-BFB	Injection Date:	08/05/03
Lab File ID:	B016838.D	Injection Time:	10:34
Instrument ID:	GCMSB		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	22181	36.4	Pass
75	30.0 - 60.0% of mass 95	35368	58.0	Pass
95	Base peak, 100% relative abundance	60960	100.0	Pass
96	5.0 - 9.0% of mass 95	4497	7.4	Pass
173	Less than 2.0% of mass 174	270	0.44 (0.49) ^a	Pass
174	50.0 - 100.0% of mass 95	54613	89.6	Pass
175	5.0 - 9.0% of mass 174	4701	7.7 (8.6) ^a	Pass
176	95.0 - 101.0% of mass 174	54277	89.0 (99.4) ^a	Pass
177	5.0 - 9.0% of mass 176	3847	6.3 (7.1) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VB745-CC730	B016840.D	08/05/03	11:26	00:52	Continuing cal 40
VB745-BS	B016841.D	08/05/03	11:53	01:19	Blank Spike
VB745-MB	B016842.D	08/05/03	12:20	01:46	Method Blank
VB746-BS	B016843.D	08/05/03	12:59	02:25	Blank Spike
OP8135-LB	B016844.D	08/05/03	13:26	02:52	Leachate Blank
F18800-1	B016845.D	08/05/03	13:53	03:19	(used for QC only; not part of job F18741)
F18800-1MS	B016846.D	08/05/03	14:21	03:47	Matrix Spike
F18800-1MSD	B016847.D	08/05/03	14:48	04:14	Matrix Spike Duplicate
ZZZZZZ	B016848.D	08/05/03	15:17	04:43	(unrelated sample)
ZZZZZZ	B016849.D	08/05/03	15:46	05:12	(unrelated sample)
ZZZZZZ	B016850.D	08/05/03	16:15	05:41	(unrelated sample)
ZZZZZZ	B016851.D	08/05/03	16:44	06:10	(unrelated sample)
F18776-1	B016852.D	08/05/03	17:13	06:39	(used for QC only; not part of job F18741)
F18776-1DUP	B016853.D	08/05/03	17:42	07:08	Duplicate
F18741-1	B016854.D	08/05/03	18:09	07:35	IH-GW-008
F18741-1MS	B016855.D	08/05/03	18:36	08:02	Matrix Spike
F18741-1MSD	B016856.D	08/05/03	19:03	08:29	Matrix Spike Duplicate

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VC773-BFB	Injection Date:	08/06/03
Lab File ID:	C0017519.D	Injection Time:	08:49
Instrument ID:	GCMSC		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	26946	27.8	Pass
75	30.0 - 60.0% of mass 95	45077	46.6	Pass
95	Base peak, 100% relative abundance	96781	100.0	Pass
96	5.0 - 9.0% of mass 95	7344	7.6	Pass
173	Less than 2.0% of mass 174	642	0.66 (0.74) ^a	Pass
174	50.0 - 100.0% of mass 95	86709	89.6	Pass
175	5.0 - 9.0% of mass 174	5887	6.1 (6.8) ^a	Pass
176	95.0 - 101.0% of mass 174	85053	87.9 (98.1) ^a	Pass
177	5.0 - 9.0% of mass 176	5136	5.3 (6.0) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VC773-CC766	C0017521.D	08/06/03	09:35	00:46	Continuing cal 40
VC773-BS	C0017522.D	08/06/03	10:04	01:15	Blank Spike
VC773-MB	C0017523.D	08/06/03	10:33	01:44	Method Blank
ZZZZZZ	C0017524.D	08/06/03	11:05	02:16	(unrelated sample)
ZZZZZZ	C0017525.D	08/06/03	11:34	02:45	(unrelated sample)
ZZZZZZ	C0017526.D	08/06/03	12:03	03:14	(unrelated sample)
ZZZZZZ	C0017527.D	08/06/03	12:32	03:43	(unrelated sample)
F18741-1	C0017528.D	08/06/03	13:01	04:12	IH-GW-008
ZZZZZZ	C0017529.D	08/06/03	13:30	04:41	(unrelated sample)
F18758-1	C0017530.D	08/06/03	13:59	05:10	(used for QC only; not part of job F18741)
F18758-1MS	C0017531.D	08/06/03	14:28	05:39	Matrix Spike
F18758-1MSD	C0017532.D	08/06/03	14:58	06:09	Matrix Spike Duplicate
ZZZZZZ	C0017533.D	08/06/03	15:27	06:38	(unrelated sample)
ZZZZZZ	C0017534.D	08/06/03	15:55	07:06	(unrelated sample)
ZZZZZZ	C0017535.D	08/06/03	16:24	07:35	(unrelated sample)
ZZZZZZ	C0017536.D	08/06/03	16:53	08:04	(unrelated sample)
ZZZZZZ	C0017537.D	08/06/03	17:22	08:33	(unrelated sample)
ZZZZZZ	C0017538.D	08/06/03	17:51	09:02	(unrelated sample)
ZZZZZZ	C0017539.D	08/06/03	18:21	09:32	(unrelated sample)
ZZZZZZ	C0017540.D	08/06/03	18:50	10:01	(unrelated sample)
ZZZZZZ	C0017541.D	08/06/03	19:19	10:30	(unrelated sample)
ZZZZZZ	C0017542.D	08/06/03	19:48	10:59	(unrelated sample)
ZZZZZZ	C0017543.D	08/06/03	20:19	11:30	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB730-BFB	Injection Date: 07/16/03
Lab File ID: B016473.D	Injection Time: 10:38
Instrument ID: GCMSB	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16335	32.8	Pass
75	30.0 - 60.0% of mass 95	28690	57.5	Pass
95	Base peak, 100% relative abundance	49866	100.0	Pass
96	5.0 - 9.0% of mass 95	3393	6.8	Pass
173	Less than 2.0% of mass 174	248	0.5 (0.57) ^a	Pass
174	50.0 - 100.0% of mass 95	43885	88.0	Pass
175	5.0 - 9.0% of mass 174	3162	6.3 (7.2) ^a	Pass
176	95.0 - 101.0% of mass 174	42952	86.1 (97.9) ^a	Pass
177	5.0 - 9.0% of mass 176	2774	5.6 (6.5) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VB730-IC730	B016474.D	07/16/03	11:04	00:26	Initial cal 1
VB730-IC730	B016475.D	07/16/03	11:31	00:53	Initial cal 5
VB730-IC730	B016476.D	07/16/03	11:58	01:20	Initial cal 20
VB730-ICC730	B016477.D	07/16/03	12:25	01:47	Initial cal 40
VB730-IC730	B016478.D	07/16/03	12:52	02:14	Initial cal 70
VB730-IC730	B016479.D	07/16/03	13:19	02:41	Initial cal 100

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VC766-BFB	Injection Date:	07/28/03
Lab File ID:	C0017329.D	Injection Time:	13:26
Instrument ID:	GCMSC		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	26309	23.8	Pass
75	30.0 - 60.0% of mass 95	48096	43.6	Pass
95	Base peak, 100% relative abundance	110349	100.0	Pass
96	5.0 - 9.0% of mass 95	6444	5.8	Pass
173	Less than 2.0% of mass 174	432	0.39 (0.43) ^a	Pass
174	50.0 - 100.0% of mass 95	99330	90.0	Pass
175	5.0 - 9.0% of mass 174	7595	6.9 (7.6) ^a	Pass
176	95.0 - 101.0% of mass 174	96546	87.5 (97.2) ^a	Pass
177	5.0 - 9.0% of mass 176	6944	6.3 (7.2) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VC766-IC766	C0017330.D	07/28/03	13:59	00:33	Initial cal 1
VC766-IC766	C0017331.D	07/28/03	14:28	01:02	Initial cal 5
VC766-IC766	C0017332.D	07/28/03	14:58	01:32	Initial cal 20
VC766-ICC766	C0017333.D	07/28/03	15:27	02:01	Initial cal 40
VC766-IC766	C0017334.D	07/28/03	15:56	02:30	Initial cal 70
VC766-IC766	C0017335.D	07/28/03	16:25	02:59	Initial cal 100
VC766-BS	C0017337.D	07/28/03	17:23	03:57	Blank Spike
VC766-MB	C0017338.D	07/28/03	17:52	04:26	Method Blank
ZZZZZZ	C0017339.D	07/28/03	18:21	04:55	(unrelated sample)
ZZZZZZ	C0017340.D	07/28/03	18:51	05:25	(unrelated sample)
F18600-2	C0017341.D	07/28/03	19:20	05:54	(used for QC only; not part of job F18741)
F18600-2MS	C0017342.D	07/28/03	19:49	06:23	Matrix Spike
F18600-2MSD	C0017343.D	07/28/03	20:18	06:52	Matrix Spike Duplicate
ZZZZZZ	C0017344.D	07/28/03	20:47	07:21	(unrelated sample)
ZZZZZZ	C0017345.D	07/28/03	21:16	07:50	(unrelated sample)
ZZZZZZ	C0017346.D	07/28/03	21:45	08:19	(unrelated sample)
ZZZZZZ	C0017347.D	07/28/03	22:14	08:48	(unrelated sample)
ZZZZZZ	C0017348.D	07/28/03	22:43	09:17	(unrelated sample)
ZZZZZZ	C0017349.D	07/28/03	23:12	09:46	(unrelated sample)
ZZZZZZ	C0017350.D	07/28/03	23:41	10:15	(unrelated sample)
ZZZZZZ	C0017351.D	07/29/03	00:09	10:43	(unrelated sample)
ZZZZZZ	C0017352.D	07/29/03	00:38	11:12	(unrelated sample)
ZZZZZZ	C0017353.D	07/29/03	01:07	11:41	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VH783-BFB	Injection Date:	07/28/03
Lab File ID:	H021585.D	Injection Time:	14:45
Instrument ID:	GCMSH		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	16974	22.7	Pass
75	30.0 - 60.0% of mass 95	40248	53.9	Pass
95	Base peak, 100% relative abundance	74675	100.0	Pass
96	5.0 - 9.0% of mass 95	4911	6.6	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	47093	63.1	Pass
175	5.0 - 9.0% of mass 174	3535	4.7 (7.5) ^a	Pass
176	95.0 - 101.0% of mass 174	45419	60.8 (96.4) ^a	Pass
177	5.0 - 9.0% of mass 176	2925	3.9 (6.4) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VH783-IC783	H021586.D	07/28/03	15:01	00:16	Initial cal 5
VH783-IC783	H021587.D	07/28/03	15:31	00:46	Initial cal 10
VH783-IC783	H021588.D	07/28/03	16:01	01:16	Initial cal 20
VH783-ICC783	H021589.D	07/28/03	16:32	01:47	Initial cal 40
VH783-IC783	H021590.D	07/28/03	17:02	02:17	Initial cal 100
VH783-IC783	H021591.D	07/28/03	17:32	02:47	Initial cal 200
VH783-BS	H021594.D	07/28/03	19:03	04:18	Blank Spike
VH783-MB	H021595.D	07/28/03	19:33	04:48	Method Blank

Volatile Internal Standard Area Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VB740-CC730	Injection Date:	07/29/03
Lab File ID:	B016709.D	Injection Time:	11:24
Instrument ID:	GCMSB	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	1312647	9.56	1057895	12.78	564178	15.32	108183	6.88
Upper Limit ^a	2625294	10.06	2115790	13.28	1128356	15.82	216366	7.38
Lower Limit ^b	656324	9.06	528948	12.28	282089	14.82	54092	6.38

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VB740-BS	1356117	9.56	1100117	12.78	553034	15.32	116777	6.87
OP8060-LB	1319178	9.56	1039488	12.78	456666	15.32	111147	6.88
F18645-1	1276091	9.56	985960	12.78	433388	15.32	111426	6.87
F18645-1MS	1286326	9.56	1032428	12.78	543675	15.32	96534	6.88
F18645-1MSD	1337195	9.56	1093943	12.78	570028	15.32	109600	6.89
F18645-2	1319265	9.56	1032454	12.78	449948	15.32	111042	6.88
F18645-2DUP	1237067	9.56	960958	12.78	421826	15.32	107157	6.88
OP8082-LB	1168627	9.56	937283	12.78	407810	15.32	100953	6.88
ZZZZZZ	1143496	9.56	923918	12.78	416720	15.32	89356	6.88
ZZZZZZ	1151329	9.56	939880	12.78	411387	15.32	92032	6.87
ZZZZZZ	1135918	9.56	894952	12.78	397230	15.32	99861	6.87
ZZZZZZ	1087055	9.56	878459	12.78	376833	15.32	96711	6.87
F18741-2	1054824	9.56	843352	12.78	358640	15.32	99968	6.87
ZZZZZZ	1019714	9.56	817211	12.78	349043	15.32	91431	6.87
F18763-1	1011513	9.56	817289	12.78	348292	15.32	80310	6.88
F18763-1DUP	994042	9.56	802838	12.78	340752	15.32	81667	6.88

IS 1 = Fluorobenzene
 IS 2 = Chlorobenzene-D5
 IS 3 = 1,4-Dichlorobenzene-d4
 IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VH784-CC783	Injection Date:	07/29/03
Lab File ID:	H021605.D	Injection Time:	11:29
Instrument ID:	GCMSH	Method:	SW846 8260B

	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
	AREA		AREA		AREA		AREA	
Check Std	523619	10.02	366700	13.12	166880	15.53	97803	7.29
Upper Limit ^a	1047238	10.52	733400	13.62	333760	16.03	195606	7.79
Lower Limit ^b	261810	9.52	183350	12.62	83440	15.03	48902	6.79

Lab	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
Sample ID	AREA		AREA		AREA		AREA	
VH784-BS	512656	10.01	369572	13.12	163826	15.53	106630	7.28
VH784-MB	497779	10.01	344831	13.12	139264	15.53	89040	7.29
ZZZZZZ	455855	10.01	308176	13.12	121357	15.53	56455	7.29
F18765-1	494800	10.02	336806	13.12	131371	15.53	94990	7.30
ZZZZZZ	505019	10.02	352042	13.12	126611	15.53	80600	7.30
ZZZZZZ	491492	10.02	329400	13.13	119846	15.53	76500	7.30
ZZZZZZ	478738	10.02	276764	13.13	119602	15.53	112039	7.30
F18765-1MS	473134	10.03	275650	13.13	111652	15.53	47141*	7.29
F18765-1MSD	471162	10.03	274005	13.13	115263	15.53	44411*	7.30
ZZZZZZ	485109	10.03	282341	13.13	120544	15.54	63439	7.30
ZZZZZZ	445025	10.02	255216	13.13	107880	15.54	66142	7.30
ZZZZZZ	461738	10.03	271837	13.13	117452	15.53	94143	7.31
F18741-2	429300	10.03	235915	13.13	83891	15.54	62496	7.30
ZZZZZZ	441914	10.02	296888	13.13	100841	15.53	63867	7.31
ZZZZZZ	437089	10.02	297939	13.13	103025	15.53	74716	7.30
ZZZZZZ	397792	10.02	276597	13.13	112852	15.52	71255	7.29
ZZZZZZ	403695	10.01	286579	13.12	118042	15.52	60852	7.30
ZZZZZZ	417521	10.01	301644	13.12	130711	15.53	83915	7.29
ZZZZZZ	420115	10.02	302491	13.12	127731	15.53	81969	7.28
ZZZZZZ	441557	10.01	305190	13.12	108712	15.52	68961	7.29
ZZZZZZ	390693	10.01	268188	13.12	102574	15.53	66853	7.30
ZZZZZZ	492222	10.01	295029	13.11	133877	15.52	88932	7.30

IS 1 = Fluorobenzene
 IS 2 = Chlorobenzene-D5
 IS 3 = 1,4-Dichlorobenzene-d4
 IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VC772-CC766	Injection Date:	08/05/03
Lab File ID:	C0017494.D	Injection Time:	09:43
Instrument ID:	GCMSC	Method:	SW846 8260B

	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
	AREA		AREA		AREA		AREA	
Check Std	1736695	10.26	1284196	13.50	733744	16.04	218161	7.49
Upper Limit ^a	3473390	10.76	2568392	14.00	1467488	16.54	436322	7.99
Lower Limit ^b	868348	9.76	642098	13.00	366872	15.54	109081	6.99

Lab Sample ID	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
	AREA		AREA		AREA		AREA	
VC772-BS	1853834	10.26	1356847	13.50	775178	16.04	234162	7.50
VC772-MB	1802989	10.26	1295430	13.50	677980	16.04	238845	7.50
ZZZZZZ	1635311	10.26	1161376	13.50	609176	16.04	199654	7.49
ZZZZZZ	1533628	10.26	1081565	13.50	572311	16.04	184745	7.50
ZZZZZZ	1513091	10.26	1081681	13.50	622568	16.04	184906	7.49
ZZZZZZ	1660824	10.26	1168031	13.50	613674	16.04	212709	7.50
ZZZZZZ	1528043	10.26	1096211	13.50	571858	16.04	195174	7.50
ZZZZZZ	1487474	10.26	1064515	13.50	557293	16.04	197615	7.50
F18731-7	1449880	10.26	1037665	13.50	544015	16.04	182978	7.50
F18731-7MS	1461976	10.26	1081142	13.50	643748	16.04	186515	7.49
F18731-7MSD	1534254	10.26	1126839	13.50	677577	16.04	204600	7.50
ZZZZZZ	1539423	10.26	1096134	13.50	585073	16.04	208010	7.50
ZZZZZZ	1486876	10.26	1053846	13.50	551823	16.04	192744	7.50
ZZZZZZ	1431269	10.27	1018893	13.50	534856	16.04	186684	7.50
ZZZZZZ	1371208	10.26	983624	13.50	517595	16.04	183313	7.50
ZZZZZZ	1319176	10.26	957006	13.50	503943	16.04	171702	7.50
ZZZZZZ	1307609	10.26	956472	13.50	490922	16.04	168086	7.51
ZZZZZZ	1272623	10.26	927784	13.50	499815	16.04	160565	7.50
ZZZZZZ	1328274	10.26	964490	13.50	515065	16.04	167519	7.50
F18741-1	1332583	10.26	947481	13.50	515348	16.04	169550	7.50
ZZZZZZ	1465766	10.26	1044167	13.50	550128	16.04	187812	7.50

- IS 1 = Fluorobenzene
- IS 2 = Chlorobenzene-D5
- IS 3 = 1,4-Dichlorobenzene-d4
- IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VB745-CC730	Injection Date:	08/05/03
Lab File ID:	B016840.D	Injection Time:	11:26
Instrument ID:	GCMSB	Method:	SW846 8260B

	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
	AREA		AREA		AREA		AREA	
Check Std	1067963	9.56	903447	12.78	531651	15.32	115915	6.88
Upper Limit ^a	2135926	10.06	1806894	13.28	1063302	15.82	231830	7.38
Lower Limit ^b	533982	9.06	451724	12.28	265826	14.82	57958	6.38

Lab	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
Sample ID	AREA		AREA		AREA		AREA	
VB745-BS	1094111	9.56	900792	12.78	513846	15.32	121883	6.88
VB745-MB	1035104	9.56	795455	12.78	377813	15.32	109308	6.89
VB746-BS	1059390	9.56	903476	12.78	506927	15.32	124735	6.87
OP8135-LB	1027936	9.56	837035	12.78	387304	15.32	127117	6.88
F18800-1	972706	9.56	806049	12.78	369416	15.32	118868	6.88
F18800-1MS	1035710	9.56	888992	12.78	503757	15.32	124177	6.88
F18800-1MSD	1091065	9.56	911280	12.78	518375	15.32	136109	6.87
ZZZZZZ	1028806	9.56	852390	12.78	393786	15.32	132070	6.88
ZZZZZZ	969441	9.56	798946	12.78	373335	15.32	126703	6.87
ZZZZZZ	945814	9.56	778264	12.78	360238	15.32	124865	6.88
ZZZZZZ	941516	9.56	778506	12.78	355577	15.32	127661	6.87
F18776-1	921321	9.56	775190	12.78	358019	15.32	125506	6.87
F18776-1DUP	916236	9.56	758856	12.78	341537	15.32	117468	6.88
F18741-1	907364	9.56	683829	12.78	324987	15.32	98986	6.89
F18741-1MS	988605	9.56	821331	12.78	484046	15.32	113139	6.87
F18741-1MSD	1035303	9.56	859221	12.78	508453	15.32	118929	6.88

IS 1 = Fluorobenzene
 IS 2 = Chlorobenzene-D5
 IS 3 = 1,4-Dichlorobenzene-d4
 IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VC773-CC766	Injection Date:	08/06/03
Lab File ID:	C0017521.D	Injection Time:	09:35
Instrument ID:	GCMSC	Method:	SW846 8260B

	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
	AREA		AREA		AREA		AREA	
Check Std	1640300	10.26	1231063	13.50	731421	16.04	210538	7.50
Upper Limit ^a	3280600	10.76	2462126	14.00	1462842	16.54	421076	8.00
Lower Limit ^b	820150	9.76	615532	13.00	365711	15.54	105269	7.00

Lab	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
Sample ID	AREA		AREA		AREA		AREA	
VC773-BS	1727918	10.26	1280960	13.50	749740	16.04	221089	7.49
VC773-MB	1709314	10.26	1222633	13.50	642156	16.04	217850	7.50
ZZZZZZ	1551738	10.26	1114746	13.50	581774	16.04	193361	7.50
ZZZZZZ	1487953	10.26	1060390	13.50	554286	16.04	185978	7.50
ZZZZZZ	1412884	10.26	1031274	13.50	542174	16.04	195280	7.50
ZZZZZZ	1392248	10.26	1014060	13.50	526518	16.04	188415	7.50
F18741-1	1361017	10.26	979202	13.50	519164	16.04	178264	7.50
ZZZZZZ	1336895	10.26	963674	13.50	603610	16.04	178257	7.49
F18758-1	1867974	10.26	1363826	13.50	715630	16.04	247619	7.50
F18758-1MS	1800822	10.26	1319472	13.50	749115	16.04	250307	7.49
F18758-1MSD	1853232	10.26	1374275	13.50	777628	16.04	263914	7.49
ZZZZZZ	1840329	10.26	1309630	13.50	692949	16.04	269025	7.50
ZZZZZZ	1601262	10.26	1145940	13.50	593075	16.05	226555	7.50
ZZZZZZ	1455289	10.26	1062631	13.50	553506	16.04	197367	7.50
ZZZZZZ	1396607	10.26	1023159	13.50	536199	16.04	191790	7.50
ZZZZZZ	1386587	10.26	1003391	13.50	532485	16.04	185053	7.50
ZZZZZZ	1342373	10.26	989564	13.50	515869	16.04	171195	7.50
ZZZZZZ	1374827	10.26	1013863	13.50	631998	16.04	166879	7.50
ZZZZZZ	1898444	10.26	1354822	13.50	755033	16.04	253476	7.50
ZZZZZZ	1935952	10.26	1467619	13.50	812422	16.05	257310	7.50
ZZZZZZ	1918193	10.26	1454524	13.50	782775	16.04	241148	7.49
ZZZZZZ	1904097	10.26	1386137	13.50	734711	16.04	237547	7.50

- IS 1 = Fluorobenzene
- IS 2 = Chlorobenzene-D5
- IS 3 = 1,4-Dichlorobenzene-d4
- IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8260B Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F18741-1	C0017528.D	91.0	96.0	107.0	96.0
F18741-1	C0017514.D	90.0	96.0	106.0	95.0
F18741-1	B016854.D	106.0	106.0	99.0	107.0
F18741-2	B016722.D	99.0	95.0	97.0	117.0
F18645-1MS	B016713.D	98.0	94.0	96.0	106.0
F18645-1MSD	B016714.D	97.0	95.0	95.0	103.0
F18645-2DUP	B016716.D	98.0	92.0	97.0	115.0
F18731-7MS	C0017504.D	92.0	96.0	106.0	93.0
F18731-7MSD	C0017505.D	93.0	101.0	106.0	93.0
F18741-1MS	B016855.D	106.0	114.0	96.0	93.0
F18741-1MSD	B016856.D	106.0	113.0	97.0	92.0
F18758-1MS	C0017531.D	93.0	99.0	106.0	96.0
F18758-1MSD	C0017532.D	93.0	96.0	106.0	99.0
F18763-1DUP	B016725.D	100.0	97.0	97.0	117.0
OP8082-LB	B016717.D	98.0	93.0	97.0	115.0
VB740-BS	B016710.D	98.0	95.0	96.0	106.0
VB745-BS	B016841.D	106.0	112.0	98.0	98.0
VB745-MB	B016842.D	105.0	106.0	98.0	109.0
VC772-BS	C0017495.D	92.0	97.0	106.0	97.0
VC772-MB	C0017496.D	93.0	97.0	108.0	100.0
VC773-BS	C0017522.D	91.0	98.0	106.0	95.0
VC773-MB	C0017523.D	90.0	94.0	107.0	96.0

Surrogate Compounds

Recovery Limits

S1 = Dibromofluoromethane	86-115%
S2 = 1,2-Dichloroethane-D4	78-125%
S3 = Toluene-D8	87-113%
S4 = 4-Bromofluorobenzene	84-117%

Volatile Surrogate Recovery Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Method: SW846 8260B	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F18741-1	C0017528.D	91.0	96.0	107.0	96.0
F18741-1	C0017514.D	90.0	96.0	106.0	95.0
F18741-1	B016854.D	106.0	106.0	99.0	107.0
F18741-2	B016722.D	99.0	95.0	97.0	117.0
F18645-1MS	B016713.D	98.0	94.0	96.0	106.0
F18645-1MSD	B016714.D	97.0	95.0	95.0	103.0
F18645-2DUP	B016716.D	98.0	92.0	97.0	115.0
F18731-7MS	C0017504.D	92.0	96.0	106.0	93.0
F18731-7MSD	C0017505.D	93.0	101.0	106.0	93.0
F18741-1MS	B016855.D	106.0	114.0	96.0	93.0
F18741-1MSD	B016856.D	106.0	113.0	97.0	92.0
F18758-1MS	C0017531.D	93.0	99.0	106.0	96.0
F18758-1MSD	C0017532.D	93.0	96.0	106.0	99.0
F18763-1DUP	B016725.D	100.0	97.0	97.0	117.0
OP8082-LB	B016717.D	98.0	93.0	97.0	115.0
VB740-BS	B016710.D	98.0	95.0	96.0	106.0
VB745-BS	B016841.D	106.0	112.0	98.0	98.0
VB745-MB	B016842.D	105.0	106.0	98.0	109.0
VC772-BS	C0017495.D	92.0	97.0	106.0	97.0
VC772-MB	C0017496.D	93.0	97.0	108.0	100.0
VC773-BS	C0017522.D	91.0	98.0	106.0	95.0
VC773-MB	C0017523.D	90.0	94.0	107.0	96.0

Surrogate Compounds	Recovery Limits
S1 = Dibromofluoromethane	86-115%
S2 = 1,2-Dichloroethane-D4	78-125%
S3 = Toluene-D8	87-113%
S4 = 4-Bromofluorobenzene	84-117%

Volatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8260B Matrix: SO

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F18741-2	H021619.D	100.0	114.0	114.0	100.0
F18765-1MS	H021614.D	99.0	110.0	105.0	87.0
F18765-1MSD	H021615.D	101.0	94.0	103.0	88.0
VH784-BS	H021606.D	95.0	89.0	98.0	94.0
VH784-MB	H021607.D	96.0	93.0	104.0	94.0

Surrogate Compounds	Recovery Limits
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S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	79-121%
S3 = 4-Bromofluorobenzene	77-133%
S4 = 1,2-Dichloroethane-D4	72-133%

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB730-ICC730
 Lab FileID: B016477.D

Response Factor Report MSVOA4

Method : C:\MSDCHEM\1\METHODS\82600716.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Thu Jul 17 12:45:13 2003
 Response via : Initial Calibration

Calibration Files

1 =B016474.D 2 =B016475.D 3 =B016476.D
 4 =B016477.D 5 =B016478.D 6 =B016479.D

Compound	1	2	3	4	5	6	Avg	%RSD
-----I STD-----								
1) I Fluorobenzene								
2) Dichlorodifluoromet		0.332	0.367	0.354	0.359	0.352	0.352	3.68
3) P Chloromethane	0.739	0.717	0.681	0.701	0.691	0.684	0.702	3.18
4) C Vinyl Chloride	0.482	0.547	0.522	0.536	0.515	0.491	0.515	4.85
5) Bromomethane	0.373	0.332	0.306	0.308	0.303	0.289	0.318	9.55
6) Chloroethane	0.277	0.273	0.280	0.264	0.260	0.249	0.267	4.41
7) Trichlorofluorometh	0.580	0.617	0.604	0.573	0.580	0.566	0.587	3.37
8) Ethyl Ether	0.357	0.392	0.378	0.379	0.361	0.355	0.370	4.00
9) 1,2-Dichloro-1,1,2-	0.479	0.533	0.490	0.470	0.449	0.423	0.474	7.86
10) Acrolein	0.029	0.035	0.033	0.033	0.031	0.031	0.032	7.59
11) Freon 113	0.389	0.364	0.370	0.356	0.340	0.327	0.358	6.14
12) C 1,1-Dichloroethene	0.761	0.606	0.709	0.694	0.631	0.669	0.678	8.21
13) Acetone		0.143	0.134	0.140	0.126	0.132	0.135	5.03
14) Iodomethane	0.385	0.411	0.417	0.436	0.443	0.446	0.423	5.54
15) Carbon Disulfide	0.966	0.826	0.807	0.810	0.783	0.778	0.828	8.44
16) Methyl acetate	0.241	0.239	0.242	0.261	0.253	0.262	0.250	4.12
17) Methylene Chloride		0.659	0.595	0.598	0.581	0.581	0.603	5.36
18) Methyl Tert Butyl E		0.508	0.623	0.671	0.673	0.695	0.634	11.87
19) trans-1,2-Dichloroe	0.409	0.434	0.478	0.489	0.490	0.496	0.466	7.76
20) Acrylonitrile	0.084	0.109	0.107	0.111	0.106	0.111	0.105	10.02
21) Hexane		0.283	0.346	0.362	0.373	0.370	0.347	10.67
22) Di-isopropyl ether		1.098	1.304	1.409	1.441	1.497	1.350	11.65
23) Vinyl acetate	0.536	0.694	0.770	0.792	0.744	0.792	0.721	13.55
24) P 1,1-Dichloroethane	0.523	0.600	0.600	0.610	0.603	0.625	0.593	6.05
25) ETBE		0.717	0.866	0.958	0.985	1.038	0.913	13.79
26) 2-Butanone		0.128	0.146	0.167	0.165	0.174	0.156	12.02
27) 2,2-Dichloropropane	0.275	0.313	0.327	0.332	0.330	0.334	0.318	7.15
28) cis-1,2-Dichloroeth	0.237	0.251	0.279	0.286	0.289	0.296	0.273	8.64
29) Bromochloromethane	0.119	0.121	0.135	0.144	0.143	0.145	0.135	8.77
30) Tetrahydrofuran	0.055	0.071	0.075	0.099	0.096	0.105	0.083	23.07
----- Quadratic regression ----- Coefficient = 0.9982								
Response Ratio = -0.00169 + 0.08630 *A + 0.00940 *A^2								
31) C Chloroform	0.488	0.527	0.530	0.531	0.527	0.541	0.524	3.47
32) S Dibromofluoromethan	0.312	0.309	0.312	0.313	0.308	0.303	0.309	1.27
33) 1,1,1-Trichloroetha	0.404	0.456	0.483	0.489	0.494	0.494	0.470	7.50
34) Cyclohexane		0.420	0.494	0.524	0.551	0.571	0.512	11.48
35) Carbon Tetrachlorid	0.435	0.446	0.451	0.472	0.484	0.490	0.463	4.81
36) 1,1-Dichloropropene		0.311	0.337	0.360	0.372	0.382	0.352	8.08
37) S 1,2-Dichloroethane-	0.415	0.411	0.431	0.438	0.451	0.458	0.434	4.35
38) TAME	0.478	0.554	0.639	0.724	0.760	0.818	0.662	19.59
----- Quadratic regression ----- Coefficient = 0.9998								
Response Ratio = -0.00819 + 0.65027 *A + 0.08565 *A^2								
39) Benzene	0.940	1.018	1.016	1.062	1.085	1.124	1.041	6.18
40) 1,2-Dichloroethane	0.475	0.497	0.490	0.523	0.514	0.518	0.503	3.68

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB730-ICC730
 Lab FileID: B016477.D

41)	Tri chloroethene	0.256	0.240	0.264	0.285	0.298	0.302	0.274	9.13
42)	Methyl cycl ohexane	0.254	0.332	0.342	0.366	0.367	0.332		13.93
43) C	1, 2-Di chl oropropane	0.266	0.282	0.297	0.314	0.318	0.326	0.301	7.71
44)	Di bromomethane	0.180	0.178	0.175	0.189	0.185	0.190	0.183	3.26
45)	Bromodi chl oromethan	0.347	0.364	0.389	0.410	0.413	0.419	0.390	7.52
46)	2-Chl oroethyl vinyl	0.072	0.101	0.139	0.161	0.170	0.187	0.138	31.97
	----- Quadratic regression -----								
	Response Ratio =	-0.01460 + 0.14171 *A + 0.00466 *A^2							
47)	2-Ni tropopropane	0.103	0.112	0.127	0.124	0.129	0.119		9.40
48)	cis-1, 3-Di chl oropro	0.361	0.416	0.458	0.466	0.480	0.437		11.11
49)	4-Methyl -2-pentanon	0.190	0.284	0.339	0.389	0.392	0.420	0.336	25.68
	----- Quadratic regression -----								
	Response Ratio =	-0.02765 + 0.35438 *A + 0.00674 *A^2							
50) I	Chl orobenzene-d5	-----I STD-----							
51) S	Tol uene-d8	1.314	1.274	1.262	1.249	1.256	1.232	1.265	2.19
52) C	Tol uene	1.454	1.290	1.386	1.432	1.480	1.499	1.424	5.35
53)	trans-1, 3-Di chl orop	0.391	0.466	0.515	0.543	0.541	0.491		13.03
54)	1, 1, 2-Tri chl oroetha	0.240	0.227	0.237	0.245	0.248	0.244	0.240	2.99
55)	Tetrachl oroethene	0.303	0.339	0.355	0.376	0.399	0.412	0.364	11.06
56)	2-hexanone	0.169	0.199	0.272	0.320	0.324	0.339	0.271	26.43
	----- Quadratic regression -----								
	Response Ratio =	-0.03995 + 0.30506 *A + 0.00383 *A^2							
57)	1, 3-Di chl oropropane	0.409	0.463	0.499	0.522	0.515	0.516	0.487	9.06
58)	Di bromochl oromethan	0.323	0.357	0.367	0.394	0.401	0.406	0.375	8.57
59)	1, 2-Di bromoethane	0.273	0.261	0.276	0.292	0.301	0.303	0.284	5.93
60)	1-Chl orohexane	0.200	0.295	0.382	0.408	0.434	0.442	0.360	26.29
	----- Quadratic regression -----								
	Response Ratio =	-0.00930 + 0.40745 *A + 0.02021 *A^2							
61) P	Chl orobenzene	0.913	0.918	0.940	0.967	1.003	1.026	0.961	4.80
62) C	Ethyl benzene	1.417	1.588	1.642	1.745	1.797	1.638		9.07
63)	1, 1, 1, 2-Tetrachl oro	0.339	0.364	0.388	0.396	0.409	0.421	0.386	7.84
64)	m, p-Xyl ene	1.104	1.260	1.334	1.459	1.517	1.335		12.30
65)	o-Xyl ene	0.718	1.000	1.235	1.346	1.466	1.543	1.218	25.47
	----- Linear regression -----								
	Response Ratio =	-0.08413 + 1.55242 *A							
66)	Styrene	0.467	0.749	0.932	1.010	1.109	1.155	0.904	28.51
	----- Linear regression -----								
	Response Ratio =	-0.06221 + 1.16544 *A							
67) P	Bromoform	0.220	0.246	0.278	0.291	0.305	0.268		12.83
68) I	1, 4-Di chl orobenzene-d	-----I STD-----							
69)	Isopropyl benzene	2.115	2.430	2.490	2.578	2.584	2.439		7.88
70)	Cycl ohexanone	0.029	0.019	0.019	0.018	0.019	0.021		20.90
	----- Quadratic regression -----								
	Response Ratio =	0.00607 + 0.01618 *A + 0.00023 *A^2							
71) S	4-Bromofl uorobenzen	0.996	0.942	0.909	0.873	0.858	0.842	0.903	6.41
72) P	1, 1, 2, 2-Tetrachl oro	0.782	0.678	0.613	0.611	0.571	0.567	0.637	12.79
73)	trans-1, 4-Di chl oro-	0.097	0.152	0.209	0.244	0.262	0.278	0.207	33.85
	----- Linear regression -----								
	Response Ratio =	-0.01756 + 0.28040 *A							
74)	n-Propyl benzene	3.016	3.332	3.428	3.555	3.638	3.394		7.12

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VB730-ICC730
Lab FileID: B016477.D

75)	Bromobenzene	0.713	0.778	0.803	0.811	0.824	0.852	0.797	5.98
76)	1,2,3-Tri chloroprop	0.204	0.205	0.195	0.204	0.197	0.201	0.201	2.00
77)	1,3,5-Tri methyl benz		1.971	2.192	2.251	2.397	2.467	2.256	8.58
78)	2-Chl orotol uene	1.905	2.325	2.392	2.414	2.507	2.580	2.354	10.09
79)	4-Chl orotol uene	1.574	1.783	1.965	2.028	2.077	2.100	1.921	10.65
80)	tert-Butyl benzene		1.162	1.357	1.390	1.437	1.443	1.358	8.46
81)	1,2,4-Tri methyl benz		1.946	2.244	2.283	2.384	2.404	2.252	8.16
82)	sec-Butyl benzene		2.165	2.532	2.599	2.708	2.731	2.547	8.97
83)	4-I sopropyl tol uene		1.668	2.109	2.190	2.296	2.321	2.117	12.53
84)	1,3-Di chl orobenzene	1.103	1.276	1.344	1.382	1.414	1.461	1.330	9.61
85)	1,4-Di chl orobenzene	1.103	1.435	1.436	1.431	1.467	1.501	1.395	10.46
86)	Benzyl Chl ori de	1.131	0.826	1.003	1.112	1.111	1.141	1.054	11.58
87)	n-Butyl benzene		1.518	2.006	2.035	2.138	2.189	1.977	13.52
88)	1,2-Di chl orobenzene	1.082	1.209	1.309	1.318	1.353	1.416	1.281	9.27
89)	1,2-Di bromo-3-Chl or	0.092	0.091	0.098	0.106	0.104	0.104	0.099	6.50
90)	1,2,4-Tri chl orobenz	0.457	0.560	0.662	0.749	0.800	0.915	0.690	24.06
	----- Quadratic regression -----								
									Coefficient = 0.9996
									Response Ratio = -0.00084 + 0.59889 *A + 0.15608 *A^2
91)	Hexachl orobutadi ene	0.307	0.327	0.356	0.362	0.379	0.411	0.357	10.38
92)	Naphthal ene	0.633	0.849	1.119	1.356	1.375	1.569	1.150	30.82
	----- Quadratic regression -----								
									Coefficient = 0.9988
									Response Ratio = -0.01451 + 1.10692 *A + 0.22990 *A^2
93)	1,2,3-Tri chl orobenz	0.391	0.479	0.581	0.663	0.674	0.791	0.596	24.25
	----- Quadratic regression -----								
									Coefficient = 0.9984
									Response Ratio = 0.00267 + 0.50831 *A + 0.13710 *A^2
94) I	Tert Butyl alcohol -d1								-----I STD-----
95)	Tert-Butyl Alcohol	1.094	1.196	1.230	1.278	1.374	1.396	1.261	8.99
96)	1,4-Dioxane		0.062	0.088	0.100	0.110	0.110	0.094	21.52
	----- Linear regression -----								
									Coefficient = 0.9989
									Response Ratio = -0.03415 + 0.11453 *A

(#) = Out of Range

82600716.M

Fri Jul 18 09:01:57 2003

RPT1

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB740-CC730
 Lab FileID: B016709.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\072903\B016709.D Vial : 1
 Acq On : 29 Jul 2003 11:24 am Operator: Karenw
 Sample : CC730-40 Inst : MSVOA4
 Misc : ms2417,vb740,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\82600716.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Fri Jul 18 11:22:03 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	154	0.00
2	Dichlorodifluoromethane	0.352	0.339	3.7	147	0.01
3 P	Chloromethane	0.702	0.746	-6.3	164	0.00
4 C	Vinyl Chloride	0.515	0.530	-2.9	152	0.00
5	Bromomethane	0.318	0.290	8.8	145	0.00
6	Chloroethane	0.267	0.267	0.0	156	0.00
7	Trichlorofluoromethane	0.587	0.651	-10.9	175	0.00
8	Ethyl Ether	0.370	0.363	1.9	147	0.00
9	1,2-Dichloro-1,1,2-trifluoroethane	0.474	0.446	5.9	146	0.00
10	Acrolein	0.032	0.026	18.8	121	0.00
11	Freon 113	0.358	0.352	1.7	152	0.00
12 C	1,1-Dichloroethene	0.678	0.730	-7.7	162	-0.02
13	Acetone	0.135	0.117	13.3	129	0.00
14	Iodomethane	0.423	0.408	3.5	144	-0.04
15	Carbon Disulfide	0.828	0.779	5.9	148	0.00
16	Methyl acetate	0.250	0.260	-4.0	154	0.00
17	Methylene Chloride	0.603	0.636	-5.5	164	0.00
18	Methyl Tert Butyl Ether	0.634	0.628	0.9	144	0.00
19	trans-1,2-Dichloroethene	0.466	0.494	-6.0	155	0.00
20	Acrylonitrile	0.105	0.090	14.3	124	0.00
21	Hexane	0.347	0.430	-23.9#	183	0.00
22	Diisopropyl ether	1.350	1.561	-15.6	170	0.00
23	Vinyl acetate	0.721	0.936	-29.8#	182	0.00
24 P	1,1-Dichloroethane	0.593	0.600	-1.2	151	0.00
25	ETBE	0.913	0.993	-8.8	159	0.00
26	2-Butanone	0.156	0.154	1.3	142	0.00
27	2,2-Dichloropropane	0.318	0.347	-9.1	161	0.00
28	cis-1,2-Dichloroethene	0.273	0.283	-3.7	152	0.00
29	Bromochloromethane	0.135	0.132	2.2	141	0.00
30	Tetrahydrofuran	0.083	0.093	-12.0	145	0.00
31 C	Chloroform	0.524	0.518	1.1	150	0.00
32 S	Dibromofluoromethane	0.309	0.302	2.3	148	0.00
33	1,1,1-Trichloroethane	0.470	0.472	-0.4	148	0.00
34	Cyclohexane	0.512	0.573	-11.9	168	0.00
35	Carbon Tetrachloride	0.463	0.447	3.5	146	0.00
36	1,1-Dichloropropene	0.352	0.342	2.8	146	0.00
37 S	1,2-Dichloroethane-d4	0.434	0.413	4.8	145	0.00
38	TAME	0.662	0.671	-1.4	142	0.00
39	Benzene	1.041	1.028	1.2	149	0.00
40	1,2-Dichloroethane	0.503	0.509	-1.2	150	0.00
41	Trichloroethene	0.274	0.272	0.7	147	0.00
42	Methylcyclohexane	0.332	0.356	-7.2	160	0.00

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB740-CC730
 Lab FileID: B016709.D

43 C	1, 2-Di chl oropropane	0.301	0.313	-4.0	153	0.00
44	Di bromomethane	0.183	0.175	4.4	143	0.00
45	Bromodi chl oromethane	0.390	0.394	-1.0	148	0.00
46	2-Chl oroethyl vinyl ether	0.138	0.135	2.2	128	0.00
47	2-Ni tropropane	0.119	0.122	-2.5	148	0.00
48	ci s-1, 3-Di chl oropropene	0.437	0.432	1.1	145	0.00
49	4-Methyl -2-pentanone	0.336	0.378	-12.5	150	0.00
50 I	Chl orobenzene-d5	1.000	1.000	0.0	150	0.00
51 S	Tol uene-d8	1.265	1.224	3.2	147	0.00
52 C	Tol uene	1.424	1.387	2.6	145	0.00
53	trans-1, 3-Di chl oropropene	0.491	0.489	0.4	143	0.00
54	1, 1, 2-Tri chl oroethane	0.240	0.235	2.1	144	0.00
55	Tetrachl oroethene	0.364	0.367	-0.8	147	0.00
56	2-hexanone	0.271	0.299	-10.3	140	0.00
57	1, 3-Di chl oropropane	0.487	0.480	1.4	138	0.00
58	Di bromochl oromethane	0.375	0.353	5.9	134	0.00
59	1, 2-Di bromoethane	0.284	0.270	4.9	139	0.00
60	1-Chl orohexane	0.360	0.411	-14.2	151	0.00
61 P	Chl orobenzene	0.961	0.931	3.1	145	0.00
62 C	Ethyl benzene	1.638	1.601	2.3	146	0.00
63	1, 1, 1, 2-Tetrachl oroethane	0.386	0.385	0.3	146	0.00
64	m, p-Xyl ene	1.335	1.287	3.6	145	0.00
65	o-Xyl ene	1.218	1.300	-6.7	145	0.00
66	Styrene	0.904	0.920	-1.8	137	0.00
67 P	Bromoform	0.268	0.247	7.8	133	0.00
68 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	139	0.00
69	Isopropyl benzene	2.439	2.621	-7.5	146	0.00
70	Cycl ohexanone	0.021	0.018	14.3	129	0.00
71 S	4-Bromofl uorobenzene	0.903	0.941	-4.2	150	0.00
72 P	1, 1, 2, 2-Tetrachl oroethane	0.637	0.630	1.1	143	0.00
73	trans-1, 4-Di chl oro-2-Butene	0.207	0.241	-16.4	137	0.00
74	n-Propyl benzene	3.394	3.564	-5.0	144	0.00
75	Bromobenzene	0.797	0.847	-6.3	145	0.00
76	1, 2, 3-Tri chl oropropane	0.201	0.183	9.0	124	0.00
77	1, 3, 5-Tri methyl benzene	2.256	2.313	-2.5	143	0.00
78	2-Chl orotol uene	2.354	2.500	-6.2	144	0.00
79	4-Chl orotol uene	1.921	2.116	-10.2	145	0.00
80	tert-Butyl benzene	1.358	1.466	-8.0	146	0.00
81	1, 2, 4-Tri methyl benzene	2.252	2.344	-4.1	142	0.00
82	sec-Butyl benzene	2.547	2.721	-6.8	145	0.00
83	4-Isopropyl tol uene	2.117	2.206	-4.2	140	0.00
84	1, 3-Di chl orobenzene	1.330	1.428	-7.4	143	0.00
85	1, 4-Di chl orobenzene	1.395	1.505	-7.9	146	0.00
86	Benzyl chl ori de	1.054	1.060	-0.6	132	0.00
87	n-Butyl benzene	1.977	2.090	-5.7	142	0.00
88	1, 2-Di chl orobenzene	1.281	1.344	-4.9	141	0.00
89	1, 2-Di bromo-3-Chl oropropane	0.099	0.100	-1.0	132	0.00
90	1, 2, 4-Tri chl orobenzene	0.690	0.736	-6.7	136	0.00
91	Hexachl orobutadi ene	0.357	0.406	-13.7	155	0.00
92	Naphthal ene	1.150	1.194	-3.8	122	0.00
93	1, 2, 3-Tri chl orobenzene	0.596	0.629	-5.5	132	0.00
94 I	Tert Butyl al coh ol -d10	1.000	1.000	0.0	125	0.00
95	Tert-Butyl Al coh ol	1.261	1.404	-11.3	137	0.00
96	1, 4-Di oxane	0.094	0.100	-6.4	125	0.00

Average % D = 6.0

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VB740-CC730
Lab FileID: B016709.D

(#) = Out of Range
B016477.D 82600716.M

SPCC's out = 0 CCC's out = 0
Wed Jul 30 09:11:14 2003 RPT1

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VH783-ICC783
 Lab FileID: H021589.D

Response Factor Report MSVOA3

Method : C:\HPCHEM\1\METHODS\072803S.M (RTE Integrator)
 Title : SWA 5035/8260B
 Last Update : Thu Jul 03 10:36:14 2003
 Response via : Initial Calibration

Calibration Files

1 =H021586.D 2 =H021587.D 3 =H021588.D
 4 =H021589.D 5 =H021590.D 6 =H021591.D

Compound	1	2	3	4	5	6	Avg	%RSD
-----I STD-----								
1) I Fluorobenzene								
2) Dichlorodifluoromethane	0.236	0.254	0.257	0.246	0.254	0.224	0.245	5.18
3) P Chloromethane	0.446	0.416	0.402	0.413	0.398	0.360	0.406	6.86
4) C Vinyl Chloride	0.343	0.329	0.336	0.329	0.326	0.292	0.326	5.35
5) Bromomethane	0.159	0.165	0.171	0.167	0.163	0.123	0.158	10.99
6) Chloroethane	0.173	0.165	0.178	0.175	0.163	0.145	0.166	7.27
7) Trichlorofluoromethane	0.267	0.257	0.287	0.291	0.292	0.253	0.274	6.44
8) 1,2-Dichloro-1,1,2-Ethyl Ether	0.362	0.361	0.355	0.346	0.353	0.295	0.345	7.34
9) Acrolein	0.297	0.306	0.296	0.316	0.325	0.308	0.308	3.65
10) Freon 113	0.027	0.030	0.027	0.032	0.034	0.032	0.030	9.05
11) 1,1-Dichloroethene	0.221	0.213	0.234	0.226	0.233	0.203	0.221	5.50
12) C Acetone	0.545	0.509	0.505	0.487	0.501	0.440	0.498	6.90
13) Iodomethane	0.160	0.153	0.137	0.161	0.153	0.149	0.152	5.74
14) Carbon Disulfide	0.366	0.347	0.360	0.361	0.377	0.327	0.356	4.86
15) Methyl acetate	0.974	0.877	0.872	0.863	0.871	0.797	0.876	6.48
16) Methylene Chloride	0.302	0.298	0.272	0.324	0.323	0.329	0.308	7.02
17)	0.955	0.676	0.571	0.513	0.498	0.459	0.612	30.08
----- Linear regression ----- Coefficient = 0.9991								
Response Ratio = 0.05396 + 0.45044 *A								
18) Acrylonitrile	0.130	0.133	0.125	0.142	0.145	0.145	0.137	6.27
19) Methyl Tert Butyl Ether	0.950	0.926	0.915	0.972	0.993	0.929	0.948	3.17
20) trans-1,2-Dichloroethene	0.583	0.560	0.540	0.528	0.542	0.501	0.542	5.13
21) Hexane	0.513	0.467	0.432	0.425	0.432	0.397	0.445	9.10
22) Vinyl acetate	0.933	0.924	0.885	0.935	1.014	0.903	0.932	4.77
23) P 1,1-Dichloroethane	0.683	0.665	0.649	0.634	0.647	0.586	0.644	5.12
24) Diisopropyl ether	1.367	1.333	1.323	1.320	1.374	1.279	1.333	2.62
25) Ethyl tert-butyl Ether	1.179	1.170	1.120	1.173	1.215	1.166	1.170	2.60
26) 2-Butanone	0.210	0.204	0.192	0.231	0.223	0.225	0.214	6.81
27) cis-1,2-Dichloroethane	0.343	0.342	0.324	0.325	0.334	0.307	0.329	4.06
28) 2,2-Dichloropropane	0.380	0.367	0.355	0.343	0.338	0.289	0.345	9.20
29) Bromochloromethane	0.145	0.150	0.137	0.143	0.147	0.141	0.144	3.31
30) C Chloroform	0.676	0.640	0.618	0.603	0.618	0.564	0.620	6.02
31) Tetrahydrofuran	0.115	0.110	0.106	0.124	0.126	0.129	0.118	8.04
32) S Dibromofluoromethane	0.249	0.250	0.250	0.255	0.257	0.249	0.252	1.42
33) 1,1,1-Trichloroethane	0.462	0.433	0.438	0.427	0.429	0.380	0.428	6.25
34) Cyclohexane	0.626	0.556	0.549	0.538	0.550	0.489	0.551	7.98
35) 1,1-Dichloropropene	0.483	0.462	0.439	0.431	0.432	0.397	0.441	6.65
36) Carbon Tetrachloride	0.386	0.365	0.354	0.343	0.357	0.319	0.354	6.34
37) S 1,2-Dichloroethane	0.400	0.401	0.406	0.425	0.390	0.378	0.400	3.89
38) 1,2-Dichloroethane	0.585	0.572	0.541	0.562	0.558	0.516	0.556	4.36
39) Benzene	1.402	1.336	1.265	1.221	1.229	1.127	1.263	7.59
40) Tert-Amyl Methyl Ether	0.956	0.969	0.921	0.973	0.987	0.943	0.958	2.45
41) Trichloroethene	0.355	0.335	0.320	0.313	0.321	0.296	0.323	6.24
42) Methyl cyclohexane		0.509	0.465	0.458	0.474	0.421	0.465	6.79
43) C 1,2-Dichloropropane	0.372	0.351	0.326	0.337	0.353	0.328	0.344	5.15

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VH783-ICC783
 Lab FileID: H021589.D

44)	Di bromomethane	0.196	0.189	0.181	0.192	0.200	0.189	0.191	3.39
45)	Bromodi chl oromethan	0.470	0.448	0.450	0.459	0.480	0.457	0.461	2.67
46)	2-Ni trop propane	0.113	0.118	0.114	0.138	0.142	0.135	0.127	10.34
47)	2-Chl oroethyl vi nyl	0.158	0.159	0.153	0.172	0.173	0.167	0.164	5.13
48)	ci s-1, 3-Di chl oropro	0.571	0.551	0.534	0.558	0.587	0.558	0.560	3.23
49)	4-Methyl -2-pentan on	0.417	0.413	0.380	0.459	0.457	0.441	0.428	7.15
50)	I Chl orobenzene-d5	-----I STD-----							
51)	S Tol uene-d8	1.424	1.396	1.639	1.634	1.638	1.407	1.523	8.23
52)	C Tol uene	2.152	1.941	2.086	2.026	2.039	1.632	1.979	9.28
53)	trans-1, 3-Di chl orop	0.713	0.715	0.804	0.850	0.752	0.757	0.765	6.94
54)	1, 1, 2-Tri chl oroetha	0.339	0.336	0.371	0.385	0.336	0.337	0.351	6.12
55)	1, 3-Di chl oropropane	0.779	0.749	0.818	0.717	0.720	0.688	0.745	6.38
56)	2-hexanone	0.417	0.411	0.434	0.463	0.459	0.474	0.443	5.88
57)	Tetrachl oroethene		0.438	0.449	0.384	0.377	0.342	0.398	11.18
58)	Di bromochl oromethan	0.384	0.387	0.439	0.400	0.413	0.416	0.406	5.04
59)	1, 2-Di bromoethane	0.356	0.359	0.339	0.372	0.380	0.382	0.365	4.47
60)	1-Chl orohexane	0.646	0.581	0.534	0.529	0.549	0.528	0.561	8.16
61)	P Chl orobenzene	1.190	1.115	1.034	1.027	1.043	0.988	1.066	6.87
62)	1, 1, 1, 2-Tetrachl oro	0.399	0.393	0.363	0.373	0.372	0.342	0.374	5.51
63)	C Ethyl benzene		2.080	1.938	1.895	1.882	1.692	1.897	7.34
64)	m, p-Xyl ene	1.786	1.729	1.594	1.552	1.519	1.361	1.590	9.62
65)	o-Xyl ene	1.835	1.723	1.653	1.624	1.580	1.423	1.639	8.45
66)	Styrene	1.164	1.186	1.120	1.141	1.141	1.049	1.134	4.16
67)	P Bromoform	0.224	0.232	0.238	0.263	0.278	0.274	0.252	9.18
68)	I 1, 4-Di chl orobenzene-d	-----I STD-----							
69)	I sopropyl benzene	4.330	4.040	3.780	3.495	3.592	3.933	3.862	7.94
70)	Cycl ohexanone	0.037	0.040	0.036	0.046	0.049	0.066	0.046	24.50
		----- Quadratic regression ----- Coefficient = 0.9995							
		Response Ratio = 0.00749 + 0.03190 *A + 0.00169 *A^2							
71)	S 4-Bromofl uorobenzen	1.298	1.279	1.282	1.222	1.263	1.466	1.302	6.49
72)	P 1, 1, 2, 2-Tetrachl oro	1.190	1.239	1.111	1.140	1.187	1.401	1.211	8.49
73)	trans-1, 4-Di chl oro-	0.328	0.352	0.348	0.382	0.418		0.366	9.58
74)	1, 2, 3-Tri chl oroprop	0.342	0.299	0.298	0.311	0.315	0.373	0.323	9.05
75)	Bromobenzene	0.956	0.962	0.908	0.829	0.843	0.890	0.898	6.19
76)	n-Propyl benzene	5.635	5.379	4.853	4.508	4.631	4.850	4.976	8.83
77)	2-Chl orotol uene		3.888	3.608	3.267	3.298	2.933	3.399	10.69
78)	1, 3, 5-Tri methyl benz		3.561	3.276	3.103	3.091	2.723	3.151	9.68
79)	4-Chl orotol uene	3.764	3.451	3.235	3.064	3.155	2.912	3.263	9.32
80)	tert-Butyl benzene	2.949	2.697	2.560	2.415	2.485	2.237	2.557	9.60
81)	1, 2, 4-Tri methyl benz	3.873	3.666	3.350	3.266	3.316	2.991	3.410	9.16
82)	sec-Butyl benzene	4.455	4.285	3.939	3.702	3.814	3.501	3.949	9.12
83)	4-I sopropyl tol uene	3.393	3.258	2.989	2.870	2.949	2.712	3.028	8.33
84)	1, 3-Di chl orobenzene	1.915	1.844	1.688	1.581	1.617	1.498	1.691	9.48
85)	1, 4-Di chl orobenzene	1.956	1.783	1.667	1.600	1.608	1.512	1.688	9.42
86)	Benzyl chl ori de	1.796	1.832	1.775	1.934	2.039	2.037	1.902	6.23
87)	n-Butyl benzene	3.478	3.375	3.080	2.958	3.095	2.860	3.141	7.63
88)	1, 2-Di chl orobenzene	1.722	1.708	1.561	1.550	1.552	1.471	1.594	6.23
89)	1, 2-Di bromo-3-Chl or	0.191	0.209	0.204	0.236	0.239	0.249	0.221	10.44
90)	1, 2, 4-Tri chl orobenz	0.943	0.993	0.902	0.931	0.953	0.913	0.939	3.44
91)	Hexachl orobutadi ene	0.590	0.577	0.534	0.505	0.537	0.493	0.539	7.11
92)	Naphthal ene	2.065	2.122	2.022	2.333	2.436	2.490	2.245	8.94
93)	1, 2, 3-Tri chl orobenz	0.818	0.873	0.830	0.855	0.883	0.861	0.853	2.94
94)	I Tert Butyl Al coh ol -d1	-----I STD-----							
95)	Tert Butyl Al coh ol	1.226	1.320	1.258	1.271	1.357	1.343	1.296	3.99
96)	1, 4-Di oxane	0.074	0.094	0.094	0.092	0.098	0.101	0.092	10.26

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VH783-ICC783
Lab FileID: H021589.D

(#) = Out of Range

072803S.M

Tue Jul 29 10:46:58 2003 RPT1

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VH784-CC783
 Lab FileID: H021605.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\072903\H021605.D Vial : 1
 Acq On : 29 Jul 2003 11:29 am Operator: NancyF
 Sample : CC783-40 Inst : MSV0A3
 Misc : ms2416, vh784, 5.00, , , , , Multiplr: 1.00
 MS Integration Params: LSCINT.P

Method : C:\HPCHEM\1\METHODS\072803S.M (RTE Integrator)
 Title : SWA 5035/8260B
 Last Update : Thu Jul 03 10:36:14 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00
2	Dichlorodifluoromethane	0.245	0.287	-17.1	118	0.00
3 P	Chloromethane	0.406	0.475	-17.0	117	0.00
4 C	Vinyl Chloride	0.326	0.381	-16.9	118	0.00
5	Bromomethane	0.158	0.181	-14.6	111	0.00
6	Chloroethane	0.166	0.193	-16.3	112	0.00
7	Trichlorofluoromethane	0.274	0.325	-18.6	114	0.00
8	1,2-Dichloro-1,1,2-trifluoro	0.345	0.411	-19.1	121	0.00
9	Ethyl Ether	0.308	0.334	-8.4	107	0.00
10	Acrolein	0.030	0.034	-13.3	109	0.00
11	Freon 113	0.221	0.276	-24.9#	124	0.00
12 C	1,1-Dichloroethene	0.498	0.583	-17.1	122	0.00
13	Acetone	0.152	0.152	0.0	96	0.00
14	Iodomethane	0.356	0.405	-13.8	114	0.01
15	Carbon Disulfide	0.876	1.001	-14.3	118	0.00
16	Methyl acetate	0.308	0.341	-10.7	107	0.00
17	Methylene Chloride	0.612	0.576	5.9	114	0.00
18	Acrylonitrile	0.137	0.150	-9.5	107	0.00
19	Methyl Tert Butyl Ether	0.948	1.009	-6.4	105	0.00
20	trans-1,2-Dichloroethene	0.542	0.619	-14.2	119	0.00
21	Hexane	0.445	0.568	-27.6#	136	0.00
22	Vinyl acetate	0.932	1.120	-20.2#	122	0.00
23 P	1,1-Dichloroethane	0.644	0.701	-8.9	112	0.00
24	Diisopropyl ether	1.333	1.471	-10.4	113	0.00
25	Ethyl tert-butyl Ether	1.170	1.260	-7.7	109	0.00
26	2-Butanone	0.214	0.229	-7.0	101	0.00
27	cis-1,2-Dichloroethene	0.329	0.353	-7.3	110	0.00
28	2,2-Dichloropropane	0.345	0.396	-14.8	117	0.00
29	Bromochloromethane	0.144	0.151	-4.9	107	0.00
30 C	Chloroform	0.620	0.653	-5.3	110	0.00
31	Tetrahydrofuran	0.118	0.133	-12.7	109	0.00
32 S	Dibromofluoromethane	0.252	0.242	4.0	96	0.00
33	1,1,1-Trichloroethane	0.428	0.481	-12.4	114	-0.01
34	Cyclohexane	0.551	0.670	-21.6#	126	0.00
35	1,1-Dichloropropene	0.441	0.501	-13.6	118	0.00
36	Carbon Tetrachloride	0.354	0.393	-11.0	116	0.00
37 S	1,2-Dichloroethane-d4	0.400	0.372	7.0	89	0.00
38	1,2-Dichloroethane	0.556	0.577	-3.8	104	0.00
39	Benzene	1.263	1.386	-9.7	115	0.00
40	Tert-Amyl Methyl Ether	0.958	1.031	-7.6	108	-0.01
41	Trichloroethene	0.323	0.353	-9.3	115	0.00
42	Methyl cyclohexane	0.465	0.591	-27.1#	131	0.00

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VH784-CC783
 Lab FileID: H021605.D

43 C	1, 2-Di chl oropropane	0.344	0.377	-9.6	114	0.00
44	Di bromomethane	0.191	0.203	-6.3	107	0.00
45	Bromodi chl oromethane	0.461	0.487	-5.6	108	0.00
46	2-Ni tropropane	0.127	0.139	-9.4	103	-0.01
47	2-Chl oroethyl vinyl ether	0.164	0.178	-8.5	105	0.00
48	ci s-1, 3-Di chl oropropene	0.560	0.614	-9.6	112	0.00
49	4-Methyl -2-pentanone	0.428	0.485	-13.3	107	0.00
50 I	Chl orobenzene-d5	1.000	1.000	0.0	117	0.00
51 S	Tol uene-d8	1.523	1.413	7.2	101	-0.01
52 C	Tol uene	1.979	1.994	-0.8	115	0.00
53	trans-1, 3-Di chl oropropene	0.765	0.789	-3.1	109	0.00
54	1, 1, 2-Tri chl oroethane	0.351	0.351	0.0	107	0.00
55	1, 3-Di chl oropropane	0.745	0.766	-2.8	125	0.00
56	2-hexanone	0.443	0.479	-8.1	121	0.00
57	Tetrachl oroethene	0.398	0.451	-13.3	138	0.00
58	Di bromochl oromethane	0.406	0.421	-3.7	123	0.00
59	1, 2-Di bromoethane	0.365	0.394	-7.9	124	0.00
60	1-Chl orohexane	0.561	0.666	-18.7	147	0.00
61 P	Chl orobenzene	1.066	1.157	-8.5	132	0.00
62	1, 1, 1, 2-Tetrachl oroethane	0.374	0.407	-8.8	128	0.00
63 C	Ethyl benzene	1.897	2.190	-15.4	135	0.00
64	m, p-Xyl ene	1.590	1.813	-14.0	137	0.00
65	o-Xyl ene	1.639	1.835	-12.0	132	-0.01
66	Styrene	1.134	1.286	-13.4	132	0.00
67 P	Bromoform	0.252	0.271	-7.5	121	0.00
68 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	113	0.00
69	Isopropyl benzene	3.862	4.228	-9.5	136	-0.01
70	Cycl ohexanone	0.046	0.049	-6.5	121	0.00
71 S	4-Bromofl uorobenzene	1.302	1.257	3.5	116	0.00
72 P	1, 1, 2, 2-Tetrachl oroethane	1.211	1.261	-4.1	125	0.00
73	trans-1, 4-Di chl oro-2-Butene	0.366	0.437	-19.4	129	0.00
74	1, 2, 3-Tri chl oropropane	0.323	0.325	-0.6	118	0.00
75	Bromobenzene	0.898	0.946	-5.3	129	0.00
76	n-Propyl benzene	4.976	5.599	-12.5	140	-0.01
77	2-Chl orotol uene	3.399	3.940	-15.9	136	0.00
78	1, 3, 5-Tri methyl benzene	3.151	3.755	-19.2	136	0.00
79	4-Chl orotol uene	3.263	3.645	-11.7	134	0.00
80	tert-Butyl benzene	2.557	2.864	-12.0	134	0.00
81	1, 2, 4-Tri methyl benzene	3.410	3.859	-13.2	133	0.00
82	sec-Butyl benzene	3.949	4.610	-16.7	140	-0.01
83	4-Isopropyl tol uene	3.028	3.536	-16.8	139	0.00
84	1, 3-Di chl orobenzene	1.691	1.824	-7.9	130	0.00
85	1, 4-Di chl orobenzene	1.688	1.853	-9.8	131	-0.01
86	Benzyl chl ori de	1.902	2.190	-15.1	128	-0.01
87	n-Butyl benzene	3.141	3.821	-21.6#	146	-0.01
88	1, 2-Di chl orobenzene	1.594	1.714	-7.5	125	-0.01
89	1, 2-Di bromo-3-Chl oropropane	0.221	0.197	10.9	94	0.00
90	1, 2, 4-Tri chl orobenzene	0.939	0.937	0.2	113	0.00
91	Hexachl orobutadi ene	0.539	0.542	-0.6	121	0.00
92	Naphthal ene	2.245	2.086	7.1	101	0.00
93	1, 2, 3-Tri chl orobenzene	0.853	0.807	5.4	106	0.00
94 I	Tert Butyl Al cohoh -d10	1.000	1.000	0.0	88	0.00
95	Tert Butyl Al cohoh	1.296	1.441	-11.2	100	0.00
96	1, 4-Di oxane	0.092	0.103	-12.0	99	0.00

Average % D = 10.8

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VH784-CC783
Lab FileID: H021605.D

(#) = Out of Range
H021589.D 072803S.M

SPCC's out = 0 CCC's out = 0
Wed Jul 30 12:31:54 2003 RPT1

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC766-ICC766
 Lab FileID: C0017333.D

Response Factor Report MSVOA5

Method : C:\MSDCHEM\2\METHODS\82600728.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Tue Jul 29 08:13:11 2003
 Response via : Initial Calibration

Calibration Files

1 =C0017330.D 2 =C0017331.D 3 =C0017332.D
 4 =C0017333.D 5 =C0017334.D 6 =C0017335.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) I Fluorobenzene	-----I STD-----							
2) Dichlorodifluoromethane	0.317	0.313	0.275	0.287	0.282	0.272	0.291	6.68
3) P Chloromethane	0.492	0.461	0.430	0.437	0.415	0.399	0.439	7.60
4) C Vinyl Chloride	0.327	0.325	0.296	0.306	0.295	0.283	0.306	5.80
5) Bromomethane		0.130	0.117	0.114	0.105	0.102	0.114	9.78
6) Chloroethane	0.141	0.130	0.125	0.124	0.119	0.112	0.125	7.90
7) Trichlorofluoromethane	0.219	0.231	0.225	0.239	0.258	0.264	0.239	7.47
8) 1,2-Dichlorotrifluoroethane	0.305	0.289	0.311	0.296	0.288	0.276	0.294	4.27
9) Ethyl ether	0.242	0.234	0.274	0.268	0.261	0.253	0.256	6.05
10) Acrolein	0.025	0.028	0.029	0.031	0.031	0.031	0.029	7.19
11) Freon 113		0.249	0.250	0.242	0.239	0.230	0.242	3.49
12) Acetone		0.108	0.103	0.102	0.101	0.101	0.103	2.90
13) C 1,1-Dichloroethene	0.512	0.473	0.498	0.487	0.490	0.484	0.491	2.68
14) Iodomethane	0.380	0.352	0.366	0.365	0.372	0.373	0.368	2.61
15) Methyl Acetate	0.220	0.216	0.231	0.228	0.230	0.229	0.226	2.65
16) Carbon Disulfide	0.910	0.783	0.828	0.790	0.778	0.737	0.804	7.39
17) Methylene Chloride		0.554	0.491	0.474	0.475	0.472	0.493	7.05
18) Acrylonitrile	0.112	0.125	0.127	0.129	0.130	0.131	0.126	5.60
19) Methyl Tert Butyl Ether	0.592	0.627	0.641	0.648	0.624	0.612	0.624	3.23
20) trans-1,2-Dichloroethene	0.477	0.435	0.452	0.439	0.438	0.433	0.446	3.78
21) Hexane		0.393	0.414	0.401	0.400	0.385	0.399	2.63
22) Vinyl acetate	0.734	0.714	0.786	0.644	0.594	0.624	0.683	10.78
23) Diisopropyl ether	1.123	1.069	1.114	1.083	1.064	1.031	1.081	3.14
24) P 1,1-Dichloroethane	0.526	0.507	0.532	0.516	0.515	0.501	0.516	2.21
25) ETBE	0.852	0.859	0.912	0.905	0.909	0.905	0.890	3.08
26) 2-Butanone	0.151	0.147	0.147	0.153	0.153	0.152	0.150	1.97
27) cis-1,2-Dichloroethane	0.280	0.269	0.278	0.267	0.262	0.252	0.268	3.83
28) 2,2-Dichloropropane	0.296	0.261	0.266	0.260	0.257	0.245	0.264	6.52
29) Bromochloromethane	0.129	0.116	0.124	0.121	0.120	0.119	0.122	3.75
30) C Chloroform	0.449	0.441	0.469	0.452	0.455	0.446	0.452	2.16
31) Tetrahydrofuran		0.116	0.098	0.099	0.095	0.096	0.101	8.55
32) S Dibromofluoromethane	0.245	0.247	0.244	0.246	0.244	0.248	0.246	0.62
33) 1,1,1-Trichloroethane	0.385	0.353	0.357	0.349	0.352	0.357	0.359	3.66
34) Cyclohexane	0.611	0.527	0.550	0.532	0.539	0.527	0.548	5.88
35) 1,1-Dichloropropene	0.349	0.317	0.329	0.316	0.321	0.311	0.324	4.26
36) Carbon Tetrachloride	0.300	0.269	0.287	0.287	0.299	0.305	0.291	4.57
37) S 1,2-Dichloroethane	0.342	0.338	0.342	0.331	0.331	0.337	0.337	1.40
38) 1,2-Dichloroethane	0.444	0.409	0.417	0.413	0.419	0.420	0.420	2.91
39) Benzene		1.041	1.025	0.976	0.924	0.845	0.962	8.31
40) TAME	0.628	0.645	0.697	0.681	0.669	0.645	0.661	3.96
41) Trichloroethene	0.273	0.257	0.264	0.268	0.270	0.258	0.265	2.46
42) C 1,2-Dichloropropane	0.301	0.306	0.309	0.296	0.288	0.272	0.295	4.61
43) Methylcyclohexane	0.499	0.405	0.412	0.395	0.386	0.361	0.410	11.48
44) Dibromomethane	0.165	0.149	0.163	0.160	0.158	0.157	0.159	3.59
45) Bromodichloromethane	0.333	0.323	0.351	0.346	0.352	0.354	0.343	3.62
46) 2-Nitropropane	0.076	0.077	0.084	0.084	0.083	0.083	0.081	4.56

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC766-ICC766
 Lab FileID: C0017333.D

47)	2-Chl oroethyl vinyl	0.161	0.182	0.191	0.183	0.170	0.157	0.174	7.71
48)	ci s-1, 3-Di chl oropro	0.453	0.407	0.431	0.426	0.429	0.419	0.427	3.56
49)	4-Methyl -2-pentanon	0.310	0.315	0.330	0.325	0.320	0.314	0.319	2.27
50) I	Chl orobenzene-d5	-----I STD-----							
51) S	Tol uene-d8	1.190	1.209	1.196	1.215	1.221	1.206	1.206	0.97
52) C	Tol uene	1.512	1.310	1.370	1.337	1.319	1.240	1.348	6.76
53)	trans-1, 3-Di chl orop	0.478	0.456	0.509	0.504	0.513	0.503	0.493	4.50
54)	1, 1, 2-Tri chl oroetha	0.255	0.264	0.262	0.266	0.262	0.249	0.260	2.51
55)	2-hexanone	0.251	0.278	0.298	0.302	0.299	0.285	0.285	6.67
56)	1, 3-Di chl oropropane	0.513	0.529	0.523	0.516	0.499	0.459	0.507	5.05
57)	Tetrachl oroethene	0.418	0.374	0.361	0.361	0.361	0.342	0.370	6.95
58)	Di bromochl oromethan	0.300	0.279	0.307	0.322	0.329	0.327	0.311	6.19
59)	1, 2-Di bromoethane	0.305	0.296	0.332	0.327	0.330	0.320	0.318	4.59
60)	1-Chl orohexane	0.480	0.429	0.451	0.451	0.447	0.421	0.447	4.62
61) P	Chl orobenzene	0.971	0.859	0.886	0.881	0.871	0.825	0.882	5.52
62)	1, 1, 1, 2-Tetrachl oro	0.333	0.301	0.299	0.304	0.294	0.280	0.302	5.71
63) C	Ethyl benzene	1.694	1.511	1.547	1.529	1.461	1.334	1.513	7.77
64)	m, p-Xyl ene	1.337	1.170	1.199	1.169	1.129	1.042	1.174	8.24
65)	o-Xyl ene	1.304	1.228	1.270	1.214	1.159	1.052	1.205	7.44
66)	Styrene	0.960	0.934	1.012	0.988	0.925	0.828	0.941	6.83
67) P	Bromoform	0.224	0.252	0.269	0.278	0.279	0.260		8.87
68) I	1, 4-Di chl orobenzene-d	-----I STD-----							
69)	l isopropyl benzene	2.612	2.443	2.594	2.576	2.574	2.447	2.541	2.97
70)	Cycl ohexanone	0.025	0.032	0.025	0.027	0.029	0.030	0.028	10.58
71) S	4-Bromofl uorobenzen	0.997	1.006	0.981	0.987	1.015	1.029	1.003	1.80
72) P	1, 1, 2, 2-Tetrachl oro	0.746	0.732	0.761	0.726	0.722	0.709	0.733	2.52
73)	trans-1, 4-Di chl oro-	0.235	0.200	0.229	0.249	0.265	0.274	0.242	11.09
74)	1, 2, 3-Tri chl oroprop	0.215	0.211	0.214	0.213	0.216	0.216	0.214	0.89
75)	Bromobenzene	0.883	0.749	0.751	0.726	0.713	0.651	0.745	10.31
76)	n-Propyl benzene	3.763	3.309	3.348	3.234	3.142	2.869	3.277	8.93
77)	1, 3, 5-Tri methyl benz	2.443	2.173	2.248	2.147	2.092	1.932	2.172	7.81
78)	2-Chl orotol uene	2.436	2.242	2.243	2.140	2.087	1.940	2.181	7.71
79)	4-Chl orotol uene	2.374	2.045	2.095	2.085	2.124	2.012	2.123	6.10
80)	tert-Butyl benzene	1.658	1.484	1.545	1.538	1.543	1.494	1.544	4.02
81)	1, 2, 4-Tri methyl benz	2.660	2.282	2.399	2.366	2.344	2.218	2.378	6.40
82)	sec-Butyl benzene	3.320	2.787	2.918	2.869	2.835	2.662	2.898	7.73
83)	4-I sopropyl tol uene	2.483	2.124	2.228	2.175	2.160	2.059	2.205	6.69
84)	1, 3-Di chl orobenzene	1.594	1.360	1.403	1.363	1.371	1.306	1.400	7.17
85)	1, 4-Di chl orobenzene	1.698	1.433	1.432	1.397	1.388	1.330	1.446	8.90
86)	Benzyl chl ori de	1.426	1.278	1.410	1.428	1.460	1.429	1.405	4.59
87)	n-Butyl benzene	2.793	2.220	2.366	2.307	2.272	2.160	2.353	9.64
88)	1, 2-Di chl orobenzene	1.511	1.312	1.345	1.348	1.363	1.289	1.361	5.74
89)	1, 2-Di bromo-3-Chl or	0.122	0.133	0.130	0.136	0.136	0.138	0.132	4.61
90)	1, 2, 4-Tri chl orobenz	1.234	0.934	0.969	0.971	0.997	0.994	1.017	10.73
91)	Hexachl orobutadi ene	0.496	0.487	0.471	0.493	0.491	0.487		2.02
92)	Naphthal ene	1.816	1.938	1.984	2.062	2.070	1.974		5.26
93)	1, 2, 3-Tri chl orobenz	0.826	0.828	0.842	0.881	0.874	0.850		3.03
94) I	Tert Butyl alcohol -d1	-----I STD-----							
95)	Tert-Butyl alcohol	1.211	1.095	1.111	1.116	1.123	1.108	1.127	3.75
96)	1, 4-Di oxane	0.084	0.095	0.107	0.105	0.111	0.106	0.101	10.00

(#) = Out of Range

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC772-CC766
 Lab FileID: C0017494.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\080503\C0017494.D Vial : 1
 Acq On : 5 Aug 2003 9:43 am Operator: KarenW
 Sample : CC766-40 Inst : MSVOA5
 Misc : ms2450,vc772,,,,, Multiplr: 1.00
 MS Integration Params: Rteint.p

Method : C:\MSDCHEM\2\METHODS\82600728.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Tue Jul 29 08:13:11 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	102	0.00
2	Dichlorodifluoromethane	0.291	0.298	-2.4	106	-0.01
3 P	Chloromethane	0.439	0.443	-0.9	103	0.00
4 C	Vinyl Chloride	0.306	0.320	-4.6	107	0.00
5	Bromomethane	0.114	0.139	-21.9#	124	0.00
6	Chloroethane	0.125	0.143	-14.4	118	0.00
7	Trichlorofluoromethane	0.239	0.302	-26.4#	129	0.00
8	1,2-Dichlorotri fluoroethane	0.294	0.304	-3.4	105	0.00
9	Ethyl ether	0.256	0.270	-5.5	103	0.00
10	Acrolein	0.029	0.019	34.5#	64	0.00
11	Freon 113	0.242	0.216	10.7	91	0.00
12	Acetone	0.103	0.097	5.8	97	0.00
13 C	1,1-Dichloroethene	0.491	0.465	5.3	97	0.00
14	Iodomethane	0.368	0.305	17.1	85	0.00
15	Methyl Acetate	0.226	0.259	-14.6	116	0.00
16	Carbon Disulfide	0.804	0.802	0.2	103	0.00
17	Methylene Chloride	0.493	0.491	0.4	106	0.00
18	Acrylonitrile	0.126	0.091	27.8#	72	0.00
19	Methyl Tert Butyl Ether	0.624	0.658	-5.4	104	0.00
20	trans-1,2-Dichloroethene	0.446	0.448	-0.4	104	0.00
21	Hexane	0.399	0.414	-3.8	105	0.00
22	Vinyl acetate	0.683	0.925	-35.4#	146	0.00
23	Diisopropyl ether	1.081	1.223	-13.1	115	0.00
24 P	1,1-Dichloroethane	0.516	0.558	-8.1	110	0.00
25	ETBE	0.890	0.938	-5.4	106	0.00
26	2-Butanone	0.150	0.157	-4.7	105	0.00
27	cis-1,2-Dichloroethene	0.268	0.254	5.2	97	0.00
28	2,2-Dichloropropane	0.264	0.251	4.9	98	0.00
29	Bromochloromethane	0.122	0.111	9.0	94	0.00
30 C	Chloroform	0.452	0.429	5.1	97	0.00
31	Tetrahydrofuran	0.101	0.095	5.9	98	0.00
32 S	Dibromofluoromethane	0.246	0.228	7.3	94	0.00
33	1,1,1-Tri chloroethane	0.359	0.306	14.8	89	0.00
34	Cyclohexane	0.548	0.539	1.6	103	0.00
35	1,1-Dichloropropene	0.324	0.303	6.5	98	0.00
36	Carbon Tetrachloride	0.291	0.251	13.7	89	0.00
37 S	1,2-Dichloroethane-d4	0.337	0.324	3.9	100	0.00
38	1,2-Dichloroethane	0.420	0.407	3.1	100	0.00
39	Benzene	0.962	1.038	-7.9	108	0.00
40	TAME	0.661	0.703	-6.4	105	0.00
41	Tri chloroethene	0.265	0.227	14.3	86	0.00
42 C	1,2-Dichloropropane	0.295	0.327	-10.8	112	0.00

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC772-CC766
 Lab FileID: C0017494.D

43	Methyl cycl ohexane	0.410	0.391	4.6	101	0.00
44	Di bromomethane	0.159	0.152	4.4	97	0.00
45	Bromodi chl oromethane	0.343	0.320	6.7	94	0.00
46	2-Ni tropropane	0.081	0.091	-12.3	110	0.00
47	2-Chl oroethyl vinyl ether	0.174	0.204	-17.2	114	0.00
48	ci s-1, 3-Di chl oropropene	0.427	0.412	3.5	99	0.00
49	4-Methyl -2-pentanone	0.319	0.353	-10.7	111	0.00
50 I	Chl orobenzene-d5	1.000	1.000	0.0	97	0.00
51 S	Tol uene-d8	1.206	1.296	-7.5	103	0.00
52 C	Tol uene	1.348	1.388	-3.0	100	0.00
53	trans-1, 3-Di chl oropropene	0.493	0.508	-3.0	97	0.00
54	1, 1, 2-Tri chl oroethane	0.260	0.281	-8.1	102	0.00
55	2-hexanone	0.285	0.333	-16.8	107	0.00
56	1, 3-Di chl oropropene	0.507	0.562	-10.8	105	0.00
57	Tetrachl oroethene	0.370	0.337	8.9	90	0.00
58	Di bromochl oromethane	0.311	0.297	4.5	89	0.00
59	1, 2-Di bromoethane	0.318	0.309	2.8	91	0.00
60	1-Chl orohexane	0.447	0.438	2.0	94	0.00
61 P	Chl orobenzene	0.882	0.837	5.1	92	0.00
62	1, 1, 1, 2-Tetrachl oroethane	0.302	0.289	4.3	92	0.00
63 C	Ethyl benzene	1.513	1.557	-2.9	98	0.00
64	m, p-Xyl ene	1.174	1.222	-4.1	101	0.00
65	o-Xyl ene	1.205	1.276	-5.9	102	0.00
66	Styrene	0.941	0.995	-5.7	97	0.00
67 P	Bromoform	0.260	0.240	7.7	86	0.00
68 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	97	0.00
69	Isopropyl benzene	2.541	2.494	1.8	94	0.00
70	Cycl ohexanone	0.028	0.026	7.1	94	0.00
71 S	4-Bromofl uorobenzene	1.003	0.995	0.8	98	0.00
72 P	1, 1, 2, 2-Tetrachl oroethane	0.733	0.834	-13.8	111	0.00
73	trans-1, 4-Di chl oro-2-butene	0.242	0.200	17.4	78	0.00
74	1, 2, 3-Tri chl oropropene	0.214	0.195	8.9	89	0.00
75	Bromobenzene	0.745	0.722	3.1	96	0.00
76	n-Propyl benzene	3.277	3.419	-4.3	102	0.00
77	1, 3, 5-Tri methyl benzene	2.172	2.217	-2.1	100	0.00
78	2-Chl orotol uene	2.181	2.251	-3.2	102	0.00
79	4-Chl orotol uene	2.123	2.073	2.4	96	0.00
80	tert-Butyl benzene	1.544	1.498	3.0	94	0.00
81	1, 2, 4-Tri methyl benzene	2.378	2.335	1.8	96	0.00
82	sec-Butyl benzene	2.898	2.844	1.9	96	0.00
83	4-Isopropyl tol uene	2.205	2.133	3.3	95	0.00
84	1, 3-Di chl orobenzene	1.400	1.329	5.1	94	0.00
85	1, 4-Di chl orobenzene	1.446	1.369	5.3	95	0.00
86	Benzyl chl ori de	1.405	1.502	-6.9	102	0.00
87	n-Butyl benzene	2.353	2.372	-0.8	100	0.00
88	1, 2-Di chl orobenzene	1.361	1.312	3.6	94	0.00
89	1, 2-Di bromo-3-Chl oropropene	0.132	0.124	6.1	92	0.00
90	1, 2, 4-Tri chl orobenzene	1.017	0.894	12.1	89	0.00
91	Hexachl orobutadi ene	0.487	0.427	12.3	88	0.00
92	Naphthal ene	1.974	1.858	5.9	91	0.00
93	1, 2, 3-Tri chl orobenzene	0.850	0.774	8.9	89	0.00
94 I	Tert Butyl al cohol -d10	1.000	1.000	0.0	97	0.00
95	Tert-Butyl al cohol	1.127	1.155	-2.5	101	0.00
96	1, 4-Di oxane	0.101	0.105	-4.0	98	0.00

Average % D = 7.7

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VC772-CC766
Lab FileID: C0017494.D

(#) = Out of Range
C0017333.D 82600728.M

SPCC's out = 0 CCC's out = 0
Wed Aug 06 08:36:01 2003 RPT1

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB745-CC730
 Lab FileID: B016840.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\1\DATA\080503\B016840.D Vial : 1
 Acq On : 5 Aug 2003 11:26 am Operator: Karenw
 Sample : CC730-40 Inst : MSVOA4
 Misc : ms2417,vb745,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\MSDCHEM\1\METHODS\82600716.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Fri Jul 18 11:22:03 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)
1 I	Fluorobenzene	1.000	1.000	0.0	125	0.00
2	Dichlorodifluoromethane	0.352	0.371	-5.4	131	0.00
3 P	Chloromethane	0.702	0.707	-0.7	126	0.00
4 C	Vinyl Chloride	0.515	0.573	-11.3	134	0.00
5	Bromomethane	0.318	0.355	-11.6	144	0.00
6	Chloroethane	0.267	0.299	-12.0	142	0.00
7	Trichlorofluoromethane	0.587	0.723	-23.2#	158	0.00
8	Ethyl Ether	0.370	0.433	-17.0	143	0.00
9	1,2-Dichloro-1,1,2-trifluor	0.474	0.514	-8.4	137	0.00
10	Acrolein	0.032	0.026	18.8	96	0.00
11	Freon 113	0.358	0.414	-15.6	145	0.01
12 C	1,1-Dichloroethene	0.678	0.805	-18.7	145	0.00
13	Acetone	0.135	0.151	-11.9	135	0.00
14	Iodomethane	0.423	0.481	-13.7	138	0.00
15	Carbon Disulfide	0.828	0.895	-8.1	138	0.00
16	Methyl acetate	0.250	0.340	-36.0#	163	0.00
17	Methylene Chloride	0.603	0.693	-14.9	145	0.00
18	Methyl Tert Butyl Ether	0.634	0.750	-18.3	140	0.00
19	trans-1,2-Dichloroethene	0.466	0.525	-12.7	134	0.00
20	Acrylonitrile	0.105	0.089	15.2	100	0.00
21	Hexane	0.347	0.400	-15.3	138	0.00
22	Diisopropyl ether	1.350	1.538	-13.9	137	0.00
23	Vinyl acetate	0.721	0.935	-29.7#	148	0.00
24 P	1,1-Dichloroethane	0.593	0.628	-5.9	129	0.00
25	ETBE	0.913	1.052	-15.2	137	0.00
26	2-Butanone	0.156	0.189	-21.2#	142	0.00
27	2,2-Dichloropropane	0.318	0.367	-15.4	138	0.00
28	cis-1,2-Dichloroethene	0.273	0.298	-9.2	130	0.00
29	Bromochloromethane	0.135	0.148	-9.6	129	0.00
30	Tetrahydrofuran	0.083	0.107	-28.9#	135	0.00
31 C	Chloroform	0.524	0.572	-9.2	135	0.00
32 S	Dibromofluoromethane	0.309	0.322	-4.2	129	0.00
33	1,1,1-Trichloroethane	0.470	0.508	-8.1	130	0.00
34	Cyclohexane	0.512	0.590	-15.2	141	0.00
35	Carbon Tetrachloride	0.463	0.501	-8.2	133	0.00
36	1,1-Dichloropropene	0.352	0.379	-7.7	132	0.00
37 S	1,2-Dichloroethane-d4	0.434	0.469	-8.1	134	0.00
38	TAME	0.662	0.755	-14.0	130	0.00
39	Benzene	1.041	1.089	-4.6	128	0.00
40	1,2-Dichloroethane	0.503	0.571	-13.5	137	0.00
41	Trichloroethene	0.274	0.269	1.8	118	0.00
42	Methylcyclohexane	0.332	0.383	-15.4	140	0.00

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VB745-CC730
 Lab FileID: B016840.D

43 C	1, 2-Di chl oropropane	0.301	0.320	-6.3	127	0.00
44	Di bromomethane	0.183	0.203	-10.9	134	0.00
45	Bromodi chl oromethane	0.390	0.451	-15.6	138	0.00
46	2-Chl oroethyl vinyl ether	0.138	0.168	-21.7#	130	0.00
47	2-Ni tropropane	0.119	0.164	-37.8#	162	0.00
48	ci s-1, 3-Di chl oropropene	0.437	0.476	-8.9	130	0.00
49	4-Methyl -2-pentanone	0.336	0.460	-36.9#	148	0.00
50 I	Chl orobenzene-d5	1.000	1.000	0.0	128	0.00
51 S	Tol uene-d8	1.265	1.201	5.1	123	0.00
52 C	Tol uene	1.424	1.377	3.3	123	0.00
53	trans-1, 3-Di chl oropropene	0.491	0.546	-11.2	136	0.00
54	1, 1, 2-Tri chl oroethane	0.240	0.262	-9.2	138	0.00
55	Tetrachl oroethene	0.364	0.407	-11.8	139	0.00
56	2-hexanone	0.271	0.354	-30.6#	142	0.00
57	1, 3-Di chl oropropane	0.487	0.547	-12.3	134	0.00
58	Di bromochl oromethane	0.375	0.409	-9.1	133	0.00
59	1, 2-Di bromoethane	0.284	0.328	-15.5	144	0.00
60	1-Chl orohexane	0.360	0.390	-8.3	122	0.00
61 P	Chl orobenzene	0.961	0.981	-2.1	130	0.00
62 C	Ethyl benzene	1.638	1.603	2.1	125	0.00
63	1, 1, 1, 2-Tetrachl oroethane	0.386	0.411	-6.5	133	0.00
64	m, p-Xyl ene	1.335	1.306	2.2	126	0.00
65	o-Xyl ene	1.218	1.303	-7.0	124	0.00
66	Styrene	0.904	0.851	5.9	108	0.00
67 P	Bromoform	0.268	0.311	-16.0	144	0.00
68 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	131	0.00
69	Isopropyl benzene	2.439	2.606	-6.8	137	0.00
70	Cycl ohexanone	0.021	0.018	14.3	118	0.00
71 S	4-Bromofl uorobenzene	0.903	0.847	6.2	127	0.00
72 P	1, 1, 2, 2-Tetrachl oroethane	0.637	0.698	-9.6	150	0.00
73	trans-1, 4-Di chl oro-2-Butene	0.207	0.288	-39.1#	154	0.00
74	n-Propyl benzene	3.394	3.299	2.8	126	0.00
75	Bromobenzene	0.797	0.849	-6.5	137	0.00
76	1, 2, 3-Tri chl oropropane	0.201	0.230	-14.4	148	0.00
77	1, 3, 5-Tri methyl benzene	2.256	2.373	-5.2	138	0.00
78	2-Chl orotol uene	2.354	2.367	-0.6	128	0.00
79	4-Chl orotol uene	1.921	1.990	-3.6	128	0.00
80	tert-Butyl benzene	1.358	1.370	-0.9	129	0.00
81	1, 2, 4-Tri methyl benzene	2.252	2.423	-7.6	139	0.00
82	sec-Butyl benzene	2.547	2.740	-7.6	138	0.00
83	4-Isopropyl tol uene	2.117	2.177	-2.8	130	0.00
84	1, 3-Di chl orobenzene	1.330	1.436	-8.0	136	0.00
85	1, 4-Di chl orobenzene	1.395	1.491	-6.9	136	0.00
86	Benzyl chl ori de	1.054	1.194	-13.3	140	0.00
87	n-Butyl benzene	1.977	1.944	1.7	125	0.00
88	1, 2-Di chl orobenzene	1.281	1.377	-7.5	137	0.00
89	1, 2-Di bromo-3-Chl oropropane	0.099	0.123	-24.2#	153	0.00
90	1, 2, 4-Tri chl orobenzene	0.690	0.771	-11.7	135	0.00
91	Hexachl orobutadi ene	0.357	0.411	-15.1	148	0.00
92	Naphthal ene	1.150	1.400	-21.7#	135	0.00
93	1, 2, 3-Tri chl orobenzene	0.596	0.715	-20.0	141	0.00
94 I	Tert Butyl al coh ol -d10	1.000	1.000	0.0	134	0.00
95	Tert-Butyl Al coh ol	1.261	1.391	-10.3	145	0.00
96	1, 4-Di oxane	0.094	0.107	-13.8	144	0.00

Average % D = 12.2

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VB745-CC730
Lab FileID: B016840.D

(#) = Out of Range
B016477.D 82600716.M

SPCC's out = 0 CCC's out = 0
Wed Aug 06 09:19:25 2003 RPT1

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC773-CC766
 Lab FileID: C0017521.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\080603\C0017521.D Vial : 1
 Acq On : 6 Aug 2003 9:35 am Operator: KarenW
 Sample : CC766-40 Inst : MSVOA5
 Misc : ms2450,vc773,,,,, Multiplr: 1.00
 MS Integration Params: Rteint.p

Method : C:\MSDCHEM\2\METHODS\82600728.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Tue Jul 29 08:13:11 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1 I	Fluorobenzene	1.000	1.000	0.0	96	0.00
2	Dichlorodifluoromethane	0.291	0.287	1.4	96	-0.01
3 P	Chloromethane	0.439	0.464	-5.7	102	0.00
4 C	Vinyl Chloride	0.306	0.332	-8.5	104	0.00
5	Bromomethane	0.114	0.147	-28.9#	124	0.00
6	Chloroethane	0.125	0.150	-20.0	117	0.00
7	Trichlorofluoromethane	0.239	0.310	-29.7#	125	0.00
8	1,2-Dichlorotri fluoroethane	0.294	0.308	-4.8	100	0.00
9	Ethyl ether	0.256	0.278	-8.6	100	0.00
10	Acrolein	0.029	0.018	37.9#	57	0.00
11	Freon 113	0.242	0.219	9.5	87	0.00
12	Acetone	0.103	0.100	2.9	95	0.00
13 C	1,1-Dichloroethene	0.491	0.471	4.1	93	0.00
14	Iodomethane	0.368	0.312	15.2	82	0.00
15	Methyl Acetate	0.226	0.272	-20.4#	115	0.00
16	Carbon Disulfide	0.804	0.803	0.1	98	0.00
17	Methylene Chloride	0.493	0.503	-2.0	102	0.00
18	Acrylonitrile	0.126	0.086	31.7#	64	0.00
19	Methyl Tert Butyl Ether	0.624	0.662	-6.1	98	0.00
20	trans-1,2-Dichloroethene	0.446	0.454	-1.8	100	0.00
21	Hexane	0.399	0.430	-7.8	103	0.00
22	Vinyl acetate	0.683	0.968	-41.7#	145	0.00
23	Diisopropyl ether	1.081	1.285	-18.9	114	0.00
24 P	1,1-Dichloroethane	0.516	0.566	-9.7	106	0.00
25	ETBE	0.890	0.952	-7.0	101	0.00
26	2-Butanone	0.150	0.164	-9.3	103	0.00
27	cis-1,2-Dichloroethene	0.268	0.258	3.7	93	0.00
28	2,2-Dichloropropane	0.264	0.249	5.7	92	0.00
29	Bromochloromethane	0.122	0.110	9.8	88	0.00
30 C	Chloroform	0.452	0.423	6.4	90	0.00
31	Tetrahydrofuran	0.101	0.100	1.0	97	0.00
32 S	Dibromofluoromethane	0.246	0.225	8.5	88	0.00
33	1,1,1-Tri chloroethane	0.359	0.306	14.8	84	0.00
34	Cyclohexane	0.548	0.555	-1.3	100	0.00
35	1,1-Dichloropropene	0.324	0.305	5.9	93	0.00
36	Carbon Tetrachloride	0.291	0.252	13.4	85	0.00
37 S	1,2-Dichloroethane-d4	0.337	0.319	5.3	93	0.00
38	1,2-Dichloroethane	0.420	0.410	2.4	96	0.00
39	Benzene	0.962	1.050	-9.1	104	0.00
40	TAME	0.661	0.716	-8.3	101	0.00
41	Tri chloroethene	0.265	0.231	12.8	83	0.00
42 C	1,2-Dichloropropane	0.295	0.336	-13.9	109	0.00

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC773-CC766
 Lab FileID: C0017521.D

43	Methyl cycl ohexane	0.410	0.396	3.4	96	0.00
44	Di bromomethane	0.159	0.153	3.8	92	0.00
45	Bromodi chl oromethane	0.343	0.322	6.1	90	0.00
46	2-Ni tropropane	0.081	0.096	-18.5	110	0.00
47	2-Chl oroethyl vinyl ether	0.174	0.215	-23.6#	113	0.00
48	ci s-1, 3-Di chl oropropene	0.427	0.413	3.3	93	0.00
49	4-Methyl -2-pentanone	0.319	0.375	-17.6	111	0.00
50 I	Chl orobenzene-d5	1.000	1.000	0.0	93	0.00
51 S	Tol uene-d8	1.206	1.273	-5.6	97	0.00
52 C	Tol uene	1.348	1.376	-2.1	95	0.00
53	trans-1, 3-Di chl oropropene	0.493	0.506	-2.6	93	0.00
54	1, 1, 2-Tri chl oroethane	0.260	0.286	-10.0	100	0.00
55	2-hexanone	0.285	0.351	-23.2#	108	0.00
56	1, 3-Di chl oropropene	0.507	0.566	-11.6	102	0.00
57	Tetrachl oroethene	0.370	0.335	9.5	86	0.00
58	Di bromochl oromethane	0.311	0.291	6.4	84	0.00
59	1, 2-Di bromoethane	0.318	0.310	2.5	88	0.00
60	1-Chl orohexane	0.447	0.438	2.0	90	0.00
61 P	Chl orobenzene	0.882	0.853	3.3	90	0.00
62	1, 1, 1, 2-Tetrachl oroethane	0.302	0.290	4.0	89	0.00
63 C	Ethyl benzene	1.513	1.584	-4.7	96	0.00
64	m, p-Xyl ene	1.174	1.236	-5.3	98	0.00
65	o-Xyl ene	1.205	1.286	-6.7	98	0.00
66	Styrene	0.941	0.991	-5.3	93	0.00
67 P	Bromoform	0.260	0.238	8.5	82	0.00
68 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	97	0.00
69	Isopropyl benzene	2.541	2.429	4.4	91	0.00
70	Cycl ohexanone	0.028	0.025	10.7	88	0.00
71 S	4-Bromofl uorobenzene	1.003	0.952	5.1	93	0.00
72 P	1, 1, 2, 2-Tetrachl oroethane	0.733	0.817	-11.5	108	0.00
73	trans-1, 4-Di chl oro-2-butene	0.242	0.177	26.9#	68	0.00
74	1, 2, 3-Tri chl oropropene	0.214	0.195	8.9	88	0.00
75	Bromobenzene	0.745	0.696	6.6	93	0.00
76	n-Propyl benzene	3.277	3.371	-2.9	101	0.00
77	1, 3, 5-Tri methyl benzene	2.172	2.162	0.5	97	0.00
78	2-Chl orotol uene	2.181	2.231	-2.3	101	0.00
79	4-Chl orotol uene	2.123	2.036	4.1	94	0.00
80	tert-Butyl benzene	1.544	1.468	4.9	92	0.00
81	1, 2, 4-Tri methyl benzene	2.378	2.260	5.0	92	0.00
82	sec-Butyl benzene	2.898	2.779	4.1	94	0.00
83	4-Isopropyl tol uene	2.205	2.073	6.0	92	0.00
84	1, 3-Di chl orobenzene	1.400	1.306	6.7	92	0.00
85	1, 4-Di chl orobenzene	1.446	1.365	5.6	94	0.00
86	Benzyl chl ori de	1.405	1.439	-2.4	97	0.00
87	n-Butyl benzene	2.353	2.314	1.7	97	0.00
88	1, 2-Di chl orobenzene	1.361	1.277	6.2	91	0.00
89	1, 2-Di bromo-3-Chl oropropene	0.132	0.117	11.4	87	0.00
90	1, 2, 4-Tri chl orobenzene	1.017	0.865	14.9	86	0.00
91	Hexachl orobutadi ene	0.487	0.404	17.0	83	0.00
92	Naphthal ene	1.974	1.811	8.3	88	0.00
93	1, 2, 3-Tri chl orobenzene	0.850	0.761	10.5	87	0.00
94 I	Tert Butyl al cohol -d10	1.000	1.000	0.0	94	0.00
95	Tert-Butyl al cohol	1.127	1.177	-4.4	99	0.00
96	1, 4-Di oxane	0.101	0.104	-3.0	93	0.00

Average % D = 9.1

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VC773-CC766
Lab FileID: C0017521.D

(#) = Out of Range
C0017333.D 82600728.M

SPCC's out = 0 CCC's out = 0
Thu Aug 07 08:43:12 2003 RPT1

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8091-LBS	L018141.D	1	07/30/03	ME	07/29/03	OP8091	SL981

The QC reported here applies to the following samples:

Method: SW846 8270C

F18741-1, F18741-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	386	77	51-102
	3&4-Methylphenol	1000	718	72	44-99
87-86-5	Pentachlorophenol	1000	952	95	36-141
95-95-4	2,4,5-Trichlorophenol	500	471	94	46-132
88-06-2	2,4,6-Trichlorophenol	500	453	91	39-130
106-46-7	1,4-Dichlorobenzene	500	406	81	48-111
121-14-2	2,4-Dinitrotoluene	500	485	97	75-126
118-74-1	Hexachlorobenzene	500	472	94	74-115
87-68-3	Hexachlorobutadiene	500	358	72	41-105
67-72-1	Hexachloroethane	500	395	79	42-115
98-95-3	Nitrobenzene	500	430	86	66-115
110-86-1	Pyridine	500	135	27	19-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	63%	19-90%
4165-62-2	Phenol-d5	43%	10-68%
118-79-6	2,4,6-Tribromophenol	100%	36-137%
4165-60-0	Nitrobenzene-d5	87%	49-119%
321-60-8	2-Fluorobiphenyl	88%	45-118%
1718-51-0	Terphenyl-d14	92%	46-135%

Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8091-DUP	L018154.D	1	07/30/03	ME	07/29/03	OP8091	SL981
F18741-2	L018153.D	1	07/30/03	ME	07/29/03	OP8091	SL981

The QC reported here applies to the following samples:

Method: SW846 8270C

F18741-1, F18741-2

CAS No.	Compound	F18741-2 ug/l	DUP Q	ug/l	Q	RPD	Limits
95-48-7	2-Methylphenol	ND		ND		nc	
	3&4-Methylphenol	ND		ND		nc	
87-86-5	Pentachlorophenol	ND		ND		nc	
95-95-4	2,4,5-Trichlorophenol	ND		ND		nc	
88-06-2	2,4,6-Trichlorophenol	ND		ND		nc	
106-46-7	1,4-Dichlorobenzene	ND		ND		nc	
121-14-2	2,4-Dinitrotoluene	ND		ND		nc	
118-74-1	Hexachlorobenzene	ND		ND		nc	
87-68-3	Hexachlorobutadiene	ND		ND		nc	
67-72-1	Hexachloroethane	ND		ND		nc	
98-95-3	Nitrobenzene	ND		ND		nc	
110-86-1	Pyridine	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F18741-2	Limits
367-12-4	2-Fluorophenol	57%	56%	19-90%
4165-62-2	Phenol-d5	39%	39%	10-68%
118-79-6	2,4,6-Tribromophenol	91%	88%	36-137%
4165-60-0	Nitrobenzene-d5	82%	78%	49-119%
321-60-8	2-Fluorobiphenyl	81%	79%	45-118%
1718-51-0	Terphenyl-d14	80%	82%	46-135%

Leachate Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8091-LB	L018142.D	1	07/30/03	ME	07/29/03	OP8091	SL981

The QC reported here applies to the following samples:

Method: SW846 8270C

F18741-1, F18741-2

CAS No.	Compound	Result	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	50	20	ug/l	
	3&4-Methylphenol	ND	50	20	ug/l	
87-86-5	Pentachlorophenol	ND	250	100	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	25	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	20	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	10	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	50	20	ug/l	
118-74-1	Hexachlorobenzene	ND	50	10	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	20	ug/l	
67-72-1	Hexachloroethane	ND	50	20	ug/l	
98-95-3	Nitrobenzene	ND	50	10	ug/l	
110-86-1	Pyridine	ND	50	20	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	57%	19-90%
4165-62-2	Phenol-d5	37%	10-68%
118-79-6	2,4,6-Tribromophenol	91%	36-137%
4165-60-0	Nitrobenzene-d5	81%	49-119%
321-60-8	2-Fluorobiphenyl	83%	45-118%
1718-51-0	Terphenyl-d14	83%	46-135%

Leachate Spike Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8091-LS	L018152.D	1	07/30/03	ME	07/29/03	OP8091	SL981
F18741-1	L018151.D	1	07/30/03	ME	07/29/03	OP8091	SL981

The QC reported here applies to the following samples:

Method: SW846 8270C

F18741-1, F18741-2

CAS No.	Compound	F18741-1 ug/l	Spike Q	LS ug/l	LS %	Limits
95-48-7	2-Methylphenol	ND	500	381	76	51-110
	3&4-Methylphenol	ND	1000	708	71	51-108
87-86-5	Pentachlorophenol	ND	1000	871	87	33-147
95-95-4	2,4,5-Trichlorophenol	ND	500	470	94	57-122
88-06-2	2,4,6-Trichlorophenol	ND	500	455	91	49-122
106-46-7	1,4-Dichlorobenzene	ND	500	409	82	46-112
121-14-2	2,4-Dinitrotoluene	ND	500	461	92	67-131
118-74-1	Hexachlorobenzene	ND	500	441	88	65-123
87-68-3	Hexachlorobutadiene	ND	500	368	74	41-106
67-72-1	Hexachloroethane	ND	500	403	81	42-115
98-95-3	Nitrobenzene	ND	500	429	86	55-122
110-86-1	Pyridine	ND	500	250	50	17-100

CAS No.	Surrogate Recoveries	LS	F18741-1	Limits
367-12-4	2-Fluorophenol	63%	60%	19-90%
4165-62-2	Phenol-d5	41%	41%	10-68%
118-79-6	2,4,6-Tribromophenol	94%	95%	36-137%
4165-60-0	Nitrobenzene-d5	87%	84%	49-119%
321-60-8	2-Fluorobiphenyl	87%	85%	45-118%
1718-51-0	Terphenyl-d14	89%	88%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8091-MS	L018148.D	10	07/30/03	ME	07/29/03	OP8091	SL981
OP8091-MSD	L018149.D	10	07/30/03	ME	07/29/03	OP8091	SL981
F18742-3 ^a	L018147.D	10	07/30/03	ME	07/29/03	OP8091	SL981

The QC reported here applies to the following samples:

Method: SW846 8270C

F18741-1, F18741-2

CAS No.	Compound	F18742-3 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	443	89	409	82	8	51-110/21
	3&4-Methylphenol	ND	1000	866	87	764	76	13	51-108/21
87-86-5	Pentachlorophenol	ND	1000	ND	0*	ND	0*	nc	33-147/29
95-95-4	2,4,5-Trichlorophenol	ND	500	513	103	463	93	10	57-122/26
88-06-2	2,4,6-Trichlorophenol	ND	500	500	100	447	89	11	49-122/24
106-46-7	1,4-Dichlorobenzene	ND	500	482	96	446	89	8	46-112/23
121-14-2	2,4-Dinitrotoluene	ND	500	432	86	416	83	4	67-131/20
118-74-1	Hexachlorobenzene	ND	500	486	97	475	95	2	65-123/18
87-68-3	Hexachlorobutadiene	ND	500	438	88	428	86	2	41-106/24
67-72-1	Hexachloroethane	ND	500	463	93	428	86	8	42-115/25
98-95-3	Nitrobenzene	ND	500	490	98	467	93	5	55-122/22
110-86-1	Pyridine	ND	500	280	56	253	51	10	17-100/38

CAS No.	Surrogate Recoveries	MS	MSD	F18742-3	Limits
367-12-4	2-Fluorophenol	72%	56%	65%	19-90%
4165-62-2	Phenol-d5	48%	40%	44%	10-68%
118-79-6	2,4,6-Tribromophenol	109%	98%	99%	36-137%
4165-60-0	Nitrobenzene-d5	96%	88%	89%	49-119%
321-60-8	2-Fluorobiphenyl	98%	93%	90%	45-118%
1718-51-0	Terphenyl-d14	95%	88%	88%	46-135%

(a) Dilution required due to matrix interference.

Instrument Performance Check (DFTPP)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SL981-DFTPP	Injection Date:	07/30/03
Lab File ID:	L018139.D	Injection Time:	10:10
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	34103	38.7	Pass
68	Less than 2.0% of mass 69	40	0.05 (0.14) ^a	Pass
69	Mass 69 relative abundance	29446	33.4	Pass
70	Less than 2.0% of mass 69	166	0.19 (0.56) ^a	Pass
127	40.0 - 60.0% of mass 198	41177	46.8	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	88075	100.0	Pass
199	5.0 - 9.0% of mass 198	6003	6.8	Pass
275	10.0 - 30.0% of mass 198	18190	20.7	Pass
365	1.0 - 100.0% of mass 198	1672	1.9	Pass
441	Present, but less than mass 443	10272	11.7 (75.6) ^b	Pass
442	40.0 - 100.0% of mass 198	70957	80.6	Pass
443	17.0 - 23.0% of mass 442	13581	15.4 (19.1) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL981-CC967	L018140.D	07/30/03	10:28	00:18	Continuing cal 50
OP8091-LBS	L018141.D	07/30/03	10:58	00:48	Blank Spike
OP8091-LB	L018142.D	07/30/03	11:28	01:18	Leachate Blank
ZZZZZZ	L018143.D	07/30/03	11:58	01:48	(unrelated sample)
ZZZZZZ	L018144.D	07/30/03	12:28	02:18	(unrelated sample)
F18742-3	L018147.D	07/30/03	14:01	03:51	(used for QC only; not part of job F18741)
OP8091-MS	L018148.D	07/30/03	14:32	04:22	Matrix Spike
OP8091-MSD	L018149.D	07/30/03	15:03	04:53	Matrix Spike Duplicate
ZZZZZZ	L018150.D	07/30/03	15:34	05:24	(unrelated sample)
F18741-1	L018151.D	07/30/03	16:05	05:55	IH-GW-008
OP8091-LS	L018152.D	07/30/03	16:35	06:25	Leachate Spike
F18741-2	L018153.D	07/30/03	17:05	06:55	IH-DS-009
OP8091-DUP	L018154.D	07/30/03	17:35	07:25	Duplicate

Instrument Performance Check (DFTPP)

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SL967-DFTPP	Injection Date:	07/11/03
Lab File ID:	L017872.D	Injection Time:	08:50
Instrument ID:	GCMSL		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	111501	41.6	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) ^a	Pass
69	Mass 69 relative abundance	96202	35.9	Pass
70	Less than 2.0% of mass 69	515	0.19 (0.54) ^a	Pass
127	40.0 - 60.0% of mass 198	129955	48.5	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	268075	100.0	Pass
199	5.0 - 9.0% of mass 198	18569	6.9	Pass
275	10.0 - 30.0% of mass 198	55792	20.8	Pass
365	1.0 - 100.0% of mass 198	5138	1.9	Pass
441	Present, but less than mass 443	29474	11.0 (74.4) ^b	Pass
442	40.0 - 100.0% of mass 198	200336	74.7	Pass
443	17.0 - 23.0% of mass 442	39636	14.8 (19.8) ^c	Pass

(a) Value is % of mass 69

(b) Value is % of mass 443

(c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL967-IC967	L017873.D	07/11/03	09:09	00:19	Initial cal 5
SL967-IC967	L017874.D	07/11/03	09:39	00:49	Initial cal 25
SL967-IC967	L017875.D	07/11/03	10:09	01:19	Initial cal 50
SL967-ICC967	L017876.D	07/11/03	10:39	01:49	Initial cal 75
SL967-IC967	L017877.D	07/11/03	11:10	02:20	Initial cal 100
SL967-IC967	L017878.D	07/11/03	11:40	02:50	Initial cal 125

Semivolatile Internal Standard Area Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	SL981-CC967	Injection Date:	07/30/03
Lab File ID:	L018140.D	Injection Time:	10:28
Instrument ID:	GCMSL	Method:	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	118498	5.12	460608	6.32	240379	8.68	367963	11.18	295505	16.12	205100	18.64
Upper Limit ^a	236996	5.62	921216	6.82	480758	9.18	735926	11.68	591010	16.62	410200	19.14
Lower Limit ^b	59249	4.62	230304	5.82	120190	8.18	183982	10.68	147753	15.62	102550	18.14

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP8091-LBS	111988	5.13	438636	6.32	232349	8.68	354623	11.17	285519	16.13	195945	18.64
OP8091-LB	115025	5.12	438130	6.32	230012	8.68	352935	11.17	291193	16.12	198713	18.64
ZZZZZZ	121252	5.13	473762	6.32	248092	8.68	379582	11.17	310762	16.12	207789	18.64
ZZZZZZ	126568	5.13	492269	6.32	258790	8.68	401561	11.17	326644	16.12	229643	18.65
F18742-3	125635	5.13	482342	6.32	258265	8.68	399693	11.17	323136	16.12	221680	18.64
OP8091-MS	120582	5.13	458136	6.32	250603	8.68	377910	11.17	308335	16.12	210635	18.64
OP8091-MSD	131102	5.13	489027	6.32	265092	8.68	408922	11.17	332386	16.12	226246	18.64
ZZZZZZ	137647	5.13	524085	6.32	277756	8.68	427276	11.17	349132	16.12	237746	18.65
F18741-1	144402	5.13	562003	6.32	293196	8.68	458771	11.17	372781	16.12	247135	18.64
OP8091-LS	145794	5.13	565784	6.32	296671	8.68	456463	11.18	355695	16.13	241533	18.65
F18741-2	135692	5.13	522164	6.32	276864	8.68	426303	11.17	347122	16.12	240684	18.64
OP8091-DUP	136431	5.13	522780	6.32	276397	8.68	424211	11.17	353696	16.12	238111	18.64

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8270C Matrix: LEACHATE

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
F18741-1	L018151.D	60.0	41.0	95.0	84.0	85.0	88.0
F18741-2	L018153.D	56.0	39.0	88.0	78.0	79.0	82.0
OP8091-DUP	L018154.D	57.0	39.0	91.0	82.0	81.0	80.0
OP8091-LB	L018142.D	57.0	37.0	91.0	81.0	83.0	83.0
OP8091-LBS	L018141.D	63.0	43.0	100.0	87.0	88.0	92.0
OP8091-LS	L018152.D	63.0	41.0	94.0	87.0	87.0	89.0
OP8091-MS	L018148.D	72.0	48.0	109.0	96.0	98.0	95.0
OP8091-MSD	L018149.D	56.0	40.0	98.0	88.0	93.0	88.0

Surrogate Compounds Recovery Limits

S1 = 2-Fluorophenol	19-90%
S2 = Phenol-d5	10-68%
S3 = 2,4,6-Tribromophenol	36-137%
S4 = Nitrobenzene-d5	49-119%
S5 = 2-Fluorobiphenyl	45-118%
S6 = Terphenyl-d14	46-135%

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL967-ICC967
 Lab FileID: L017876.D

Response Factor Report MSBNA02

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Fri Jul 11 13:01:38 2003
 Response via : Initial Calibration

Calibration Files

5 =L017873.D 25 =L017874.D 50 =L017875.D
 75 =L017876.D 100 =L017877.D 125 =L017878.D

Compound	5	25	50	75	100	125	Avg	%RSD
-----I STD-----								
1) I 1,4-Dichlorobenzene-d								
2) 1,4-Dioxane	0.471	0.471	0.461	0.434	0.440	0.420	0.450	4.75
3) N-nitrosodimethyl am	0.663	0.712	0.705	0.676	0.674	0.646	0.679	3.71
4) Pyridine	1.189	1.300	1.237	1.220	1.193	1.154	1.215	4.13
5) Benzaldehyde	1.102	0.859	0.865	0.695	0.599	0.457	0.763	29.87
6) Aniline	1.854	1.853	1.724	1.709	1.765	1.266	1.695	12.92
7) S 2-Fluorophenol	1.279	1.290	1.259	1.176	1.164	1.065	1.205	7.23
8) bis(2-Chloroethyl) e	1.278	1.294	1.250	1.214	1.164	1.266	1.244	3.85
9) S Phenol-d5	1.555	1.540	1.486	1.412	1.392	1.291	1.446	6.96
10) C Phenol	1.812	1.777	1.703	1.605	1.531	1.395	1.637	9.67
11) 2-Chlorophenol	1.439	1.495	1.446	1.411	1.406	1.349	1.425	3.41
12) 1,3-Dichlorobenzene	1.610	1.684	1.641	1.565	1.575	1.472	1.591	4.60
13) C 1,4-Dichlorobenzene	1.602	1.658	1.595	1.542	1.532	1.437	1.561	4.85
14) 1,2-Dichlorobenzene	1.597	1.591	1.549	1.487	1.481	1.407	1.519	4.85
15) Benzyl alcohol	0.846	0.925	0.904	0.893	0.912	0.881	0.894	3.13
16) bis(2-chloroisoprop	2.333	2.323	2.197	2.131	2.112	1.975	2.178	6.26
17) 2-Methylphenol	1.252	1.319	1.272	1.262	1.247	1.187	1.257	3.40
18) Acetophenone	1.830	1.879	1.923	1.867	1.820	1.632	1.825	5.57
19) Hexachloroethane	0.549	0.568	0.555	0.540	0.546	0.512	0.545	3.44
20) P N-Nitroso-di-n-prop	0.907	0.901	0.885	0.883	0.881	0.857	0.886	1.98
21) 3&4-Methylphenol	1.329	1.347	1.333	1.284	1.280	1.192	1.294	4.43
-----I STD-----								
22) I Naphthalene-d8								
23) S Nitrobenzene-d5	0.326	0.345	0.336	0.328	0.331	0.319	0.331	2.70
24) Nitrobenzene	0.335	0.344	0.334	0.323	0.323	0.307	0.328	4.00
25) Isophorone	0.632	0.644	0.617	0.610	0.612	0.598	0.619	2.72
26) C 2-Nitrophenol	0.188	0.212	0.214	0.215	0.216	0.210	0.209	5.08
27) 2,4-Dimethylphenol	0.332	0.352	0.331	0.327	0.328	0.313	0.331	3.76
28) bis(2-Chloroethoxy)	0.404	0.400	0.374	0.362	0.364	0.349	0.375	5.85
29) Benzoic Acid	0.185	0.254	0.258	0.273	0.280	0.280	0.255	14.10
30) C 2,4-Dichlorophenol	0.308	0.327	0.312	0.306	0.310	0.291	0.309	3.82
31) 1,2,4-Tri chlorobenz	0.328	0.341	0.325	0.311	0.310	0.296	0.319	4.97
32) Naphthalene	1.062	1.069	1.016	0.980	0.966	0.892	0.997	6.65
33) 4-Chloroaniline	0.445	0.451	0.433	0.417	0.411	0.381	0.423	6.06
34) 2,6-Dichlorophenol	0.304	0.314	0.301	0.291	0.289	0.265	0.294	5.79
35) C Hexachlorobutadiene	0.174	0.174	0.164	0.159	0.158	0.149	0.163	6.03
36) Caprolactam	0.120	0.129	0.134	0.139	0.134	0.125	0.130	5.35
37) C 4-Chloro-3-methyl ph	0.280	0.297	0.291	0.290	0.294	0.279	0.288	2.48
38) 2-Methylnaphthalene	0.723	0.745	0.703	0.693	0.682	0.639	0.698	5.23
39) 1-Methylnaphthalene	0.725	0.726	0.684	0.666	0.662	0.617	0.680	6.13
40) 1,2,4,5-Tetrachloro	0.306	0.310	0.297	0.288	0.286	0.268	0.293	5.21
-----I STD-----								
41) I Acenaphthene-d10								
42) P Hexachlorocyclopent	0.239	0.290	0.289	0.273	0.279	0.270	0.273	6.84
43) C 2,4,6-Tri chlorophen	0.377	0.415	0.400	0.389	0.398	0.378	0.393	3.74
44) 2,4,5-Tri chlorophen	0.397	0.431	0.424	0.410	0.414	0.400	0.413	3.18

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL967-ICC967
 Lab FileID: L017876.D

45)	S	2-Fluorobiphenyl	1.392	1.437	1.364	1.273	1.286	1.214	1.328	6.30
46)		1,1'-Bi phenyl	1.619	1.682	1.714	1.615	1.589	1.441	1.610	5.89
47)		2-Chloronaphthalene	1.233	1.278	1.204	1.122	1.146	1.069	1.175	6.55
48)		2-Nitroaniline	0.289	0.332	0.338	0.326	0.339	0.330	0.326	5.76
49)		Acenaphthylene	1.804	1.854	1.782	1.638	1.670	1.540	1.715	6.91
50)		Dimethyl phthalate	1.371	1.409	1.374	1.323	1.348	1.296	1.353	2.98
51)		2,6-Dinitrotoluene	0.258	0.309	0.308	0.294	0.297	0.277	0.291	6.80
52)	C	Acenaphthene	1.173	1.236	1.185	1.107	1.128	1.061	1.148	5.42
53)		3-Nitroaniline	0.331	0.376	0.384	0.377	0.386	0.369	0.370	5.46
54)	P	2,4-Dinitrophenol	0.083	0.152	0.182	0.194	0.209	0.212	0.172	28.34
----- Quadratic regression ----- Coefficient = 0.9993										
Response Ratio = -0.03476 + 0.18218 *A + 0.00589 *A^2										
55)		Dibenzofuran	1.712	1.700	1.651	1.546	1.563	1.448	1.603	6.38
56)		2,4-Dinitrotoluene	0.375	0.432	0.441	0.432	0.442	0.429	0.425	5.91
57)	P	4-Nitrophenol	0.148	0.171	0.177	0.171	0.173	0.167	0.168	6.21
58)		2,3,4,6-Tetrachloro	0.245	0.296	0.290	0.288	0.296	0.283	0.283	6.78
59)		Fluorene	1.344	1.380	1.335	1.248	1.268	1.175	1.292	5.84
60)		4-Chlorophenyl-phen	0.624	0.620	0.586	0.550	0.554	0.521	0.576	7.15
61)		Diethyl phthalate	1.317	1.368	1.329	1.284	1.280	1.224	1.300	3.81
62)		4-Nitroaniline	0.329	0.375	0.387	0.382	0.386	0.379	0.373	5.84
63)	I	Phenanthrene-d10	-----I STD-----							
64)		4,6-Dinitro-2-methy	0.098	0.152	0.165	0.165	0.166	0.164	0.152	17.74
----- Quadratic regression ----- Coefficient = 0.9999										
Response Ratio = -0.02273 + 0.17624 *A + -0.00126 *A^2										
65)	C	n-Nitrosodiphenyl am	0.646	0.650	0.625	0.592	0.586	0.572	0.612	5.39
66)		1,2-Diphenylhydrazin	0.767	0.799	0.754	0.703	0.712	0.664	0.733	6.71
67)	S	2,4,6-Tribromopheno	0.085	0.095	0.092	0.088	0.088	0.084	0.089	4.70
68)		4-Bromophenyl-pheny	0.191	0.207	0.198	0.187	0.189	0.180	0.192	4.96
69)		Hexachlorobenzene	0.200	0.206	0.199	0.187	0.188	0.176	0.193	5.64
70)		Atrazine	0.217	0.230	0.194	0.201	0.188	0.169	0.200	10.85
71)	C	Pentachlorophenol	0.225	0.138	0.136	0.136	0.137	0.129	0.150	24.42
----- Quadratic regression ----- Coefficient = 0.9986										
Response Ratio = 0.00352 + 0.14332 *A + -0.00218 *A^2										
72)		Phenanthrene	1.259	1.253	1.231	1.138	1.158	1.083	1.187	6.03
73)		Anthracene	1.244	1.284	1.227	1.161	1.154	1.075	1.191	6.34
74)		Carbazole	1.206	1.228	1.204	1.150	1.131	1.064	1.164	5.27
75)		Di-n-butyl phthalate	1.321	1.432	1.397	1.355	1.332	1.256	1.349	4.56
76)	C	Fluoranthene	1.183	1.224	1.200	1.166	1.157	1.073	1.167	4.47
77)	I	Chrysene-d12	-----I STD-----							
78)		Benzo[a]fluoranthene	0.576	0.561	0.433	0.484	0.515	0.481	0.509	10.53
79)		Pyrene	1.631	1.798	1.722	1.633	1.656	1.613	1.676	4.24
80)	S	Terphenyl-d14	0.894	0.986	0.953	0.923	0.925	0.907	0.931	3.57
81)		Butyl benzyl phthalat	0.678	0.812	0.807	0.804	0.816	0.807	0.787	6.81
82)		3,3'-Dichlorobenzid	0.386	0.437	0.455	0.432	0.436	0.414	0.427	5.57
83)		Benzo[a]anthracene	1.246	1.357	1.382	1.329	1.354	1.309	1.330	3.62
84)		Chrysene	1.284	1.334	1.312	1.254	1.274	1.213	1.279	3.34
85)		bis(2-Ethylhexyl)ph	0.905	1.079	1.057	1.077	1.067	1.055	1.040	6.41
86)	I	Perylene-d12	-----I STD-----							
87)	C	Di-n-octyl phthalate	1.810	2.410	2.315	2.441	2.383	2.310	2.278	10.32
88)		Benzo[b]fluoranthene	1.401	1.651	1.609	1.657	1.590	1.599	1.585	5.93
89)		Benzo[k]fluoranthene	1.566	1.653	1.648	1.525	1.598	1.427	1.570	5.42
90)	C	Benzo[a]pyrene	1.359	1.535	1.504	1.472	1.500	1.426	1.466	4.37
91)		Indeno[1,2,3-cd]pyr	1.154	1.422	1.492	1.474	1.561	1.476	1.430	9.96
92)		Dibenz[a,h]anthracene	1.152	1.519	1.563	1.491	1.533	1.414	1.445	10.54

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: SL967-ICC967
Lab FileID: L017876.D

93)	Benzo[g, h, i]peryl en	1.530	1.603	1.682	1.573	1.640	1.522	1.592	3.96
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(#) = Out of Range

8270C.M

Wed Jul 16 10:21:20 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL981-CC967
 Lab FileID: L018140.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\073003\L018140.D Vial : 2
 Acq On : 30 Jul 2003 10:28 am Operator: marke
 Sample : cc967-50 Inst : MSBNA02
 Misc : op8049, sl 981, 820, , , 1, 1, water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Thu Jul 31 10:21:25 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)	R. T.
1 I	1,4-Di chl orobenzene-d4	1.000	1.000	0.0	66	0.00	5.12
2	1,4-Di oxane	0.450	0.456	-1.3	66	-0.01	2.71
3	N-ni trosodi methyl ami ne	0.679	0.671	1.2	63	0.00	3.04
4	Pyri di ne	1.215	1.263	-4.0	68	-0.02	3.04
5	Benzal dehyde	0.763	0.516	32.4#	40#	0.00	4.79
6	Ani li ne	1.695	1.981	-16.9	76	0.00	4.89
7 S	2-Fl uorophenol	1.205	1.271	-5.5	67	0.00	4.17
8	bi s(2-Chl oroethyl)ether	1.244	1.256	-1.0	67	0.00	4.93
9 S	Phenol -d5	1.446	1.512	-4.6	68	0.00	4.87
10 C	Phenol	1.637	1.761	-7.6	69	0.00	4.88
11	2-Chl orophenol	1.425	1.491	-4.6	69	0.00	4.98
12	1,3-Di chl orobenzene	1.591	1.628	-2.3	66	0.00	5.10
13 C	1,4-Di chl orobenzene	1.561	1.615	-3.5	67	0.00	5.14
14	1,2-Di chl orobenzene	1.519	1.538	-1.3	66	0.00	5.30
15	Benzyl al cohoh	0.894	0.931	-4.1	68	0.00	5.25
16	bi s(2-chl oro i sopropyl)eth	2.178	2.243	-3.0	68	0.00	5.38
17	2-Methyl phenol	1.257	1.311	-4.3	68	0.00	5.36
18	Acetophenone	1.825	1.845	-1.1	64	0.00	5.48
19	Hexachl oroethane	0.545	0.552	-1.3	66	0.00	5.57
20 P	N-Ni troso-di -n-propyl ami n	0.886	0.895	-1.0	67	0.00	5.50
21	3&4-Methyl phenol	1.294	1.365	-5.5	68	0.00	5.48
22 I	Naphthal ene-d8	1.000	1.000	0.0	68	0.00	6.32
23 S	Ni trobenzene-d5	0.331	0.334	-0.9	68	0.00	5.62
24	Ni trobenzene	0.328	0.326	0.6	67	0.00	5.64
25	I sophorone	0.619	0.603	2.6	67	0.00	5.85
26 C	2-Ni trophenol	0.209	0.224	-7.2	71	0.00	5.95
27	2,4-Di methyl phenol	0.331	0.344	-3.9	71	0.00	5.97
28	bi s(2-Chl oroethoxy)methan	0.375	0.373	0.5	68	0.00	6.06
29	Benzi c Aci d	0.255	0.278	-9.0	73	-0.03	6.11
30 C	2,4-Di chl orophenol	0.309	0.318	-2.9	69	0.00	6.18
31	1,2,4-Tri chl orobenzene	0.319	0.315	1.3	66	0.00	6.27
32	Naphthal ene	0.997	1.010	-1.3	68	0.00	6.34
33	4-Chl oroani li ne	0.423	0.442	-4.5	70	0.00	6.42
34	2,6-Di chl orophenol	0.294	0.307	-4.4	70	0.00	6.43
35 C	Hexachl orobutadi ene	0.163	0.162	0.6	67	0.00	6.54
36	Caprol actam	0.130	0.123	5.4	62	-0.02	6.82
37 C	4-Chl oro-3-methyl phenol	0.288	0.290	-0.7	68	0.00	6.98
38	2-Methyl naphthal ene	0.698	0.713	-2.1	69	0.00	7.16
39	1-Methyl naphthal ene	0.680	0.676	0.6	67	0.00	7.30
40	1,2,4,5-Tetrachl orobenzen	0.293	0.294	-0.3	67	0.00	7.43

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL981-CC967
 Lab FileID: L018140.D

		1.000	1.000	0.0	67	0.00	8.68
41 I	Acenaphthene-d10						
42 P	Hexachl orocycl opentadi ene	0.273	0.233	14.7	54	0.00	7.46
43 C	2, 4, 6-Tri chl orophenol	0.393	0.418	-6.4	70	0.00	7.57
44	2, 4, 5-Tri chl orophenol	0.413	0.444	-7.5	71	0.00	7.62
45 S	2-Fl uorobi phenyl	1.328	1.393	-4.9	69	-0.01	7.68
46	1, 1' -Bi phenyl	1.610	1.650	-2.5	65	-0.01	7.80
47	2-Chl oronaphthal ene	1.175	1.244	-5.9	70	-0.01	7.82
48	2-Ni troani li ne	0.326	0.338	-3.7	67	0.00	8.01
49	Acenaphthyl ene	1.715	1.785	-4.1	68	0.00	8.44
50	Di methyl phthal ate	1.353	1.379	-1.9	68	0.00	8.34
51	2, 6-Di ni trotol uene	0.291	0.313	-7.6	69	0.00	8.44
52 C	Acenaphthene	1.148	1.214	-5.7	69	0.00	8.73
53	3-Ni troani li ne	0.370	0.394	-6.5	69	0.00	8.65
		True	Cal c.	% Dri ft			
54 P	2, 4-Di ni trophenol	100.000	107.904	-7.9	74	0.00	8.82
		AvgRF	CCRF	% Dev			
55	Di benzofuran	1.603	1.686	-5.2	69	0.00	8.98
56	2, 4-Di ni trotol uene	0.425	0.447	-5.2	68	0.00	9.07
57 P	4-Ni trophenol	0.168	0.174	-3.6	66	0.00	8.96
58	2, 3, 4, 6-Tetrachl orophenol	0.283	0.313	-10.6	73	0.00	9.27
59	Fl uorene	1.292	1.379	-6.7	70	0.00	9.55
60	4-Chl orophenyl -phenyl ethe	0.576	0.604	-4.9	69	0.00	9.57
61	Di ethyl phthal ate	1.300	1.339	-3.0	68	0.00	9.51
62	4-Ni troani li ne	0.373	0.403	-8.0	70	0.00	9.67
63 I	Phenanthrene-d10	1.000	1.000	0.0	70	0.00	11.18
		True	Cal c.	% Dri ft			
64	4, 6-Di ni tro-2-methyl pheno	100.000	104.928	-4.9	73	-0.02	9.75
		AvgRF	CCRF	% Dev			
65 C	n-Ni trosodi phenyl ami ne	0.612	0.625	-2.1	70	-0.01	9.80
66	1, 2-Di phenyl hydrazi ne	0.733	0.735	-0.3	68	-0.01	9.85
67 S	2, 4, 6-Tri bromophenol	0.089	0.095	-6.7	72	-0.01	10.00
68	4-Bromophenyl -phenyl ether	0.192	0.195	-1.6	69	0.00	10.41
69	Hexachl orobenzene	0.193	0.195	-1.0	69	0.00	10.65
70	Atrazi ne	0.200	0.233	-16.5	84	0.00	10.83
		True	Cal c.	% Dri ft			
71 C	Pentachl orophenol	100.000	99.827	0.2	71	0.00	10.98
		AvgRF	CCRF	% Dev			
72	Phenanthrene	1.187	1.211	-2.0	69	0.00	11.21
73	Anthracene	1.191	1.255	-5.4	71	0.00	11.29
74	Carbazol e	1.164	1.205	-3.5	70	0.00	11.62
75	Di -n-butyl phthal ate	1.349	1.398	-3.6	70	0.00	12.47
76 C	Fl uoranthene	1.167	1.222	-4.7	71	0.01	13.41
77 I	Chrysene-d12	1.000	1.000	0.0	77	-0.01	16.12
78	Benzi di ne	0.509	0.596	-17.1	106	-0.01	13.73
79	Pyrene	1.676	1.579	5.8	71	-0.02	13.81
80 S	Terphenyl -d14	0.931	0.891	4.3	72	-0.01	14.21
81	Butyl benzyl phthal ate	0.787	0.734	6.7	70	0.00	15.28
82	3, 3' -Di chl orobenzi di ne	0.427	0.414	3.0	70	0.00	16.14
83	Benzo[a]anthracene	1.330	1.275	4.1	71	-0.01	16.10
84	Chrysene	1.279	1.223	4.4	72	-0.02	16.17
85	bi s(2-Ethyl hexyl)phthal at	1.040	0.968	6.9	71	0.00	16.49

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: SL981-CC967
Lab FileID: L018140.D

86 I	Perylene-d12	1.000	1.000	0.0	70	0.00	18.64
87 C	Di-n-octyl phthalate	2.278	2.328	-2.2	71	0.00	17.61
88	Benzo[b]fluoranthene	1.585	1.639	-3.4	71	-0.02	18.03
89	Benzo[k]fluoranthene	1.570	1.653	-5.3	70	-0.02	18.07
90 C	Benzo[a]pyrene	1.466	1.531	-4.4	71	-0.01	18.55
91	Indeno[1,2,3-cd]pyrene	1.430	1.487	-4.0	70	0.00	20.26
92	Dibenz[a,h]anthracene	1.445	1.553	-7.5	70	-0.01	20.30
93	Benzo[g,h,i]perylene	1.592	1.628	-2.3	68	-0.02	20.63

(1.1 %) 1 of 87 compounds' %D > 20

(#) = Out of Range
L017875.D 8270C.M

SPCC's out = 0 CCC's out = 0
Thu Jul 31 10:48:12 2003

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Surrogate Recovery Summaries**
- **GC Surrogate Retention Time Summaries**
- **Initial and Continuing Calibration Summaries**

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH172-BS	HH003285.D1		07/26/03	RM	n/a	n/a	GHH172

The QC reported here applies to the following samples:

Method: SW846 8015

F18741-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	16.3	82	67-136

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	102%	57-144%
98-08-8	aaa-Trifluorotoluene	104%	65-132%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH175-BS	HH003325.D1		07/29/03	JG	n/a	n/a	GHH175

The QC reported here applies to the following samples:

Method: SW846 8015

F18741-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH-GRO (C6-C10)	0.4	0.385	96	64-135

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	107%	64-130%
98-08-8	aaa-Trifluorotoluene	99%	59-136%

Duplicate Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18759-3DUP	HH003328.D1		07/29/03	JG	n/a	n/a	GHH175
F18759-3	HH003327.D1		07/29/03	JG	n/a	n/a	GHH175

The QC reported here applies to the following samples:

Method: SW846 8015

F18741-1

CAS No.	Compound	F18759-3 mg/l	DUP Q	F18759-3 mg/l	Q	RPD	Limits
	TPH-GRO (C6-C10)	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F18759-3	Limits
460-00-4	4-Bromofluorobenzene	102%	103%	64-130%
98-08-8	aaa-Trifluorotoluene	97%	98%	59-136%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH172-MB	HH003286.D1		07/26/03	RM	n/a	n/a	GHH172

The QC reported here applies to the following samples:

Method: SW846 8015

F18741-2

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	95%	57-144%
98-08-8	aaa-Trifluorotoluene	90%	65-132%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GHH175-MB	HH003326.D1		07/29/03	JG	n/a	n/a	GHH175

The QC reported here applies to the following samples:

Method: SW846 8015

F18741-1

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	0.10	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	90%	57-144%
460-00-4	4-Bromofluorobenzene	102%	57-144%
98-08-8	aaa-Trifluorotoluene	91%	65-132%
98-08-8	aaa-Trifluorotoluene	98%	65-132%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18741-1MS	HH003330.D1		07/29/03	JG	n/a	n/a	GHH175
F18741-1MSD	HH003331.D1		07/29/03	JG	n/a	n/a	GHH175
F18741-1	HH003329.D1		07/29/03	JG	n/a	n/a	GHH175

The QC reported here applies to the following samples:

Method: SW846 8015

F18741-1

CAS No.	Compound	F18741-1 mg/l	Spike Q mg/l	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	0.350	0.4	0.741	98	0.730	95	1	46-133/10

CAS No.	Surrogate Recoveries	MS	MSD	F18741-1	Limits
460-00-4	4-Bromofluorobenzene	105%	110%	105%	64-130%
98-08-8	aaa-Trifluorotoluene	113%	114%	99%	59-136%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F18741-2MS	HH003293.D1		07/26/03	RM	n/a	n/a	GHH172
F18741-2MSD	HH003294.D1		07/26/03	RM	n/a	n/a	GHH172
F18741-2	HH003292.D1		07/26/03	RM	n/a	n/a	GHH172

The QC reported here applies to the following samples:

Method: SW846 8015

F18741-2

CAS No.	Compound	F18741-2 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	27.5	20.2	74	21.0	76	4	58-151/18

CAS No.	Surrogate Recoveries	MS	MSD	F18741-2	Limits
460-00-4	4-Bromofluorobenzene	114%	112%	94%	57-144%
98-08-8	aaa-Trifluorotoluene	99%	100%	85%	65-132%

Volatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8015	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F18741-1	HH003329.D	105.0	99.0
F18741-1MS	HH003330.D	105.0	113.0
F18741-1MSD	HH003331.D	110.0	114.0
F18759-3DUP	HH003328.D	102.0	97.0
GHH175-BS	HH003325.D	107.0	99.0

Surrogate Compounds	Recovery Limits
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S1 = 4-Bromofluorobenzene	64-130%
S2 = aaa-Trifluorotoluene	59-136%

(a) Recovery from GC signal #2

Volatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8015	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F18741-2	HH003292.D	94.0	85.0
F18741-2MS	HH003293.D	114.0	99.0
F18741-2MSD	HH003294.D	112.0	100.0
GHH172-BS	HH003285.D	102.0	104.0
GHH172-MB	HH003286.D	95.0	90.0

Surrogate Compounds	Recovery Limits
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S1 = 4-Bromofluorobenzene	57-144%
S2 = aaa-Trifluorotoluene	65-132%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std: GHH172-CC122	Injection Date: 07/26/03
Lab File ID: HH003291.D	Injection Time: 05:28
Instrument ID: GCHH	Method: SW846 8015

S1 ^a	S1 ^b	S2 ^a	S2 ^b
RT	RT	RT	RT

Check Std	16.87	16.87	11.25	11.25
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
F18741-2	HH003292.D	07/26/03	05:57		16.87		11.25
F18741-2MS	HH003293.D	07/26/03	06:27		16.87		11.25
F18741-2MSD	HH003294.D	07/26/03	06:56		16.87		11.25
GHH172-ECC122	HH003295.D	07/26/03	07:25	16.87	16.87	11.25	11.25

Surrogate Compounds

S1 = 4-Bromofluorobenzene
 S2 = aaa-Trifluorotoluene

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std: GHH175-CC138	Injection Date: 07/29/03
Lab File ID: HH003324.D	Injection Time: 15:28
Instrument ID: GCHH	Method: SW846 8015

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	16.88	16.87	11.26	11.25

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
GHH175-BS	HH003325.D	07/29/03	16:09		16.87		11.26
GHH175-MB	HH003326.D	07/29/03	16:38	16.88	16.87	11.25	11.25
F18759-3	HH003327.D	07/29/03	17:08		16.87		11.25
F18759-3DUP	HH003328.D	07/29/03	17:37		16.87		11.25
F18741-1	HH003329.D	07/29/03	18:07		16.87		11.25
F18741-1MS	HH003330.D	07/29/03	18:36		16.87		11.25
F18741-1MSD	HH003331.D	07/29/03	19:06		16.88		11.25
GHH175-ECC138	HH003332.D	07/29/03	19:35	16.88	16.88	11.25	11.25

**Surrogate
Compounds**

S1 = 4-Bromofluorobenzene
 S2 = aaa-Trifluorotoluene

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GHH171-CC122	Injection Date:	07/26/03
Lab File ID:	HH003280.D	Injection Time:	00:04
Instrument ID:	GCHH	Method:	SW846 8015

S1 ^a	S2 ^a
RT	RT

Check Std	16.87	11.25
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
ZZZZZZ	HH003281.D	07/26/03	00:33	16.87	11.25
ZZZZZZ	HH003282.D	07/26/03	01:02	16.87	11.25
ZZZZZZ	HH003283.D	07/26/03	01:32	16.87	11.25
ZZZZZZ	HH003284.D	07/26/03	02:02	16.87	11.25
GHH172-BS	HH003285.D	07/26/03	02:31	16.87	11.25
GHH172-MB	HH003286.D	07/26/03	03:00	16.87	11.25
ZZZZZZ	HH003287.D	07/26/03	03:30	16.87	11.25
ZZZZZZ	HH003288.D	07/26/03	03:59	16.87	11.25
ZZZZZZ	HH003289.D	07/26/03	04:29	16.87	11.25
ZZZZZZ	HH003290.D	07/26/03	04:58	16.87	11.25

Surrogate Compounds

S1 = 4-Bromofluorobenzene

S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GHH122-ICC122
Lab FileID: HH002422.D

Response Factor Report VOA6

Method : C:\MSDCHEM\1\METHODS\GROS508.M (Chemstation Integrator)
Title : Gasoline Range Organics SW8015
Last Update : Thu May 08 20:52:58 2003
Response via : Initial Calibration

Calibration Files

1 =HH002419.D 2 =HH002420.D 3 =HH002421.D
4 =HH002422.D 5 =HH002423.D 6 =HH002424.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) S a, a, a-TFT	5.625	5.629	5.666	5.954	6.032		5.781 E4	3.39
2) S BFB	1.246	1.256	1.250	1.277	1.280		1.262 E5	1.24

Signal #2

4) S a, a, a-TFT#2	1.580	1.690	1.802	2.202	2.345		1.924 E6	17.29
5) S BFB #2	7.320	7.250	7.673	8.313	8.578		7.827 E5	7.60
6) H TPH-GRO (C6-C10)	1.999	1.685	1.478	1.427	1.413	1.383	1.564 E6	15.27

----- Linear regression ----- Coefficient = 1.0000
Response Ratio = 51100493.14680 + 1372236.55338 *A

(#) = Out of Range

GROS508.M

Fri May 09 10:51:45 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GHH172-CC122
Lab FileID: HH003291.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\072503\HH003291.D\ELC1B.CH Vial : 33
Signal #2 : C:\MSDCHEM\1\DATA\072503\HH003291.D\FID2A.CH
Acq On : 7-26-03 05:28:09 AM Operator: RondaM
Sample : CC122-3 Inst : VOA6
Misc : GC2685, GHH172, 5.00, , 100, 5, 1, soil Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\GROS508.M (Chemstation Integrator)
Title : Gasoline Range Organics SW8015
Last Update : Mon Jun 16 09:29:07 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(mi n)	R. T.
1 S	a, a, a-TFT	20.000	19.060	4.7	97	0.01	11.25
2 S	BFB	20.000	18.890	5.5	96	0.01	16.87
***** Signal #2 *****							
4 S	a, a, a-TFT#2	20.000	19.888	0.6	105	0.00	11.25
5 S	BFB #2	20.000	20.147	-0.7	101	0.01	16.87
6 H	TPH-GRO (C6-C10)	400.000	384.186	4.0	96	0.00	8.27

(0.0 %) 0 of 5 compounds' %D > 15

(#) = Out of Range
HH002140.D GROS508.M

SPCC's out = 0 CCC's out = 0
Mon Jul 28 11:08:05 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GHH172-ECC122
Lab FileID: HH003295.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\072503\HH003295.D\ELC1B.CH Vial : 36
Signal #2 : C:\MSDCHEM\1\DATA\072503\HH003295.D\FID2A.CH
Acq On : 7-26-03 07:25:55 AM Operator: RondaM
Sample : ecc122-3 Inst : VOA6
Misc : GC2685, GHH172, 5.00, , 100, 5, 1, soil Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\GROS508.M (Chemstation Integrator)
Title : Gasoline Range Organics SW8015
Last Update : Mon Jun 16 09:29:07 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(mi n)	R. T.
1 S	a, a, a-TFT	20.000	19.165	4.2	97	0.01	11.25
2 S	BFB	20.000	18.748	6.3	95	0.01	16.87
***** Signal #2 *****							
4 S	a, a, a-TFT#2	20.000	19.982	0.1	106	0.00	11.25
5 S	BFB #2	20.000	20.046	-0.2	100	0.01	16.87
6 H	TPH-GRO (C6-C10)	400.000	390.460	2.4	97	0.00	8.27

(0.0 %) 0 of 5 compounds' %D > 15

(#) = Out of Range
HH002140.D GROS508.M

SPCC's out = 0 CCC's out = 0
Mon Jul 28 11:08:06 2003

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GHH138-ICC138
Lab FileID: HH002797.D

Response Factor Report VOA6

Method : C:\MSDCHEM\1\METHODS\GROTN.M (Chemstation Integrator)
Title : Gasoline Range Organics SW8015/OA-1
Last Update : Fri Jun 20 08:19:43 2003
Response via : Initial Calibration

Calibration Files

1 =HH002794.D 2 =HH002795.D 3 =HH002796.D
4 =HH002797.D 5 =HH002798.D 6 =HH002799.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) S a, a, a-TFT	6.108	5.765	5.326	5.752	5.729	5.693	5.729	E4 4.34
2) S BFB	1.323	1.308	1.306	1.330	1.322	1.385	1.329	E5 2.19

Signal #2

4) S a, a, a-TFT #2	1.603	1.700	1.545	1.678	1.680	1.673	1.647	E6 3.64
5) S BFB #2	8.078	7.956	7.872	8.119	8.071	8.270	8.061	E5 1.70
6) H TPH-GRO (C6-C10)	1.958	1.893	1.659	1.727	1.730	1.631	1.766	E6 7.40

----- Linear regression ----- Coefficient = 0.9999
Response Ratio = 56834201.14491 + 1621815.81259 *A

(#) = Out of Range

GROTN.M

Mon Jun 23 14:17:10 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GHH175-CC138
Lab FileID: HH003324.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\072903\HH003324.D\ELC1B.CH Vial : 12
Signal #2 : C:\MSDCHEM\1\DATA\072903\HH003324.D\FID2A.CH
Acq On : 7-29-03 03:28:44 PM Operator: JuanG
Sample : CC138-3 Inst : VOA6
Misc : gc2689,ghh175,,,,, Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\GR00328.M (Chemstation Integrator)
Title : Gasoline Range Organics SW8015
Last Update : Tue May 06 10:43:55 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(mi n)	R. T.
1 S	a, a, a-TFT	20.000	16.851	15.7#	88	0.00	11.26
2 S	BFB	20.000	18.474	7.6	94	0.00	16.88
***** Signal #2 *****							
4 S	a, a, a-TFT#2	20.000	19.214	3.9	101	0.00	11.25
5 S	BFB #2	20.000	21.556	-7.8	111	0.00	16.87
6 H	TPH-GRO (C6-C10)	400.000	393.762	1.6	99	0.00	8.27

(20.0 %) 1 of 5 compounds' %D > 15

(#) = Out of Range
HH001758.D GR00328.M

SPCC's out = 0 CCC's out = 0
Wed Jul 30 08:33:29 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GHH175-ECC138
Lab FileID: HH003332.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\072903\HH003332.D\ELC1B.CH Vial : 17
Signal #2 : C:\MSDCHEM\1\DATA\072903\HH003332.D\FID2A.CH
Acq On : 7-29-03 07:35:24 PM Operator: JuanG
Sample : ECC138-4 Inst : VOA6
Misc : gc2689,ghh175,,,,, Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\GR00328.M (Chemstation Integrator)
Title : Gasoline Range Organics SW8015
Last Update : Tue May 06 10:43:55 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(mi n)	R. T.
1 S	a, a, a-TFT	20.000	18.856	5.7	95	0.00	11.25
2 S	BFB	20.000	18.360	8.2	93	0.00	16.88
***** Signal #2 *****							
4 S	a, a, a-TFT#2	20.000	24.423	-22.1#	111	0.00	11.25
5 S	BFB #2	20.000	21.528	-7.6	105	0.00	16.88
6 H	TPH-GRO (C6-C10)	800.000	874.607	-9.3	109	0.00	8.27

(20.0 %) 1 of 5 compounds' %D > 15

(#) = Out of Range
HH001759.D GR00328.M

SPCC's out = 0 CCC's out = 0
Wed Jul 30 08:42:32 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GHH171-CC122
Lab FileID: HH003280.D

Evaluate Continuing Calibration Report

Signal #1 : C:\MSDCHEM\1\DATA\072503\HH003280.D\ELC1B.CH Vial : 24
Signal #2 : C:\MSDCHEM\1\DATA\072503\HH003280.D\FID2A.CH
Acq On : 26 Jul 2003 12:04 am Operator: RondaM
Sample : CC122-3 Inst : VOA6
Misc : GC2685, GHH171, 5.00, , 100, 5, 1, soil Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\MSDCHEM\1\METHODS\GROS508.M (Chemstation Integrator)
Title : Gasoline Range Organics SW8015
Last Update : Mon Jun 16 09:29:07 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(mi n)	R. T.
1 S	a, a, a-TFT	20.000	19.023	4.9	97	0.00	11.25
2 S	BFB	20.000	19.020	4.9	97	0.01	16.87
***** Signal #2 *****							
4 S	a, a, a-TFT#2	20.000	19.882	0.6	105	0.00	11.25
5 S	BFB #2	20.000	20.630	-3.1	103	0.01	16.87
6 H	TPH-GRO (C6-C10)	400.000	394.338	1.4	98	0.00	8.27

(0.0 %) 0 of 5 compounds' %D > 15

(#) = Out of Range
HH002140.D GROS508.M

SPCC's out = 0 CCC's out = 0
Mon Jul 28 11:08:05 2003

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- DDT/Endrin Breakdown Checks
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8071-BS	ZF09398.D	1	07/29/03	SM	07/28/03	OP8071	GZF445

The QC reported here applies to the following samples:

Method: SW846 8015 M

F18741-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	28.4	85	55-118

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	93%	64-121%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8088-BS	AB26531.D	1	07/31/03	NJ	07/29/03	OP8088	GAB962

The QC reported here applies to the following samples:

Method: SW846 8082

F18741-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	136	102	73-121
11096-82-5	Aroclor 1260	133	140	105	79-130

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	101%	50-134%
2051-24-3	Decachlorobiphenyl	113%	48-147%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8092-LBS	DD09766.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374

The QC reported here applies to the following samples:

Method: SW846 8081A

F18741-1, F18741-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
58-89-9	gamma-BHC (Lindane)	5	5.3	106	71-132
72-20-8	Endrin	5	5.4	108	44-156
76-44-8	Heptachlor	5	5.3	106	64-132
1024-57-3	Heptachlor epoxide	5	5.3	106	73-134
72-43-5	Methoxychlor	5	5.6	112	71-135

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	104%	52-131%
2051-24-3	Decachlorobiphenyl	112%	16-153%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8101-BS	ZF09476.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448

The QC reported here applies to the following samples:

Method: SW846 8015 M

F18741-1

CAS No.	Compound	Spike mg/l	BSP mg/l	BSP %	Limits
	TPH (C10-C28)	1	0.878	88	57-103

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	100%	62-118%

Blank Spike Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8102-BS	AB26565.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963

The QC reported here applies to the following samples:

Method: SW846 8082

F18741-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
12674-11-2	Aroclor 1016	4	3.8	95	68-123
11096-82-5	Aroclor 1260	4	3.8	95	70-129

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	94%	51-129%
2051-24-3	Decachlorobiphenyl	104%	21-148%

Leachate Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8092-LB	DD09767.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374

The QC reported here applies to the following samples:

Method: SW846 8081A

F18741-1, F18741-2

CAS No.	Compound	Result	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.50	0.10	ug/l	
12789-03-6	Chlordane	ND	5.0	2.5	ug/l	
72-20-8	Endrin	ND	1.0	0.20	ug/l	
76-44-8	Heptachlor	ND	0.50	0.10	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.50	0.10	ug/l	
72-43-5	Methoxychlor	ND	1.0	0.40	ug/l	
8001-35-2	Toxaphene	ND	25	15	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	104%	52-131%
2051-24-3	Decachlorobiphenyl	114%	16-153%

Leachate Spike Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8092-LS	DD09769.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
F18741-1	DD09768.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374

The QC reported here applies to the following samples:

Method: SW846 8081A

F18741-1, F18741-2

CAS No.	Compound	F18741-1 ug/l	Spike Q	LS ug/l	LS %	Limits
58-89-9	gamma-BHC (Lindane)	ND	5	5.5	110	59-139
72-20-8	Endrin	ND	5	5.9	118	61-152
76-44-8	Heptachlor	ND	5	5.3	106	60-132
1024-57-3	Heptachlor epoxide	ND	5	5.2	104	68-136
72-43-5	Methoxychlor	ND	5	6.0	120	56-145

CAS No.	Surrogate Recoveries	LS	F18741-1	Limits
877-09-8	Tetrachloro-m-xylene	101%	101%	52-131%
2051-24-3	Decachlorobiphenyl	107%	116%	16-153%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8071-MB	ZF09399.D	1	07/29/03	SM	07/28/03	OP8071	GZF445

The QC reported here applies to the following samples:

Method: SW846 8015 M

F18741-2

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	8.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	94% 64-121%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8088-MB	AB26532.D	1	07/31/03	NJ	07/29/03	OP8088	GAB962

The QC reported here applies to the following samples:

Method: SW846 8082

F18741-2

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	17	8.3	ug/kg	
11104-28-2	Aroclor 1221	ND	17	13	ug/kg	
11141-16-5	Aroclor 1232	ND	17	13	ug/kg	
53469-21-9	Aroclor 1242	ND	17	8.3	ug/kg	
12672-29-6	Aroclor 1248	ND	17	8.3	ug/kg	
11097-69-1	Aroclor 1254	ND	17	8.3	ug/kg	
11096-82-5	Aroclor 1260	ND	17	8.3	ug/kg	
	Total PCBs	ND	33		ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	106%	50-134%
2051-24-3	Decachlorobiphenyl	113%	48-147%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8101-MB	ZF09477.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448

The QC reported here applies to the following samples:

Method: SW846 8015 M

F18741-1

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	0.25	mg/l	

CAS No.	Surrogate Recoveries		Limits
84-15-1	o-Terphenyl	103%	62-118%

Method Blank Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8102-MB	AB26566.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963

The QC reported here applies to the following samples:

Method: SW846 8082

F18741-1

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.50	0.25	ug/l	
11104-28-2	Aroclor 1221	ND	0.50	0.40	ug/l	
11141-16-5	Aroclor 1232	ND	0.50	0.40	ug/l	
53469-21-9	Aroclor 1242	ND	0.50	0.25	ug/l	
12672-29-6	Aroclor 1248	ND	0.50	0.25	ug/l	
11097-69-1	Aroclor 1254	ND	0.50	0.25	ug/l	
11096-82-5	Aroclor 1260	ND	0.50	0.25	ug/l	
	Total PCBs	ND	1.0		ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	97%	51-129%
2051-24-3	Decachlorobiphenyl	98%	21-148%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8071-MS	ZF09402.D	1	07/29/03	SM	07/28/03	OP8071	GZF445
OP8071-MSD	ZF09403.D	1	07/29/03	SM	07/28/03	OP8071	GZF445
F18759-2 ^a	ZF09401.D	1	07/29/03	SM	07/28/03	OP8071	GZF445

The QC reported here applies to the following samples:

Method: SW846 8015 M

F18741-2

CAS No.	Compound	F18759-2 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	ND	36.7	28.3	77	31.3	80	10	31-145/34

CAS No.	Surrogate Recoveries	MS	MSD	F18759-2	Limits
84-15-1	o-Terphenyl	88%	92%	89%	64-121%

(a) Petroleum hydrocarbon pattern extends beyond C28.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8088-MS	AB26538.D	2	07/31/03	NJ	07/29/03	OP8088	GAB962
OP8088-MSD	AB26539.D	2	07/31/03	NJ	07/29/03	OP8088	GAB962
F18736-1 ^a	AB26537.D	4	07/31/03	NJ	07/29/03	OP8088	GAB962

The QC reported here applies to the following samples:

Method: SW846 8082

F18741-2

CAS No.	Compound	F18736-1 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	167	137	82	157	95	14	47-145/21
11096-82-5	Aroclor 1260	ND	167	137	82	149	90	8	41-160/27

CAS No.	Surrogate Recoveries	MS	MSD	F18736-1	Limits
877-09-8	Tetrachloro-m-xylene	81%	87%	92%	50-134%
2051-24-3	Decachlorobiphenyl	94%	98%	105%	48-147%

(a) Dilution required due to matrix interference.

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8092-MS	DD09771.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
OP8092-MSD	DD09772.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
F18741-2	DD09770.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374

The QC reported here applies to the following samples:

Method: SW846 8081A

F18741-1, F18741-2

CAS No.	Compound	F18741-2 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	5	5.3	106	5.7	114	7	59-139/23
72-20-8	Endrin	ND	5	5.6	112	5.9	118	5	61-152/25
76-44-8	Heptachlor	ND	5	5.1	102	5.7	114	11	60-132/23
1024-57-3	Heptachlor epoxide	ND	5	5.3	106	5.7	114	7	68-136/21
72-43-5	Methoxychlor	ND	5	6.1	122	6.0	120	2	56-145/27

CAS No.	Surrogate Recoveries	MS	MSD	F18741-2	Limits
877-09-8	Tetrachloro-m-xylene	100%	107%	97%	52-131%
2051-24-3	Decachlorobiphenyl	124%	116%	118%	16-153%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8101-MS	ZF09479.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448
OP8101-MSD	ZF09480.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448
F18741-1	ZF09478.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448

The QC reported here applies to the following samples:

Method: SW846 8015 M

F18741-1

CAS No.	Compound	F18741-1 mg/l	Spike Q	MS mg/l	MS %	MSD mg/l	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	1.13	2.13	2.43	61	2.43	61	0	49-108/27

CAS No.	Surrogate Recoveries	MS	MSD	F18741-1	Limits
84-15-1	o-Terphenyl	97%	99%	76%	62-118%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP8102-MS	AB26568.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963
OP8102-MSD	AB26569.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963
F18741-1 ^a	AB26567.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963

The QC reported here applies to the following samples:

Method: SW846 8082

F18741-1

CAS No.	Compound	F18741-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
12674-11-2	Aroclor 1016	ND	9.52	9.7	102	9.6	101	1	62-128/14
11096-82-5	Aroclor 1260	ND	9.52	9.2	97	9.0	95	2	66-141/17

CAS No.	Surrogate Recoveries	MS	MSD	F18741-1	Limits
877-09-8	Tetrachloro-m-xylene	89%	88%	87%	51-129%
2051-24-3	Decachlorobiphenyl	64%	66%	53%	21-148%

(a) All hits confirmed by dual column analysis.

DDT/Endrin Breakdown Check

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GDD374-DDT	Injection Date:	07/30/03
Lab File ID:	DD09762.D	Injection Time:	09:45
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	55878	12792
4,4'-DDE	13327	2065
4,4'-DDT	1167861	280413

DDT Breakdown ^a	5.6 %	5 %
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Endrin aldehyde	97320	10353
Endrin ketone	156815	26342
Endrin	1573715	424665

Endrin Breakdown ^b	13.9 %	8 %
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(a) Calculated as: $(\text{DDD} + \text{DDE}) / (\text{DDD} + \text{DDE} + \text{DDT}) \times 100$

(b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD374-CC373	DD09763.D	07/30/03	10:10	00:25	Continuing cal 40
OP8092-LBS	DD09766.D	07/30/03	11:15	01:30	Blank Spike
OP8092-LB	DD09767.D	07/30/03	11:37	01:52	Leachate Blank
F18741-1	DD09768.D	07/30/03	11:58	02:13	IH-GW-008
OP8092-LS	DD09769.D	07/30/03	12:19	02:34	Leachate Spike
F18741-2	DD09770.D	07/30/03	12:41	02:56	IH-DS-009
OP8092-MS	DD09771.D	07/30/03	13:02	03:17	Matrix Spike
OP8092-MSD	DD09772.D	07/30/03	13:23	03:38	Matrix Spike Duplicate
GDD374-CC373	DD09773.D	07/30/03	13:45	04:00	Continuing cal 40
OP8087-BS	DD09774.D	07/30/03	14:08	04:23	Blank Spike
OP8087-MB	DD09775.D	07/30/03	14:29	04:44	Method Blank
F18745-7	DD09776.D	07/30/03	14:51	05:06	(used for QC only; not part of job F18741)
OP8087-MS	DD09777.D	07/30/03	15:12	05:27	Matrix Spike
OP8087-MSD	DD09778.D	07/30/03	15:33	05:48	Matrix Spike Duplicate
ZZZZZZ	DD09779.D	07/30/03	15:55	06:10	(unrelated sample)
GDD374-ECC373	DD09780.D	07/30/03	16:16	06:31	Ending cal 20

DDT/Endrin Breakdown Check

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	GDD373-DDT	Injection Date:	07/23/03
Lab File ID:	DD09732.D	Injection Time:	14:09
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	46377	11807
4,4'-DDE	9550	1448
4,4'-DDT	1163565	264739

DDT Breakdown ^a	4.6 %	4.8 %
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Endrin aldehyde	47066	4359
Endrin ketone	99547	17801
Endrin	1560417	448698

Endrin Breakdown ^b	8.6 %	4.7 %
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(a) Calculated as: (DDD + DDE) / (DDD + DDE + DDT) x 100

(b) Calculated as: (Endrin Aldehyde + Endrin Ketone) / (Endrin Aldehyde + Endrin Ketone + Endrin) x 100

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD373-IC373	DD09733.D	07/23/03	14:30	00:21	Initial cal 5
GDD373-IC373	DD09734.D	07/23/03	14:52	00:43	Initial cal 10
GDD373-IC373	DD09735.D	07/23/03	15:13	01:04	Initial cal 20
GDD373-ICC373	DD09736.D	07/23/03	15:35	01:26	Initial cal 40
GDD373-IC373	DD09737.D	07/23/03	15:56	01:47	Initial cal 60
GDD373-IC373	DD09738.D	07/23/03	16:17	02:08	Initial cal 80
OP8032-LBS	DD09742.D	07/23/03	17:43	03:34	Blank Spike
OP8032-LB	DD09743.D	07/23/03	18:04	03:55	Leachate Blank
F18589-1	DD09744.D	07/23/03	18:25	04:16	(used for QC only; not part of job F18741)
OP8032-MS	DD09745.D	07/23/03	18:47	04:38	Matrix Spike
OP8032-MSD	DD09746.D	07/23/03	19:08	04:59	Matrix Spike Duplicate
GDD373-CC373	DD09747.D	07/23/03	19:29	05:20	Continuing cal 40
OP8043-BS	DD09748.D	07/23/03	19:51	05:42	Blank Spike
OP8043-MB	DD09749.D	07/23/03	20:12	06:03	Method Blank
ZZZZZZ	DD09750.D	07/23/03	20:33	06:24	(unrelated sample)
ZZZZZZ	DD09751.D	07/23/03	20:55	06:46	(unrelated sample)
ZZZZZZ	DD09752.D	07/23/03	21:16	07:07	(unrelated sample)
F18626-4	DD09753.D	07/23/03	21:37	07:28	(used for QC only; not part of job F18741)
OP8043-MS	DD09754.D	07/23/03	21:59	07:50	Matrix Spike
OP8043-MSD	DD09755.D	07/23/03	22:20	08:11	Matrix Spike Duplicate
GDD373-CC373	DD09756.D	07/23/03	22:41	08:32	Continuing cal 40
ZZZZZZ	DD09757.D	07/23/03	23:03	08:54	(unrelated sample)
ZZZZZZ	DD09758.D	07/23/03	23:24	09:15	(unrelated sample)
ZZZZZZ	DD09759.D	07/23/03	23:45	09:36	(unrelated sample)

DDT/Endrin Breakdown Check

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GDD373-DDT	Injection Date:	07/23/03
Lab File ID:	DD09732.D	Injection Time:	14:09
Instrument ID:	GCDD		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD373-ECC373	DD09760.D	07/24/03	00:07	09:58	Ending cal 20

Semivolatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8081A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F18741-1	DD09768.D	101.0	116.0
F18741-2	DD09770.D	97.0	118.0
OP8092-LB	DD09767.D	104.0	114.0
OP8092-LBS	DD09766.D	104.0	112.0
OP8092-LS	DD09769.D	101.0	107.0
OP8092-MS	DD09771.D	100.0	124.0
OP8092-MSD	DD09772.D	107.0	116.0

Surrogate Compounds	Recovery Limits
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S1 = Tetrachloro-m-xylene	52-131%
S2 = Decachlorobiphenyl	16-153%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8082 Matrix: AQ

Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F18741-1	AB26567.D	87.0	53.0
OP8102-BS	AB26565.D	94.0	104.0
OP8102-MB	AB26566.D	97.0	98.0
OP8102-MS	AB26568.D	89.0	64.0
OP8102-MSD	AB26569.D	88.0	66.0

Surrogate Compounds	Recovery Limits
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S1 = Tetrachloro-m-xylene	51-129%
S2 = Decachlorobiphenyl	21-148%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8082	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F18741-2	AB26533.D	97.0	109.0
OP8088-BS	AB26531.D	101.0	113.0
OP8088-MB	AB26532.D	106.0	113.0
OP8088-MS	AB26538.D	81.0	94.0
OP8088-MSD	AB26539.D	87.0	98.0

Surrogate Compounds	Recovery Limits
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S1 = Tetrachloro-m-xylene	50-134%
S2 = Decachlorobiphenyl	48-147%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8015 M	Matrix: AQ
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
F18741-1	ZF09478.D	76.0
OP8101-BS	ZF09476.D	100.0
OP8101-MB	ZF09477.D	103.0
OP8101-MS	ZF09479.D	97.0
OP8101-MSD	ZF09480.D	99.0
Surrogate Compounds		Recovery Limits
S1 = o-Terphenyl		62-118%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8015 M	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
F18741-2	ZF09406.D	96.0
OP8071-BS	ZF09398.D	93.0
OP8071-MB	ZF09399.D	94.0
OP8071-MS	ZF09402.D	88.0
OP8071-MSD	ZF09403.D	92.0
Surrogate Compounds		Recovery Limits
S1 = o-Terphenyl		64-121%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std: GZF445-CC401	Injection Date: 07/29/03
Lab File ID: ZF09396.D	Injection Time: 09:23
Instrument ID: GCZF	Method: SW846 8015 M

S1 ^a
RT

Check Std	5.85
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP8071-BS	ZF09398.D	07/29/03	10:17	5.85
OP8071-MB	ZF09399.D	07/29/03	10:37	5.85
ZZZZZZ	ZF09400.D	07/29/03	10:58	5.84
F18759-2	ZF09401.D	07/29/03	11:18	5.85
OP8071-MS	ZF09402.D	07/29/03	11:38	5.85
OP8071-MSD	ZF09403.D	07/29/03	11:58	5.85
ZZZZZZ	ZF09404.D	07/29/03	12:48	0.00
F18741-2	ZF09406.D	07/29/03	13:29	5.84
GZF445-ECC401	ZF09407.D	07/29/03	13:49	5.85

Surrogate Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GDD374-CC373	Injection Date:	07/30/03
Lab File ID:	DD09763.D	Injection Time:	10:10
Instrument ID:	GCDD	Method:	SW846 8081A

S1 ^a	S2 ^a
RT	RT

Check Std	5.52	15.18
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
OP8092-LBS	DD09766.D	07/30/03	11:15	5.52	15.17
OP8092-LB	DD09767.D	07/30/03	11:37	5.52	15.17
F18741-1	DD09768.D	07/30/03	11:58	5.52	15.17
OP8092-LS	DD09769.D	07/30/03	12:19	5.52	15.17
F18741-2	DD09770.D	07/30/03	12:41	5.52	15.17
OP8092-MS	DD09771.D	07/30/03	13:02	5.52	15.17
OP8092-MSD	DD09772.D	07/30/03	13:23	5.52	15.17

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GAB962-CC960	Injection Date:	07/31/03
Lab File ID:	AB26526.D	Injection Time:	09:30
Instrument ID:	GCAB	Method:	SW846 8082

S1 ^a	S2 ^a
RT	RT

Check Std	3.12	9.17
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
OP8088-BS	AB26531.D	07/31/03	10:59	3.12	9.17
OP8088-MB	AB26532.D	07/31/03	11:15	3.11	9.16
F18741-2	AB26533.D	07/31/03	11:31	3.11	9.16
ZZZZZZ	AB26534.D	07/31/03	11:47	3.11	9.16
ZZZZZZ	AB26535.D	07/31/03	12:04	3.11	9.16

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GZF448-CC401	Injection Date:	08/03/03
Lab File ID:	ZF09474.D	Injection Time:	10:05
Instrument ID:	GCZF	Method:	SW846 8015 M

S1 ^a
RT

Check Std	5.84
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP8101-BS	ZF09476.D	08/03/03	10:45	5.84
OP8101-MB	ZF09477.D	08/03/03	11:05	5.84
F18741-1	ZF09478.D	08/03/03	11:25	5.84
OP8101-MS	ZF09479.D	08/03/03	11:45	5.84
OP8101-MSD	ZF09480.D	08/03/03	12:05	5.84
GZF448-ECC401	ZF09481.D	08/03/03	12:25	5.84

Surrogate Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GAB963-ICC963	Injection Date:	08/01/03
Lab File ID:	AB26556.D	Injection Time:	11:24
Instrument ID:	GCAB	Method:	SW846 8082

S1 ^a	S2 ^a
RT	RT

Check Std	3.11	9.16
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
OP8102-BS	AB26565.D	08/01/03	14:11	3.11	9.16
OP8102-MB	AB26566.D	08/01/03	14:28	3.11	9.16
F18741-1	AB26567.D	08/01/03	14:44	3.11	9.15
OP8102-MS	AB26568.D	08/01/03	15:00	3.11	9.15
OP8102-MSD	AB26569.D	08/01/03	15:16	3.11	9.15

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GAB962-CC960	Injection Date:	07/31/03
Lab File ID:	AB26536.D	Injection Time:	12:20
Instrument ID:	GCAB	Method:	SW846 8082

S1 ^a	S2 ^a
RT	RT

Check Std	3.11	9.16
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
F18736-1	AB26537.D	07/31/03	12:40	3.12	9.16
OP8088-MS	AB26538.D	07/31/03	12:56	3.12	9.16
OP8088-MSD	AB26539.D	07/31/03	13:12	3.11	9.16
ZZZZZ	AB26540.D	07/31/03	13:28	0.00	0.00

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GZF401-ICC401
Lab FileID: ZF08674.D

Response Factor Report FID 3

Method : C:\HPCHEM\1\METHODS\F_DRO.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Tue May 13 12:59:43 2003
Response via : Initial Calibration

Calibration Files

250 =ZF08671.D 500 =ZF08672.D 1000 =ZF08673.D
2000 =ZF08674.D 3000 =ZF08675.D 4000 =ZF08676.D

Compound	250	500	1000	2000	3000	4000	Avg	%RSD
1) S 0-TERPHENYL	3.691	3.668	3.917	3.779	3.721	3.746	3.754 E4	2.38
2) H TPH (C10-C28)	3.987	3.757	3.893	3.709	3.635	3.606	3.765 E4	3.96

Average % RSD = 3.2

(#) = Out of Range

F_DRO.M

Thu May 15 12:45:17 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GZF445-CC401
Lab FileID: ZF09396.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0729DRO\ZF09396.D Vial : 2
Acq On : 29 Jul 2003 9:23 am Operator: SARAHM
Sample : CC401-1000 Inst : FID 3
Misc : op8071,gzf445,30.0,,,1,1,SOIL Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\1\METHODS\F_DRO.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Mon Jul 21 14:36:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 S	O-TERPHENYL	25.000	26.229	-4.9	101	0.00
2 H	TPH (C10-C28)	1000.000	999.835	0.0	97	0.00

Average % D = 2.5

(#) = Out of Range
ZF08673.D F_DRO.M

SPCC's out = 0 CCC's out = 0
Tue Jul 29 14:19:31 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GZF445-ECC401
Lab FileID: ZF09407.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0729DRO\ZF09407.D Vial : 13
Acq On : 29 Jul 2003 1:49 pm Operator: SARAHM
Sample : ECC401-2000 Inst : FID 3
Misc : op8071,gzf445,29.5,,,1,1,SOIL Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\1\METHODS\F_DRO.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Mon Jul 21 14:36:36 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 S	O-TERPHENYL	50.000	52.736	-5.5	105	0.00
2 H	TPH (C10-C28)	2000.000	1977.801	1.1	100	0.00

Average % D = 3.3

(#) = Out of Range
ZF08674.D F_DRO.M

SPCC's out = 0 CCC's out = 0
Tue Jul 29 14:19:05 2003

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD373-ICC373
 Lab FileID: DD09736.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Jul 24 09:42:45 2003
 Response via : Initial Calibration

Calibration Files

5 =DD09733.D 10 =DD09734.D 20 =DD09735.D
 40 =DD09736.D 60 =DD09737.D 80 =DD09738.D c200 =DD09740.D

Compound	5	10	20	40	60	80	c200	Avg	%RSD
1)S Tetrachloro-m-xyl	2.464	2.797	2.861	2.808	2.795	2.822		2.758 E4	5.30
2) alpha-BHC	3.914	4.725	5.041	5.034	5.157	5.373		4.874 E4	10.57
3) gamma-BHC (Lindan	3.543	4.155	4.353	4.385	4.410	4.614		4.243 E4	8.79
4) beta-BHC	1.279	1.508	1.545	1.518	1.528	1.634		1.502 E4	7.89
5) Heptachlor	3.232	3.651	4.021	3.952	3.912	4.022		3.798 E4	8.15
6) delta-BHC	2.511	3.142	3.496	3.597	3.768	3.944		3.410 E4	15.16
7) Aldrin	3.193	3.748	3.919	3.995	3.809	3.981		3.774 E4	7.97
8) Heptachlor Epoxid	3.016	3.358	3.488	3.511	3.447	3.422		3.374 E4	5.43
9) gamma-Chlordane	2.842	3.266	3.389	3.363	3.388	3.544		3.299 E4	7.30
10) alpha-Chlordane	2.872	3.134	3.280	3.308	3.314	3.362		3.212 E4	5.71
11) Endosulfan I	2.654	3.053	3.153	3.027	2.986	3.093		2.995 E4	5.88
12) 4,4'-DDE	1.956	2.245	2.492	2.571	2.472	2.667		2.400 E4	10.79
13) Dieldrin	2.827	3.190	3.466	3.481	3.331	3.507		3.300 E4	7.90
14) Endrin	2.282	2.672	2.809	2.781	2.762	2.907		2.702 E4	8.11
15) 4,4'-DDD	1.602	1.783	1.898	1.938	1.922	2.082		1.871 E4	8.70
16) Endosulfan II	2.289	2.723	2.769	2.857	2.651	2.908		2.700 E4	8.19
17) 4,4'-DDT	1.451	1.817	1.971	2.114	2.093	2.353		1.967 E4	15.69
18) Endrin Aldehyde	1.723	1.942	2.030	2.134	2.016	2.137		1.997 E4	7.69
19) Endosulfan Sulfat	1.995	2.346	2.469	2.545	2.509	2.713		2.430 E4	10.04
20) Methoxychlor	0.743	0.858	0.903	1.009	0.892	0.996		0.900 E4	10.83
21) Endrin Ketone	1.926	2.299	2.426	2.504	2.289	2.491		2.322 E4	9.26
22)L1Chlordane-A							1.380	1.380 E3	0.00
23)L1Chlordane-B							1.729	1.729 E3	0.00
24)L1Chlordane-C							3.536	3.536 E3	0.00
25)L1Chlordane-D							2.147	2.147 E3	0.00
26)L1Chlordane-E							7.118	7.118 E2	0.00
27)L1Chlordane-F							1.181	1.181 E3	0.00
28)H Toxaphene							4.552	E5	0.00
29)SCDecachlorobipheny	0.896	0.966	1.044	1.016	0.945	1.113		0.997 E4	7.74

Signal #2

1)S Tetrachloro-m-xyl	0.715	0.853	0.916	0.940	0.977	1.008		0.901 E4	11.72
2) alpha-BHC	0.843	1.134	1.379	1.503	1.615	1.743		1.370 E4	24.22
----- Quadratic regression ----- Coefficient = 0.9999									
Response Ratio = -24440.99113 + 13558.25735 *A + 51.78615 *A^2									
3) gamma-BHC (Lindan	0.756	1.021	1.195	1.324	1.373	1.472		1.190 E4	22.16
----- Quadratic regression ----- Coefficient = 0.9998									
Response Ratio = -22866.59981 + 12309.13005 *A + 33.03154 *A^2									
4) beta-BHC	3.535	4.494	4.880	5.046	5.159	5.470		4.764 E3	14.33
5) Heptachlor	0.712	0.915	1.048	1.121	1.175	1.250		1.037 E4	18.90
6) delta-BHC	0.553	0.792	0.962	1.088	1.146	1.235		0.963 E4	26.29
----- Quadratic regression ----- Coefficient = 0.9999									
Response Ratio = -22736.54930 + 10033.69052 *A + 32.11854 *A^2									
7) Aldrin	0.710	0.904	1.037	1.134	1.169	1.241		1.032 E4	19.02

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GDD373-ICC373
Lab FileID: DD09736.D

8)	Heptachlor Epoxid	0.676	0.850	0.933	0.984	1.026	1.065	0.922	E4	15.37
9)	gamma-Chlordane	0.653	0.782	0.896	0.962	1.005	1.062	0.893	E4	17.05
10)	alpha-Chlordane	6.304	7.859	8.591	9.298	9.709	9.973	8.622	E3	15.92
11)	Endosulfan I	5.883	7.171	8.020	8.546	8.840	9.277	7.956	E3	15.69
12)	4,4'-DDE	3.354	4.531	5.417	6.330	6.495	7.148	5.546	E3	25.41
	----- Quadratic regression -----									
	Response Ratio =	-11521.31418								
13)	Dieldrin	0.584	0.738	0.840	0.932	0.958	1.005	0.843	E4	18.83
14)	Endrin	4.965	6.207	7.305	8.083	8.206	8.857	7.270	E3	19.93
15)	4,4'-DDD	3.321	4.090	4.913	5.373	5.380	6.063	4.857	E3	20.48
	----- Quadratic regression -----									
	Response Ratio =	-4034.35855								
16)	Endosulfan II	5.214	6.568	7.258	7.909	7.902	8.481	7.222	E3	16.36
17)	4,4'-DDT	2.227	3.247	4.063	5.067	5.190	6.005	4.300	E3	32.48
	----- Quadratic regression -----									
	Response Ratio =	-8779.59263								
18)	Endrin Aldehyde	1.913	2.382	2.727	2.859	2.865	3.053	2.633	E3	15.86
19)	Endosulfan Sulfat	4.279	5.193	5.764	6.177	6.272	6.854	5.756	E3	15.82
20)	Methoxychlor	1.389	1.946	2.318	2.585	2.458	2.788	2.247	E3	22.54
	----- Quadratic regression -----									
	Response Ratio =	-2955.93954								
21)	Endrin Ketone	4.089	4.853	5.483	6.090	5.866	6.546	5.488	E3	16.27
22)	L1Chlordane-A							3.412	E2	0.00
23)	L1Chlordane-B							4.151	E2	0.00
24)	L1Chlordane-C							9.010	E2	0.00
25)	L1Chlordane-D							1.278	E3	0.00
26)	L1Chlordane-E							1.641	E2	0.00
27)	L1Chlordane-F							1.400	E2	0.00
28)	H Toxaphene							9.602	E4	0.00
29)	SCDecachlorobiphenyl	2.808	3.195	3.358	3.469	3.178	3.637	3.274	E3	8.74

(#) = Out of Range ### Number of calibration levels exceeded format ###

8081A.M

Thu Jul 24 10:39:08 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD374-CC373
 Lab FileID: DD09763.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0730PEST\DD09763.D\ECD1A.CH Vial : 3
 Signal #2 : C:\HPCHEM\2\DATA\0730PEST\DD09763.D\ECD2B.CH
 Acq On : 30 Jul 2003 10:10 am Operator: stephw
 Sample : CC373-40 Inst : ECD 4
 Misc : op8092,gdd374,1000,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Jul 24 09:42:45 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	39.053	2.4	96	0.00
2	alpha-BHC	40.000	40.861	-2.2	99	0.00
3	gamma-BHC (Lindane)	40.000	40.619	-1.5	98	0.00
4	beta-BHC	40.000	37.684	5.8	93	0.00
5	Heptachlor	40.000	40.520	-1.3	97	0.00
6	delta-BHC	40.000	39.682	0.8	94	0.00
7	Aldrin	40.000	39.809	0.5	94	0.00
8	Heptachlor Epoxide	40.000	40.236	-0.6	97	0.00
9	gamma-Chlordane	40.000	40.484	-1.2	99	0.00
10	alpha-Chlordane	40.000	38.717	3.2	94	0.00
11	Endosulfan I	40.000	39.627	0.9	98	0.00
12	4,4'-DDE	40.000	38.027	4.9	89	0.00
13	Dieldrin	40.000	39.817	0.5	94	0.00
14	Endrin	40.000	39.009	2.5	95	0.00
15	4,4'-DDD	40.000	36.396	9.0	88	0.00
16	Endosulfan II	40.000	38.186	4.5	90	0.00
17	4,4'-DDT	40.000	39.995	0.0	93	0.00
18	Endrin Aldehyde	40.000	40.058	-0.1	94	0.00
19	Endosulfan Sulfate	40.000	38.357	4.1	92	0.00
20	Methoxychlor	40.000	38.195	4.5	85	0.00
21	Endrin Ketone	40.000	39.064	2.3	91	0.00
29 SC	Decachlorobiphenyl	40.000	39.271	1.8	96	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	37.270	6.8	89	0.00
2	alpha-BHC	40.000	39.403	1.5	98	0.00
3	gamma-BHC (Lindane)	40.000	39.172	2.1	96	0.00
4	beta-BHC	40.000	38.168	4.6	90	0.00
5	Heptachlor	40.000	41.952	-4.9	97	0.00
6	delta-BHC	40.000	36.738	8.2	89	0.00
7	Aldrin	40.000	40.705	-1.8	93	0.00
8	Heptachlor Epoxide	40.000	39.793	0.5	93	0.00
9	gamma-Chlordane	40.000	39.803	0.5	92	0.00
10	alpha-Chlordane	40.000	40.267	-0.7	93	0.00
11	Endosulfan I	40.000	39.754	0.6	93	0.00
12	4,4'-DDE	40.000	35.336	11.7	84	0.00
13	Dieldrin	40.000	40.290	-0.7	91	0.00
14	Endrin	40.000	39.299	1.8	88	0.00
15	4,4'-DDD	40.000	35.614	11.0	84	0.00
16	Endosulfan II	40.000	40.043	-0.1	91	0.00

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD374-CC373
 Lab FileID: DD09763.D

17	4, 4' -DDT	40.000	37.692	5.8	88	0.00
18	Endrin Aldehyde	40.000	38.065	4.8	88	0.00
19	Endosulfan Sulfate	40.000	38.993	2.5	91	0.00
20	Methoxychlor	40.000	36.042	9.9	84	0.00
21	Endrin Ketone	40.000	40.570	-1.4	91	0.00
29 SC	Decachlorobiphenyl	40.000	37.306	6.7	88	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\0730PEST\DD09763.D\ECD1A.CH Vial : 3
 Signal #2 : C:\HPCHEM\2\DATA\0730PEST\DD09763.D\ECD2B.CH
 Acq On : 30 Jul 2003 10:10 am Operator: stephw
 Sample : CC373-40 Inst : ECD 4
 Misc : op8092,gdd374,1000,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Jul 24 09:42:45 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.55#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-7.80#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.41#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.45#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.77#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.15#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.29#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.57#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-7.81#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.70#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.79#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.02#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.12#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.09#

(#) = Out of Range
 DD09736.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Wed Jul 30 16:43:42 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD374-CC373
 Lab FileID: DD09773.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\0730PEST\DD09773.D\ECD1A.CH Vial : 13
 Signal #2 : C:\HPCHEM\2\DATA\0730PEST\DD09773.D\ECD2B.CH
 Acq On : 30 Jul 2003 1:45 pm Operator: stephw
 Sample : CC373-40 Inst : ECD 4
 Misc : op8092,gdd374,100,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Jul 24 09:42:45 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	40.126	-0.3	99	0.00
2	alpha-BHC	40.000	41.595	-4.0	101	0.00
3	gamma-BHC (Lindane)	40.000	40.600	-1.5	98	0.00
4	beta-BHC	40.000	38.618	3.5	96	0.00
5	Heptachlor	40.000	42.516	-6.3	102	0.00
6	delta-BHC	40.000	39.301	1.7	93	0.00
7	Aldrin	40.000	41.075	-2.7	97	0.00
8	Heptachlor Epoxide	40.000	41.809	-4.5	100	0.00
9	gamma-Chlordane	40.000	41.811	-4.5	103	0.00
10	alpha-Chlordane	40.000	40.104	-0.3	97	0.00
11	Endosulfan I	40.000	40.936	-2.3	101	0.00
12	4,4'-DDE	40.000	38.390	4.0	90	0.00
13	Dieldrin	40.000	41.108	-2.8	97	0.00
14	Endrin	40.000	40.725	-1.8	99	0.00
15	4,4'-DDD	40.000	39.071	2.3	94	0.00
16	Endosulfan II	40.000	40.996	-2.5	97	0.00
17	4,4'-DDT	40.000	44.963	-12.4	105	0.00
18	Endrin Aldehyde	40.000	43.168	-7.9	101	0.00
19	Endosulfan Sulfate	40.000	42.046	-5.1	100	0.00
20	Methoxychlor	40.000	40.083	-0.2	89	0.00
21	Endrin Ketone	40.000	42.684	-6.7	99	0.00
29 SC	Decachlorobiphenyl	40.000	41.794	-4.5	102	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	39.807	0.5	95	0.00
2	alpha-BHC	40.000	39.629	0.9	99	0.00
3	gamma-BHC (Lindane)	40.000	40.008	-0.0	99	0.00
4	beta-BHC	40.000	40.097	-0.2	95	0.00
5	Heptachlor	40.000	42.930	-7.3	99	0.00
6	delta-BHC	40.000	37.280	6.8	91	0.00
7	Aldrin	40.000	43.337	-8.3	99	0.00
8	Heptachlor Epoxide	40.000	41.541	-3.9	97	0.00
9	gamma-Chlordane	40.000	41.291	-3.2	96	0.00
10	alpha-Chlordane	40.000	42.786	-7.0	99	0.00
11	Endosulfan I	40.000	40.875	-2.2	95	0.00
12	4,4'-DDE	40.000	36.748	8.1	88	0.00
13	Dieldrin	40.000	42.598	-6.5	96	0.00
14	Endrin	40.000	41.854	-4.6	94	0.00
15	4,4'-DDD	40.000	38.194	4.5	91	0.00
16	Endosulfan II	40.000	42.962	-7.4	98	0.00

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD374-CC373
 Lab FileID: DD09773.D

17	4, 4' -DDT	40.000	40.785	-2.0	97	0.00
18	Endrin Aldehyde	40.000	42.235	-5.6	97	0.00
19	Endosulfan Sulfate	40.000	42.316	-5.8	99	0.00
20	Methoxychlor	40.000	38.847	2.9	91	0.00
21	Endrin Ketone	40.000	43.727	-9.3	98	0.00
29 SC	Decachlorobiphenyl	40.000	39.402	1.5	93	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\0730PEST\DD09773.D\ECD1A.CH Vial : 13
 Signal #2 : C:\HPCHEM\2\DATA\0730PEST\DD09773.D\ECD2B.CH
 Acq On : 30 Jul 2003 1:45 pm Operator: stephw
 Sample : CC373-40 Inst : ECD 4
 Misc : op8092,gdd374,100,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Thu Jul 24 09:42:45 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.55#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-7.80#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.41#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.45#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.77#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.15#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.29#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-7.57#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-7.81#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-9.70#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-9.79#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-10.02#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.12#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.09#

(#) = Out of Range
 DD09736.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Wed Jul 30 16:43:43 2003

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GAB960-ICC960
Lab FileID: AB26452.D

Response Factor Report ECD 1

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
Title : PCB's by EPA-608 / SW846-8082
Last Update : Wed Jul 30 09:36:05 2003
Response via : Initial Calibration

Calibration Files

50 =AB26453.D 200 =AB26454.D 400 =AB26452.D
600 =AB26455.D 800 =AB26456.D 1000 =AB26457.D 1232 =AB26459.D

Compound	50	200	400	600	800	1000	1232	Avg	%RSD
1)S Tetrachloro-m-xyl	1.785	2.083	1.978	2.017	1.973	1.970		1.968	E3 5.04
2)L1AR1016-A	4.249	4.467	3.939	3.790	3.656	3.562		3.944	E1 8.92
3)L1AR1016-B	8.491	8.665	7.497	7.237	7.029	6.841		7.627	E1 10.10
4)L1AR1016-C	1.347	1.426	1.297	1.298	1.288	1.277		1.322	E2 4.26
5)L1AR1016-D	4.922	5.593	5.178	5.286	5.301	5.290		5.262	E1 4.12
6)L1AR1016-E	6.914	7.272	6.417	6.515	6.476	6.343		6.656	E1 5.43
7)L1AR1016-F	5.734	6.422	5.732	5.892	5.887	5.828		5.916	E1 4.36
8)L2AR1221-A								1.305	E1 0.00
9)L2AR1221-B								6.390	0.00
10)L2AR1221-C								2.515	E1 0.00
11)L2AR1221-D								1.829	E1 0.00
12)L2AR1221-E								5.740	E1 0.00
13)L3AR1232-A							5.036	5.036	E1 0.00
14)L3AR1232-B							3.747	3.747	E1 0.00
15)L3AR1232-C							5.814	5.814	E1 0.00
16)L3AR1232-D							2.610	2.610	E1 0.00
17)L3AR1232-E							2.554	2.554	E1 0.00
18)L3AR1232-F							1.305	1.305	E1 0.00
19)L4AR1242-A								3.571	E1 0.00
20)L4AR1242-B								6.820	E1 0.00
21)L4AR1242-C								1.142	E2 0.00
22)L4AR1242-D								4.420	E1 0.00
23)L4AR1242-E								5.171	E1 0.00
24)L4AR1242-F								4.101	E1 0.00
25)L5AR1248-A								3.609	E1 0.00
26)L5AR1248-B								7.380	E1 0.00
27)L5AR1248-C								8.853	E1 0.00
28)L5AR1248-D								7.022	E1 0.00
29)L5AR1248-E								7.718	E1 0.00
30)L5AR1248-F								6.529	E1 0.00
31)L6AR1254-A								5.167	E1 0.00
32)L6AR1254-B								8.915	E1 0.00
33)L6AR1254-C								9.019	E1 0.00
34)L6AR1254-D								1.229	E2 0.00
35)L6AR1254-E								5.655	E1 0.00
36)L6AR1254-F								8.924	E1 0.00
37)L7AR1260-A	8.942	9.362	8.511	8.540	8.750	8.706		8.802	E1 3.59
38)L7AR1260-B	8.868	9.860	9.312	9.308	9.641	9.678		9.445	E1 3.77
39)L7AR1260-C	6.712	8.255	7.903	7.829	8.332	8.462		7.916	E1 8.08
40)L7AR1260-D	1.402	1.649	1.618	1.627	1.777	1.802		1.646	E2 8.70
41)L7AR1260-E	0.851	1.006	0.993	0.994	1.095	1.106		1.008	E2 9.13
42)L7AR1260-F	3.925	4.579	4.458	4.410	4.672	4.639		4.447	E1 6.19
43)L8AR1268-A							7.850	7.850	E1 0.00
44)L8AR1268-B							2.645	2.645	E2 0.00
45)L8AR1268-C							2.688	2.688	E2 0.00
46)L8AR1268-D							2.424	2.424	E2 0.00
47)L8AR1268-E							6.760	6.760	E1 0.00

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB960-ICC960
 Lab FileID: AB26452.D

48) L8AR1268-F								5.313	5.313	E2	0.00
49) SCDecachl orobi pheny	1.663	1.774	1.686	1.660	1.694	1.673			1.692	E3	2.51

Signal #2

1) S Tetrachl oro-m-xyI	1.553	1.792	1.650	1.673	1.634	1.608			1.652	E3	4.84
2) L1AR1016-A	3.757	4.100	3.453	3.301	3.184	3.053			3.475	E1	11.25
3) L1AR1016-B	7.676	7.605	6.340	6.069	5.851	5.559			6.517	E1	13.93
4) L1AR1016-C	1.366	1.334	1.160	1.131	1.100	1.056			1.191	E2	10.75
5) L1AR1016-D	5.809	5.674	4.977	4.896	4.632	4.333			5.053	E1	11.48
6) L1AR1016-E	6.232	7.541	6.632	6.598	6.388	6.099			6.582	E1	7.80
7) L1AR1016-F	5.436	5.668	4.888	4.938	4.877	4.708			5.086	E1	7.41
8) L2AR1221-A									8.560		0.00
9) L2AR1221-B									5.870		0.00
10) L2AR1221-C									2.438	E1	0.00
11) L2AR1221-D									1.708	E1	0.00
12) L2AR1221-E									4.959	E1	0.00
13) L3AR1232-A								4.399	4.399	E1	0.00
14) L3AR1232-B								3.435	3.435	E1	0.00
15) L3AR1232-C								5.678	5.678	E1	0.00
16) L3AR1232-D								3.160	3.160	E1	0.00
17) L3AR1232-E								2.518	2.518	E1	0.00
18) L3AR1232-F								2.622	2.622	E1	0.00
19) L4AR1242-A									3.265	E1	0.00
20) L4AR1242-B									6.192	E1	0.00
21) L4AR1242-C									1.064	E2	0.00
22) L4AR1242-D									5.810	E1	0.00
23) L4AR1242-E									4.625	E1	0.00
24) L4AR1242-F									5.117	E1	0.00
25) L5AR1248-A									3.170	E1	0.00
26) L5AR1248-B									7.171	E1	0.00
27) L5AR1248-C									7.043	E1	0.00
28) L5AR1248-D									8.402	E1	0.00
29) L5AR1248-E									6.932	E1	0.00
30) L5AR1248-F									4.878	E1	0.00
31) L6AR1254-A									5.026	E1	0.00
32) L6AR1254-B									9.859	E1	0.00
33) L6AR1254-C									7.221	E1	0.00
34) L6AR1254-D									1.360	E2	0.00
35) L6AR1254-E									8.212	E1	0.00
36) L6AR1254-F									3.430	E1	0.00
37) L7AR1260-A	1.002	1.039	0.931	0.915	0.902	0.881			0.945	E2	6.54
38) L7AR1260-B	1.099	1.158	1.046	1.024	1.022	1.005			1.059	E2	5.52
39) L7AR1260-C	7.610	8.203	7.703	7.543	7.706	7.624			7.731	E1	3.09
40) L7AR1260-D	1.883	2.069	1.990	1.958	2.016	1.994			1.985	E2	3.12
41) L7AR1260-E	8.966	9.793	9.462	9.277	9.610	9.531			9.440	E1	3.04
42) L7AR1260-F	6.332	7.049	6.734	6.625	6.791	6.829			6.727	E1	3.55
43) L8AR1268-A								8.384	8.384	E1	0.00
44) L8AR1268-B								2.901	2.901	E2	0.00
45) L8AR1268-C								2.686	2.686	E2	0.00
46) L8AR1268-D								2.448	2.448	E2	0.00
47) L8AR1268-E								8.296	8.296	E1	0.00
48) L8AR1268-F								5.424	5.424	E2	0.00
49) SCDecachl orobi pheny	1.641	1.716	1.586	1.528	1.549	1.516			1.589	E3	4.84

(#) = Out of Range ### Number of calibration levels exceeded format ###

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB962-CC960
 Lab FileID: AB26526.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0731PCB\AB26526.D\ECD1B.CH Vial : 2
 Signal #2 : C:\HPCHEM\1\DATA\0731PCB\AB26526.D\ECD2A.CH
 Acq On : 31 Jul 2003 9:30 am Operator: nareshj
 Sample : CC960-400 Inst : ECD 1
 Misc : op8088, gab962, 30.0, , , 10, 1, soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Thu Jul 31 09:39:48 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S Tetrachloro-m-xylene	40.000	42.469	-6.2	106	0.00
2 L1 AR1016-A	400.000	417.492	-4.4	105	0.00
3 L1 AR1016-B	400.000	410.482	-2.6	104	0.00
4 L1 AR1016-C	400.000	426.267	-6.6	109	0.00
5 L1 AR1016-D	400.000	431.852	-8.0	110	0.00
6 L1 AR1016-E	400.000	416.038	-4.0	108	0.00
7 L1 AR1016-F	400.000	419.611	-4.9	108	0.00
37 L7 AR1260-A	400.000	403.868	-1.0	104	0.00
38 L7 AR1260-B	400.000	406.095	-1.5	103	0.00
39 L7 AR1260-C	400.000	419.265	-4.8	105	0.00
40 L7 AR1260-D	400.000	418.014	-4.5	106	0.00
41 L7 AR1260-E	400.000	418.150	-4.5	106	0.00
42 L7 AR1260-F	400.000	431.650	-7.9	108	0.00
49 SC Decachlorobiphenyl	40.000	42.830	-7.1	107	0.00

Signal #2

1 S Tetrachloro-m-xylene	40.000	42.592	-6.5	107	0.00
2 L1 AR1016-A	400.000	412.542	-3.1	104	0.00
3 L1 AR1016-B	400.000	409.332	-2.3	105	0.00
4 L1 AR1016-C	400.000	409.692	-2.4	105	0.00
5 L1 AR1016-D	400.000	424.835	-6.2	108	0.00
6 L1 AR1016-E	400.000	430.985	-7.7	107	0.00
7 L1 AR1016-F	400.000	416.788	-4.2	108	0.00
37 L7 AR1260-A	400.000	393.572	1.6	100	0.00
38 L7 AR1260-B	400.000	390.147	2.5	99	0.00
39 L7 AR1260-C	400.000	391.223	2.2	98	0.00
40 L7 AR1260-D	400.000	395.359	1.2	99	0.00
41 L7 AR1260-E	400.000	396.823	0.8	99	0.00
42 L7 AR1260-F	400.000	408.194	-2.0	102	0.00
49 SC Decachlorobiphenyl	40.000	41.149	-2.9	103	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\1\DATA\0731PCB\AB26526.D\ECD1B.CH Vial : 2
 Signal #2 : C:\HPCHEM\1\DATA\0731PCB\AB26526.D\ECD2A.CH
 Acq On : 31 Jul 2003 9:30 am Operator: nareshj
 Sample : CC960-400 Inst : ECD 1
 Misc : op8088, gab962, 30.0, , , 10, 1, soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB962-CC960
 Lab FileID: AB26526.D

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Thu Jul 31 09:39:48 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.74#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.29#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.59#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.65#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.65#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.00#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.41#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.53#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-4.91#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.46#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-3.65#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-4.00#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-4.41#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-4.62#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-4.91#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-5.27#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-4.00#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-4.41#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-4.71#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-4.99#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-5.26#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-5.46#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-4.69#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-5.24#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-5.39#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-5.77#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-6.08#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-6.41#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-6.67#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-7.43#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-7.50#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-7.72#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-8.42#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-8.88#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.85#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.45#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.51#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.66#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.72#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.72#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.11#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.43#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.71#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-5.00#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.28#

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GAB962-CC960
Lab FileID: AB26526.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-3.72#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-4.11#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-4.43#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-4.71#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-5.00#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-5.28#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-4.10#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-4.43#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-4.71#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-5.28#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-5.52#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-5.84#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-4.71#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-5.38#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-5.75#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-5.84#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-6.49#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-6.99#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-6.89#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-7.57#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-7.64#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-8.11#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-8.44#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-9.16#

(#) = Out of Range
AB26452.D FASTPCB.M

SPCC's out = 0 CCC's out = 0
Fri Aug 01 12:49:22 2003 RPT1

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GAB962-CC960
Lab FileID: AB26536.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0731PCB\AB26536.D\ECD1B.CH Vial : 12
Signal #2 : C:\HPCHEM\1\DATA\0731PCB\AB26536.D\ECD2A.CH
Acq On : 31 Jul 2003 12:20 pm Operator: nareshj
Sample : CC960-400 Inst : ECD 1
Misc : op8088, gab962, 29.8, , , 10, 1, soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
Title : PCB's by EPA-608 / SW846-8082
Last Update : Thu Jul 31 09:39:48 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	42.348	-5.9	105	0.00
2 L1	AR1016-A	400.000	414.841	-3.7	104	0.00
3 L1	AR1016-B	400.000	411.288	-2.8	105	0.00
4 L1	AR1016-C	400.000	432.455	-8.1	110	0.00
5 L1	AR1016-D	400.000	434.665	-8.7	110	0.00
6 L1	AR1016-E	400.000	423.199	-5.8	110	0.00
7 L1	AR1016-F	400.000	428.701	-7.2	111	0.00
37 L7	AR1260-A	400.000	411.329	-2.8	106	0.00
38 L7	AR1260-B	400.000	419.271	-4.8	106	0.00
39 L7	AR1260-C	400.000	431.996	-8.0	108	0.00
40 L7	AR1260-D	400.000	435.648	-8.9	111	0.00
41 L7	AR1260-E	400.000	431.509	-7.9	109	-0.01
42 L7	AR1260-F	400.000	449.455	-12.4	112	-0.01
49 SC	Decachlorobiphenyl	40.000	43.814	-9.5	110	-0.01

Signal #2

1 S	Tetrachloro-m-xylene	40.000	42.618	-6.5	107	0.00
2 L1	AR1016-A	400.000	411.709	-2.9	104	0.00
3 L1	AR1016-B	400.000	410.602	-2.7	106	0.00
4 L1	AR1016-C	400.000	412.384	-3.1	106	0.00
5 L1	AR1016-D	400.000	418.227	-4.6	106	0.00
6 L1	AR1016-E	400.000	421.323	-5.3	105	0.00
7 L1	AR1016-F	400.000	407.264	-1.8	106	0.00
37 L7	AR1260-A	400.000	399.628	0.1	101	0.00
38 L7	AR1260-B	400.000	400.772	-0.2	101	0.00
39 L7	AR1260-C	400.000	404.655	-1.2	102	0.00
40 L7	AR1260-D	400.000	408.952	-2.2	102	0.00
41 L7	AR1260-E	400.000	415.809	-4.0	104	0.00
42 L7	AR1260-F	400.000	421.724	-5.4	105	0.00
49 SC	Decachlorobiphenyl	40.000	42.088	-5.2	105	-0.01

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\1\DATA\0731PCB\AB26536.D\ECD1B.CH Vial : 12
Signal #2 : C:\HPCHEM\1\DATA\0731PCB\AB26536.D\ECD2A.CH
Acq On : 31 Jul 2003 12:20 pm Operator: nareshj
Sample : CC960-400 Inst : ECD 1
Misc : op8088, gab962, 29.8, , , 10, 1, soil Multiplr: 1.00
IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB962-CC960
 Lab FileID: AB26536.D

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
 Title : PCB' s by EPA-608 / SW846-8082
 Last Update : Thu Jul 31 09:39:48 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.74#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.29#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.59#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.65#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.65#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.00#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.41#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.53#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-4.91#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.46#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-3.65#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-4.00#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-4.41#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-4.62#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-4.91#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-5.27#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-4.00#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-4.41#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-4.71#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-4.99#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-5.26#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-5.46#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-4.69#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-5.24#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-5.39#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-5.77#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-6.08#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-6.41#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-6.67#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-7.43#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-7.50#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-7.72#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-8.42#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-8.88#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.85#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.45#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.51#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.66#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.72#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.72#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.11#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.43#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.71#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-5.00#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.28#

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GAB962-CC960
Lab FileID: AB26536.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-3.72#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-4.11#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-4.43#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-4.71#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-5.00#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-5.28#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-4.10#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-4.43#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-4.71#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-5.28#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-5.52#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-5.84#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-4.71#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-5.38#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-5.75#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-5.84#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-6.49#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-6.99#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-6.89#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-7.57#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-7.64#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-8.11#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-8.44#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-9.16#

(#) = Out of Range
AB26452.D FASTPCB.M

SPCC's out = 0 CCC's out = 0
Fri Aug 01 12:49:25 2003 RPT1

Initial Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GAB963-ICC963
Lab FileID: AB26556.D

Response Factor Report ECD 1

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
Title : PCB's by EPA-608 / SW846-8082
Last Update : Sat Aug 02 10:47:16 2003
Response via : Initial Calibration

Calibration Files

50 =AB26554.D 200 =AB26555.D 400 =AB26556.D
600 =AB26557.D 800 =AB26558.D 1000 =AB26559.D 1232 =AB26560.D

Compound	50	200	400	600	800	1000	1232	Avg	%RSD
1)S Tetrachloro-m-xyl	2.594	2.361	2.478	2.401	2.351	2.293		2.413	E3 4.47
2)L1AR1016-A	6.054	4.979	4.747	4.398	4.187	4.033		4.733	E1 15.54
3)L1AR1016-B	1.172	0.955	0.905	0.835	0.795	0.760		0.904	E2 16.55
4)L1AR1016-C	1.907	1.626	1.616	1.530	1.493	1.448		1.603	E2 10.22
5)L1AR1016-D	6.972	6.283	6.393	6.145	6.003	5.900		6.283	E1 6.09
6)L1AR1016-E	9.674	8.091	7.872	7.385	7.166	6.947		7.856	E1 12.58
7)L1AR1016-F	8.086	7.173	7.116	6.798	6.630	6.479		7.047	E1 8.18
8)L2AR1221-A								1.530	E1 0.00
9)L2AR1221-B								7.855	0.00
10)L2AR1221-C								2.975	E1 0.00
11)L2AR1221-D								2.152	E1 0.00
12)L2AR1221-E								6.755	E1 0.00
13)L3AR1232-A							5.925	5.925	E1 0.00
14)L3AR1232-B							4.376	4.376	E1 0.00
15)L3AR1232-C							6.925	6.925	E1 0.00
16)L3AR1232-D							3.100	3.100	E1 0.00
17)L3AR1232-E							3.016	3.016	E1 0.00
18)L3AR1232-F							1.773	1.773	E1 0.00
19)L4AR1242-A								4.154	E1 0.00
20)L4AR1242-B								7.800	E1 0.00
21)L4AR1242-C								1.333	E2 0.00
22)L4AR1242-D								5.172	E1 0.00
23)L4AR1242-E								6.008	E1 0.00
24)L4AR1242-F								6.274	E1 0.00
25)L5AR1248-A								4.254	E1 0.00
26)L5AR1248-B								8.849	E1 0.00
27)L5AR1248-C								1.030	E2 0.00
28)L5AR1248-D								8.296	E1 0.00
29)L5AR1248-E								1.128	E2 0.00
30)L5AR1248-F								7.672	E1 0.00
31)L6AR1254-A								6.063	E1 0.00
32)L6AR1254-B								1.112	E2 0.00
33)L6AR1254-C								1.074	E2 0.00
34)L6AR1254-D								1.448	E2 0.00
35)L6AR1254-E								6.917	E1 0.00
36)L6AR1254-F								1.052	E2 0.00
37)L7AR1260-A	1.223	1.034	1.036	1.003	0.980	0.976		1.042	E2 8.85
38)L7AR1260-B	1.270	1.112	1.128	1.104	1.097	1.106		1.136	E2 5.84
39)L7AR1260-C	9.732	9.230	9.516	9.471	9.451	9.511		9.485	E1 1.70
40)L7AR1260-D	2.026	1.928	2.029	2.054	2.056	2.106		2.033	E2 2.90
41)L7AR1260-E	1.240	1.175	1.239	1.235	1.258	1.271		1.236	E2 2.65
42)L7AR1260-F	5.719	5.366	5.675	5.543	5.457	5.594		5.559	E1 2.39
43)L8AR1268-A							9.682	9.682	E1 0.00
44)L8AR1268-B							3.314	3.314	E2 0.00
45)L8AR1268-C							3.259	3.259	E2 0.00
46)L8AR1268-D							3.058	3.058	E2 0.00
47)L8AR1268-E							8.402	8.402	E1 0.00

Initial Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB963-ICC963
 Lab FileID: AB26556.D

48) L8AR1268-F							6.538	6.538	E2	0.00
49) SCDecachl orobi pheny	2.385	2.040	2.053	1.991	1.958	1.936		2.060	E3	8.02

Signal #2

1) S Tetrachl oro-m-xyl	2.200	1.944	1.975	1.868	1.807	1.735		1.922	E3	8.46
2) L1AR1016-A	5.347	4.301	3.982	3.586	3.394	3.189		3.967	E1	19.84
3) L1AR1016-B		7.967	7.242	6.603	6.197	5.885		6.779	E1	12.33
4) L1AR1016-C	1.775	1.416	1.334	1.247	1.185	1.142		1.350	E2	17.10
5) L1AR1016-D	7.514	6.009	5.718	5.415	5.234	5.025		5.819	E1	15.48
6) L1AR1016-E	9.850	7.999	7.661	7.237	6.996	6.757		7.750	E1	14.48
7) L1AR1016-F	7.260	5.975	5.740	5.389	5.208	5.093		5.777	E1	13.81
8) L2AR1221-A								9.525		0.00
9) L2AR1221-B								6.110		0.00
10) L2AR1221-C								2.676	E1	0.00
11) L2AR1221-D								1.818	E1	0.00
12) L2AR1221-E								5.288	E1	0.00
13) L3AR1232-A							4.953	4.953	E1	0.00
14) L3AR1232-B							3.774	3.774	E1	0.00
15) L3AR1232-C							6.344	6.344	E1	0.00
16) L3AR1232-D							3.565	3.565	E1	0.00
17) L3AR1232-E							2.713	2.713	E1	0.00
18) L3AR1232-F							2.779	2.779	E1	0.00
19) L4AR1242-A								3.556	E1	0.00
20) L4AR1242-B								6.412	E1	0.00
21) L4AR1242-C								1.160	E2	0.00
22) L4AR1242-D								6.485	E1	0.00
23) L4AR1242-E								5.093	E1	0.00
24) L4AR1242-F								5.559	E1	0.00
25) L5AR1248-A								3.427	E1	0.00
26) L5AR1248-B								7.688	E1	0.00
27) L5AR1248-C								7.503	E1	0.00
28) L5AR1248-D								9.160	E1	0.00
29) L5AR1248-E								7.396	E1	0.00
30) L5AR1248-F								5.207	E1	0.00
31) L6AR1254-A								5.195	E1	0.00
32) L6AR1254-B								1.102	E2	0.00
33) L6AR1254-C								7.639	E1	0.00
34) L6AR1254-D								1.461	E2	0.00
35) L6AR1254-E								9.769	E1	0.00
36) L6AR1254-F								3.499	E1	0.00
37) L7AR1260-A	1.359	1.107	1.068	1.003	0.971	0.940		1.075	E2	14.17
38) L7AR1260-B	1.530	1.261	1.233	1.158	1.121	1.088		1.232	E2	13.01
39) L7AR1260-C	1.005	0.876	0.879	0.850	0.831	0.810		0.875	E2	7.88
40) L7AR1260-D	2.542	2.283	2.313	2.275	2.214	2.192		2.303	E2	5.45
41) L7AR1260-E	1.210	1.074	1.092	1.080	1.043	1.048		1.091	E2	5.61
42) L7AR1260-F	8.466	7.694	7.905	7.824	7.602	7.552		7.840	E1	4.26
43) L8AR1268-A							1.008	1.008	E2	0.00
44) L8AR1268-B							3.514	3.514	E2	0.00
45) L8AR1268-C							3.169	3.169	E2	0.00
46) L8AR1268-D							2.922	2.922	E2	0.00
47) L8AR1268-E							9.737	9.737	E1	0.00
48) L8AR1268-F							6.425	6.425	E2	0.00
49) SCDecachl orobi pheny	2.164	1.848	1.854	1.745	1.704	1.662		1.830	E3	9.89

(#) = Out of Range ### Number of calibration levels exceeded format ###

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB963-CC963
 Lab FileID: AB26574.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0801PCB\AB26574.D\ECD1B.CH Vial : 22
 Signal #2 : C:\HPCHEM\1\DATA\0801PCB\AB26574.D\ECD2A.CH
 Acq On : 1 Aug 2003 4:37 pm Operator: nareshj
 Sample : CC963-400 Inst : ECD 1
 Misc : op8102,gab963,1000,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Sat Aug 02 10:47:16 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S Tetrachloro-m-xylene	40.000	43.069	-7.7	105	0.00
2 L1 AR1016-A	400.000	420.248	-5.1	105	0.00
3 L1 AR1016-B	400.000	419.178	-4.8	105	0.00
4 L1 AR1016-C	400.000	428.041	-7.0	106	0.00
5 L1 AR1016-D	400.000	435.429	-8.9	107	0.00
6 L1 AR1016-E	400.000	426.502	-6.6	106	0.00
7 L1 AR1016-F	400.000	440.270	-10.1	109	0.00
37 L7 AR1260-A	400.000	421.475	-5.4	106	0.00
38 L7 AR1260-B	400.000	416.279	-4.1	105	0.00
39 L7 AR1260-C	400.000	430.797	-7.7	107	0.00
40 L7 AR1260-D	400.000	420.042	-5.0	105	0.00
41 L7 AR1260-E	400.000	431.246	-7.8	108	0.00
42 L7 AR1260-F	400.000	419.499	-4.9	103	0.00
49 SC Decachlorobiphenyl	40.000	42.039	-5.1	105	0.00

Signal #2

1 S Tetrachloro-m-xylene	40.000	42.964	-7.4	104	0.00
2 L1 AR1016-A	400.000	413.038	-3.3	103	0.00
3 L1 AR1016-B	400.000	452.298	-13.1	106	0.00
4 L1 AR1016-C	400.000	420.698	-5.2	106	0.00
5 L1 AR1016-D	400.000	420.607	-5.2	107	0.00
6 L1 AR1016-E	400.000	430.195	-7.5	109	0.00
7 L1 AR1016-F	400.000	417.915	-4.5	105	0.00
37 L7 AR1260-A	400.000	407.733	-1.9	103	0.00
38 L7 AR1260-B	400.000	402.808	-0.7	101	0.00
39 L7 AR1260-C	400.000	419.167	-4.8	104	0.00
40 L7 AR1260-D	400.000	408.762	-2.2	102	0.00
41 L7 AR1260-E	400.000	423.065	-5.8	106	0.00
42 L7 AR1260-F	400.000	432.002	-8.0	107	0.00
49 SC Decachlorobiphenyl	40.000	43.491	-8.7	107	-0.01

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\1\DATA\0801PCB\AB26574.D\ECD1B.CH Vial : 22
 Signal #2 : C:\HPCHEM\1\DATA\0801PCB\AB26574.D\ECD2A.CH
 Acq On : 1 Aug 2003 4:37 pm Operator: nareshj
 Sample : CC963-400 Inst : ECD 1
 Misc : op8102,gab963,1000,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB963-CC963
 Lab FileID: AB26574.D

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Sat Aug 02 10:47:16 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.74#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.29#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.59#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.65#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.65#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.00#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.41#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.53#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-4.91#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.46#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-3.65#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-4.00#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-4.41#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-4.62#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-4.91#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-5.27#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-4.00#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-4.41#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-4.71#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-4.99#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-5.26#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-5.46#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-4.69#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-5.24#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-5.39#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-5.77#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-6.08#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-6.41#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-6.67#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-7.43#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-7.50#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-7.72#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-8.42#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-8.88#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.85#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.45#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.51#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.66#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.72#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.72#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.11#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.43#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.71#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-5.00#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.28#

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GAB963-CC963
Lab FileID: AB26574.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-3.72#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-4.11#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-4.43#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-4.71#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-5.00#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-5.28#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-4.10#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-4.43#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-4.71#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-5.28#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-5.52#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-5.84#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-4.71#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-5.38#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-5.75#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-5.84#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-6.49#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-6.99#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-6.89#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-7.57#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-7.64#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-8.11#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-8.44#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-9.16#

(#) = Out of Range
AB26556.D FASTPCB.M

SPCC's out = 0 CCC's out = 0
Mon Aug 04 11:04:00 2003 RPT1

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GZF448-CC401
Lab FileID: ZF09474.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0803DRO\ZF09474.D Vial : 2
Acq On : 3 Aug 2003 10:05 am Operator: MI KEE
Sample : CC401-2000 Inst : FID 3
Misc : op8101,gzf448,1000,,,1,,WATER Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\1\METHODS\F_DRO.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Sun Aug 03 09:28:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(min)
1 S	O-TERPHENYL	50.000	51.237	-2.5	102	0.00
2 H	TPH (C10-C28)	2000.000	1889.366	5.5	96	0.00

Average % D = 4.0

(#) = Out of Range
ZF08674.D F_DRO.M

SPCC's out = 0 CCC's out = 0
Mon Aug 04 11:17:00 2003

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GZF448-ECC401
Lab FileID: ZF09481.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\0803DRO\ZF09481.D Vial : 9
Acq On : 3 Aug 2003 12:25 pm Operator: MI KEE
Sample : ECC401-1000 Inst : FID 3
Misc : op8101,gzf448,1000,,,1,,WATER Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\1\METHODS\F_DRO.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Sun Aug 03 09:28:46 2003
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 S	O-TERPHENYL	25.000	25.297	-1.2	97	0.00
2 H	TPH (C10-C28)	1000.000	929.391	7.1	90	0.00

Average % D = 4.1

(#) = Out of Range
ZF08673.D F_DRO.M

SPCC's out = 0 CCC's out = 0
Mon Aug 04 11:17:41 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB962-CC960
 Lab FileID: AB26542.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\0731PCB\AB26542.D\ECD1B.CH Vial : 18
 Signal #2 : C:\HPCHEM\1\DATA\0731PCB\AB26542.D\ECD2A.CH
 Acq On : 31 Jul 2003 2:04 pm Operator: nareshj
 Sample : CC960-400 Inst : ECD 1
 Misc : op8088, gab962, 29.3, , , 10, 1, soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Thu Jul 31 09:39:48 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S Tetrachloro-m-xylene	40.000	42.156	-5.4	105	0.00
2 L1 AR1016-A	400.000	408.160	-2.0	102	0.00
3 L1 AR1016-B	400.000	377.915	5.5	96	0.00
4 L1 AR1016-C	400.000	379.029	5.2	97	0.00
5 L1 AR1016-D	400.000	351.377	12.2	89	0.00
6 L1 AR1016-E	400.000	339.197	15.2#	88	0.00
7 L1 AR1016-F	400.000	337.836	15.5#	87	0.00
37 L7 AR1260-A	400.000	322.422	19.4#	83	0.00
38 L7 AR1260-B	400.000	342.298	14.4	87	0.00
39 L7 AR1260-C	400.000	355.068	11.2	89	0.00
40 L7 AR1260-D	400.000	379.370	5.2	96	0.00
41 L7 AR1260-E	400.000	370.666	7.3	94	0.00
42 L7 AR1260-F	400.000	383.113	4.2	96	0.00
49 SC Decachlorobiphenyl	40.000	38.006	5.0	95	-0.01

Signal #2

1 S Tetrachloro-m-xylene	40.000	43.896	-9.7	110	0.00
2 L1 AR1016-A	400.000	414.555	-3.6	104	0.00
3 L1 AR1016-B	400.000	382.883	4.3	98	0.00
4 L1 AR1016-C	400.000	363.022	9.2	93	0.00
5 L1 AR1016-D	400.000	350.253	12.4	89	0.00
6 L1 AR1016-E	400.000	349.877	12.5	87	0.00
7 L1 AR1016-F	400.000	325.337	18.7#	85	0.00
37 L7 AR1260-A	400.000	300.403	24.9#	76	0.00
38 L7 AR1260-B	400.000	302.567	24.4#	77	0.00
39 L7 AR1260-C	400.000	309.424	22.6#	78	0.00
40 L7 AR1260-D	400.000	328.296	17.9#	82	0.00
41 L7 AR1260-E	400.000	315.358	21.2#	79	-0.01
42 L7 AR1260-F	400.000	333.132	16.7#	83	-0.01
49 SC Decachlorobiphenyl	40.000	34.372	14.1	86	-0.02

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\1\DATA\0731PCB\AB26542.D\ECD1B.CH Vial : 18
 Signal #2 : C:\HPCHEM\1\DATA\0731PCB\AB26542.D\ECD2A.CH
 Acq On : 31 Jul 2003 2:04 pm Operator: nareshj
 Sample : CC960-400 Inst : ECD 1
 Misc : op8088, gab962, 29.3, , , 10, 1, soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Continuing Calibration Summary

Job Number: F18741
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GAB962-CC960
 Lab FileID: AB26542.D

Method : C:\HPCHEM\1\METHODS\FASTPCB.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Thu Jul 31 09:39:48 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.74#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.29#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.45#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.59#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.65#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.65#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.00#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.41#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.53#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-4.91#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.46#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-3.65#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-4.00#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-4.41#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-4.62#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-4.91#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-5.27#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-4.00#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-4.41#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-4.71#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-4.99#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-5.26#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-5.46#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-4.69#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-5.24#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-5.39#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-5.77#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-6.08#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-6.41#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-6.67#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-7.43#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-7.50#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-7.72#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-8.42#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-8.88#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-2.85#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-3.45#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-3.51#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-3.66#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-3.72#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-3.72#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-4.11#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-4.43#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-4.71#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-5.00#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-5.28#

Continuing Calibration Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GAB962-CC960
Lab FileID: AB26542.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-3.72#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-4.11#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-4.43#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-4.71#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-5.00#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-5.28#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-4.10#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-4.43#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-4.71#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-5.28#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-5.52#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-5.84#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-4.71#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-5.38#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-5.75#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-5.84#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-6.49#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-6.99#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-6.89#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-7.57#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-7.64#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-8.11#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-8.44#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-9.16#

(#) = Out of Range
AB26452.D FASTPCB.M

SPCC's out = 0 CCC's out = 0
Fri Aug 01 12:49:29 2003 RPT1

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR073003.ASC Date Analyzed: 07/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3409
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:14	MA3409-ICV1	1		
10:17	MA3409-ICB1	1		
10:22	MA3409-CRI1	1		
10:23	MA3409-ICSA1	1		
10:26	MA3409-IC SAB1	1		
10:33	MA3409-CCV1	1		
10:36	MA3409-CCB1	1		
10:39	MP5706-MB1	1		
10:42	MP5706-B1	1		
10:45	F18747-2A	1		(sample used for QC only; not part of login F18741)
10:48	MP5706-D1	1		
10:51	MP5706-SD1	5		
10:54	MP5706-S1	1		
10:57	MP5706-S2	1		
11:00	ZZZZZZ	1		
11:03	ZZZZZZ	1		
11:05	ZZZZZZ	1		
11:08	MA3409-CCV2	1		
11:11	MA3409-CCB2	1		
11:14	ZZZZZZ	1		
11:17	ZZZZZZ	1		
11:20	ZZZZZZ	1		
11:23	ZZZZZZ	1		
11:26	ZZZZZZ	1		
11:29	ZZZZZZ	1		
11:32	ZZZZZZ	1		
11:35	ZZZZZZ	1		
11:38	ZZZZZZ	1		
11:41	MP5708-MB1	1		
11:44	MA3409-CCV3	1		
11:47	MA3409-CCB3	1		
11:50	MP5708-B1	1		
11:53	F18460-2R	1		(sample used for QC only; not part of login F18741)

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR073003.ASC Date Analyzed: 07/30/03 Methods: SW846 6010B
Analyst: DM Run ID: MA3409
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
11:56	MP5708-D1	1		
11:59	MP5708-SD1	5		
12:02	MP5708-S1	1		
12:05	MP5708-S2	1		
12:08	F18741-2	1		
12:11	MP5708-D2	1		
12:14	ZZZZZZ	1		
12:17	ZZZZZZ	1		
12:20	MA3409-CCV4	1		
12:23	MA3409-CCB4	1		
12:26	ZZZZZZ	1		
12:29	ZZZZZZ	1		
12:32	MP5708-MB2	1		
12:35	MP5708-B2	1		
12:38	MP5709-MB1	1		
12:41	MP5709-B1	1		
12:44	F18741-1	1		
12:47	MP5709-B2	1		
----->	Last reportable sample/prep for job F18741			
12:50	MA3409-CRI 2	1		
12:53	MA3409-CCV5	1		
12:56	MA3409-CCB5	1		
----->	Last reportable CCB for job F18741			
	Refer to raw data for calibration curve and standards.			

INTERNAL STANDARD SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

File ID: IR073003.ASC Date Analyzed: 07/30/03 Methods: SW846 6010B
 Analyst: DM Run ID: MA3409
 Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Istd#1
10:14	MA3409-ICV1	4161
10:17	MA3409-ICB1	4205 R
10:22	MA3409-CRI 1	4206
10:23	MA3409-ICSA1	3704
10:26	MA3409-IC SAB1	3769
10:33	MA3409-CCV1	4043
10:36	MA3409-CCB1	4250
10:39	MP5706-MB1	4316
10:42	MP5706-B1	4186
10:45	F18747-2A	4241
10:48	MP5706-D1	4268
10:51	MP5706-SD1	4267
10:54	MP5706-S1	4121
10:57	MP5706-S2	4154
11:00	ZZZZZZ	4276
11:03	ZZZZZZ	4257
11:05	ZZZZZZ	4258
11:08	MA3409-CCV2	4054
11:11	MA3409-CCB2	4218
11:14	ZZZZZZ	4270
11:17	ZZZZZZ	4147
11:20	ZZZZZZ	4278
11:23	ZZZZZZ	4168
11:26	ZZZZZZ	4151
11:29	ZZZZZZ	4115
11:32	ZZZZZZ	4178
11:35	ZZZZZZ	4204
11:38	ZZZZZZ	4216
11:41	MP5708-MB1	4266
11:44	MA3409-CCV3	4192
11:47	MA3409-CCB3	4185
11:50	MP5708-B1	4171
11:53	F18460-2R	3667
11:56	MP5708-D1	3701

INTERNAL STANDARD SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

File ID: IR073003.ASC Date Analyzed: 07/30/03 Methods: SW846 6010B
 Analyst: DM Run ID: MA3409
 Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Istd#1
11:59	MP5708-SD1	4006
12:02	MP5708-S1	3694
12:05	MP5708-S2	3691
12:08	F18741-2	3840
12:11	MP5708-D2	3804
12:14	ZZZZZZ	3798
12:17	ZZZZZZ	3773
12:20	MA3409-CCV4	4204
12:23	MA3409-CCB4	4366
12:26	ZZZZZZ	3774
12:29	ZZZZZZ	3868
12:32	MP5708-MB2	3887
12:35	MP5708-B2	3840
12:38	MP5709-MB1	4392
12:41	MP5709-B1	4289
12:44	F18741-1	4260
12:47	MP5709-B2	4233
12:50	MA3409-CRI 2	4435
12:53	MA3409-CCV5	4322
12:56	MA3409-CCB5	4442

R = Reference for ISTD limits. ! = Outside limits.

LEGEND:

Istd#	Parameter	Limits
Istd#1	Yttrium	60-125 %

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR073003.ASC
QC Limits: result < RL

Date Analyzed: 07/30/03
Run ID: MA3409

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	6.6	anr							
Arsenic	10	2.8	-3.3	<10	-3.8	<10	-5.0	<10	-4.7	<10
Barium	200	.49	-0.81	<200	-1.4	<200	-1.2	<200	-1.3	<200
Cadmium	5.0	.26	-1.4	<5.0	-2.0	<5.0	-1.9	<5.0	-1.9	<5.0
Calcium	1000	3.8								
Chromium	10	.43	-1.2	<10	-1.3	<10	-1.9	<10	-2.1	<10
Copper	25	.44	anr							
Iron	300	7.1	anr							
Lead	5.0	1.2	1.5	<5.0	1.4	<5.0	2.6	<5.0	2.4	<5.0
Magnesium	5000	9.9								
Manganese	15	.16	anr							
Molybdenum	50	.75								
Nickel	40	1.1	anr							
Selenium	10	2	2.7	<10	2.7	<10	7.1	<10	2.6	<10
Silver	10	.55	-0.12	<10	-0.070	<10	-0.010	<10	-0.16	<10
Sodium	5000	150								
Zinc	20	.59	anr							

(*) Outside of QC Limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR073003.ASC
QC Limits: result < RL

Date Analyzed: 07/30/03
Run ID: MA3409

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final
Aluminum	200	6.6	anr			
Arsenic	10	2.8	-2.2	<10	-2.0	<10
Barium	200	.49	-1.1	<200	-0.48	<200
Cadmium	5.0	.26	-1.6	<5.0	-1.4	<5.0
Calcium	1000	3.8				
Chromium	10	.43	-1.5	<10	-0.90	<10
Copper	25	.44	anr			
Iron	300	7.1	anr			
Lead	5.0	1.2	2.4	<5.0	3.3	<5.0
Magnesium	5000	9.9				
Manganese	15	.16	anr			
Molybdenum	50	.75				
Nickel	40	1.1	anr			
Selenium	10	2	1.4	<10	2.2	<10
Silver	10	.55	-0.060	<10	0.46	<10
Sodium	5000	150				
Zinc	20	.59	anr			

(*) Outside of QC Limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR073003.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 07/30/03
Run ID: MA3409

Methods: SW846 6010B
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Arsenic	2000	1990	99.5	2000	1990	99.5	2000	1980	99.0
Barium	2000	2000	100.0	2000	2030	101.5	2000	2020	101.0
Cadmium	2000	2040	102.0	2000	2030	101.5	2000	2040	102.0
Calcium									
Chromium	2000	1930	96.5	2000	1920	96.0	2000	1920	96.0
Copper	anr								
Iron	anr								
Lead	2000	1960	98.0	2000	1970	98.5	2000	1960	98.0
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Selenium	2000	1960	98.0	2000	1980	99.0	2000	1960	98.0
Silver	250	243	97.2	250	245	98.0	250	243	97.2
Sodium									
Zinc	anr								

(*) Outside of QC Limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR073003.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 07/30/03
Run ID: MA3409

Methods: SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Arsenic	2000	1980	99.0	2000	2010	100.5	2000	2050	102.5
Barium	2000	1980	99.0	2000	1990	99.5	2000	1980	99.0
Cadmium	2000	2050	102.5	2000	2070	103.5	2000	2120	106.0
Calcium									
Chromium	2000	1930	96.5	2000	1950	97.5	2000	1980	99.0
Copper	anr								
Iron	anr								
Lead	2000	1960	98.0	2000	1990	99.5	2000	2030	101.5
Magnesium									
Manganese	anr								
Molybdenum									
Nickel	anr								
Selenium	2000	1960	98.0	2000	2010	100.5	2000	2050	102.5
Silver	250	243	97.2	250	244	97.6	250	243	97.2
Sodium									
Zinc	anr								

(*) Outside of QC Limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

File ID: IR073003.ASC
 QC Limits: 70 to 130 % Recovery

Date Analyzed: 07/30/03
 Run ID: MA3409

Methods: SW846 6010B
 Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec	CRI Results	% Rec
Aluminum	400		anr			
Arsenic	20		14.0	70.0	19.0	95.0
Barium	400		397	99.3	392	98.0
Cadmium	10		7.6	76.0	7.4	74.0
Calcium	2000					
Chromium	20		17.1	85.5	17.2	86.0
Copper	50		anr			
Iron	600		anr			
Lead	10		12.4	124.0	9.8	98.0
Magnesium	10000					
Manganese	30		anr			
Molybdenum	100					
Nickel	80		anr			
Selenium	10		11.9	119.0		
Silver	20		19.6	98.0	19.2	96.0
Sodium	10000					
Zinc	40		anr			

(*) Outside of QC Limits
 (anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR073003.ASC
QC Limits: 80 to 120 % Recovery

Date Analyzed: 07/30/03
Run ID: MA3409

Methods: SW846 6010B
Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSAB Results	% Rec
Aluminum	500000	500000	509000	101.8	492000	98.4
Arsenic		1000	-8.2		987	98.7
Barium		500	-0.070		515	103.0
Cadmium		1000	0.0		977	97.7
Calcium	500000	500000	477000H	95.4	466000H	93.2
Chromium		500	-0.37		461	92.2
Copper		500	-19		493	98.6
Iron	200000	200000	200000	100.0	185000	92.5
Lead		1000	2.8		948	94.8
Magnesium	500000	500000	512000	102.4	491000	98.2
Manganese		500	-2.3		488	97.6
Molybdenum		1000	-11		909	90.9
Nickel		1000	0.45		940	94.0
Selenium		1000	-0.090		979	97.9
Silver		1000	-0.32		1070	107.0
Sodium			88.7		93.9	
Zinc		1000	-0.48		949	94.9

(*) Outside of QC Limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H20731W2.PRN
Analyst: SL
Parameters: Hg

Date Analyzed: 07/31/03 Methods: SW846 7470A
Run ID: MA3412

Time	Sample Description	Dilution Factor	PS Recov	Comments
16:15	MA3412-ICV1	1		
16:17	MA3412-ICB1	1		
16:19	MA3412-CRI 1	1		
16:21	MA3412-CCV1	1		
16:23	MA3412-CCB1	1		
16:25	MP5715-MB1	1		
16:27	MP5715-MB2	1		
16:32	MP5715-B1	1		
16:37	MP5715-B2	1		
16:39	F18741-2	1		
16:41	MP5715-D1	1		
16:44	MP5715-S1	1		
16:46	ZZZZZ	1		
16:47	ZZZZZ	1		
16:50	MA3412-CCV2	1		
16:51	MA3412-CCB2	1		
16:53	ZZZZZ	1		
16:55	ZZZZZ	1		
16:57	ZZZZZ	1		
16:59	MA3412-CCV3	1		
17:01	MA3412-CCB3	1		
17:04	MP5716-MB1	1		
17:10	MP5716-B1	1		
17:12	MP5716-B2	1		
17:14	F18741-1	1		
17:17	MP5716-D1	1		
17:19	MP5716-S1	1		
----->	Last reportable sample/prep for job F18741			
17:21	MA3412-CCV4	1		
17:22	MA3412-CCB4	1		
----->	Last reportable CCB for job F18741			
17:24	MP5717-MB1	1		
17:29	MP5717-B1	1		
17:30	F18716-1	1		(sample used for QC only; not part of login F18741)
17:32	MP5717-D1	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H20731W2.PRN
Analyst: SL
Parameters: Hg

Date Analyzed: 07/31/03 Methods: SW846 7470A
Run ID: MA3412

Time	Sample Description	Dilution Factor	PS Recov	Comments
17:34	MP5717-S1	1		
17:36	ZZZZZZ	1		
17:38	ZZZZZZ	1		
17:40	ZZZZZZ	1		
17:42	ZZZZZZ	1		
17:44	MA3412-CCV5	1		
17:46	MA3412-CCB5	1		

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
 Part 1 - Initial and Continuing Calibration Blanks

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

File ID: H20731W2.PRN Date Analyzed: 07/31/03 Methods: SW846 7470A
 QC Limits: result < RL Run ID: MA3412 Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Mercury	1.0	.022	-0.15	<1.0	-0.14	<1.0	-0.066	<1.0	-0.081	<1.0

(*) Outside of QC limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H20731W2.PRN Date Analyzed: 07/31/03 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA3412 Units: ug/l

Metal	RL	IDL	CCB raw	final
Mercury	1.0	.022	-0.069	<1.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H20731W2.PRN Date Analyzed: 07/31/03 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA3412 Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	3.0	100.0	3.0	3.1	103.3	3.0	3.1	103.3

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H20731W2.PRN Date Analyzed: 07/31/03 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA3412 Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	2.9	96.7	3.0	3.0	100.0

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H20731W2.PRN
QC Limits: to % Recovery

Date Analyzed: 07/31/03
Run ID: MA3412

Methods: SW846 7470A
Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Mercury	0.20		0.16	80.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP5708
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 07/29/03 07/29/03

Metal	RL	IDL	MB raw	MB fi nal	MB raw	MB fi nal
Al umi num	0. 20	. 0066				
Arseni c	0. 010	. 0028	-0. 0062	<0. 010	-0. 010	<0. 010
Bari um	1. 0	. 00049	-0. 0025	<1. 0	0. 00022	<1. 0
Cadmi um	0. 0050	. 00026	-0. 0032	<0. 0050	-0. 0033	<0. 0050
Cal ci um	5. 0	. 0038				
Chromi um	0. 010	. 00043	-0. 0032	<0. 010	-0. 0027	<0. 010
Copper	0. 025	. 00044				
I ron	0. 30	. 0071				
Lead	0. 050	. 0012	0. 0011	<0. 050	-0. 0011	<0. 050
Magnesi um	5. 0	. 0099				
Manganese	0. 015	. 00016				
Mol ybdenum	0. 050	. 00075				
Ni ckel	0. 040	. 0011	anr			
Sel eni um	0. 050	. 002	0. 00014	<0. 050	0. 011	<0. 050
Si l ver	0. 010	. 00055	-0. 00065	<0. 010	-0. 0016	<0. 010
Sodi um	5. 0	. 15				
Zi nc	0. 10	. 00059				

Associated samples MP5708: F18741-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5708
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 07/29/03 07/29/03

Metal	F18460-2R		RPD	QC Limits	F18460-2R		Spike lot		QC Limits
	Original	DUP			Original	MS	MPFLICP	% Rec	
Aluminum									
Arsenic	0.0	0.0	NC	0-12	0.0	4.0	4.0	100.0	83-116
Barium	0.38	0.36	5.4	0-13	0.38	3.9	4.0	88.0	82-116
Cadmium	0.058	0.054	7.1	0-13	0.058	0.15	0.10	92.0	80-115
Calcium									
Chromium	0.00091	0.0	200.0(a)	0-12	0.00091	0.34	0.40	84.8	82-120
Copper									
Iron									
Lead	0.0026	0.0022	16.7 (a)	0-10	0.0026	0.86	1.0	85.7	84-118
Magnesium									
Manganese									
Molybdenum									
Nickel	anr								
Selenium	0.010	0.0	200.0(a)	0-13	0.010	4.5	4.0	112.3	84-121
Silver	0.0	0.0	NC	0-14	0.0	0.10	0.10	100.0	77-125
Sodium									
Zinc									

Associated samples MP5708: F18741-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5708
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 07/29/03 07/29/03

Metal	F18460-2R Original	MSD	Spike lot MPFLICP	% Rec	MSD RPD	QC Limit	F18741-2 Original	DUP	RPD	QC Limits
Aluminum										
Arsenic	0.0	3.8	4.0	95.0	5.1		0.0	0.0	NC	0-12
Barium	0.38	3.7	4.0	83.0	5.3		0.73	1.1	40.4 (b)	0-13
Cadmium	0.058	0.14	0.10	82.0	6.9		0.0	0.0	NC	0-13
Calcium										
Chromium	0.00091	0.32	0.40	79.8N(a)	6.1		0.0	0.0	NC	0-12
Copper										
Iron										
Lead	0.0026	0.82	1.0	81.7N(a)	4.8		0.015	0.012	22.2 (b)	0-10
Magnesium										
Manganese										
Molybdenum										
Nickel	anr									
Selenium	0.010	4.2	4.0	104.8	6.9		0.021	0.013	47.1 (b)	0-13
Silver	0.0	0.099	0.10	99.0	1.0		0.0	0.0	NC	0-14
Sodium										
Zinc										

Associated samples MP5708: F18741-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) Spike recovery indicates possible matrix interference and/or sample nonhomogeneity.

(b) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5708
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 07/29/03 07/29/03

Metal	BSP Result	Spike lot MPFLICP	% Rec	QC Limits	BSP Result	Spike lot MPFLICP	% Rec	QC Limits
Aluminum								
Arsenic	3.9	4.0	97.5	80-120	4.0	4.0	100.0	80-120
Barium	4.0	4.0	100.0	80-120	3.5	4.0	87.5	80-120
Cadmium	0.10	0.10	100.0	80-120	0.090	0.10	90.0	80-120
Calcium								
Chromium	0.39	0.40	97.5	80-120	0.34	0.40	85.0	80-120
Copper								
Iron								
Lead	1.0	1.0	100.0	80-120	0.88	1.0	88.0	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel	anr							
Selenium	4.0	4.0	100.0	80-120	4.4	4.0	110.0	80-120
Silver	0.10	0.10	100.0	80-120	0.10	0.10	100.0	80-120
Sodium								
Zinc								

Associated samples MP5708: F18741-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC Limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5708
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: ug/l

Prep Date: 07/29/03

Metal	F18460-2R Original	SDL 1:5	RPD	QC Limits
Aluminum				
Arsenic	0.00	0.00	NC	0-10
Barium	384	386	0.3	0-10
Cadmium	57.8	50.7	12.3*(a)	0-10
Calcium				
Chromium	0.910	0.00	100.0(b)	0-10
Copper				
Iron				
Lead	2.63	6.98	165.4(b)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel	anr			
Selenium	10.1	14.2	40.7 (b)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Zinc				

Associated samples MP5708: F18741-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC Limits

(anr) Analyte not requested

(a) Serial dilution indicates possible matrix interference.

(b) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP5709
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 07/29/03

Metal	RL	IDL	MB raw	fi nal
Al umi num	0.20	.0066		
Arseni c	0.010	.0028	-0.0021	<0.010
Bari um	1.0	.00049	-0.0017	<1.0
Cadmi um	0.0050	.00026	-0.0031	<0.0050
Cal ci um	5.0	.0038		
Chromi um	0.010	.00043	-0.0028	<0.010
Copper	0.025	.00044		
I ron	0.30	.0071		
Lead	0.050	.0012	0.0016	<0.050
Magnesi um	5.0	.0099		
Manganese	0.015	.00016		
Mol ybdenum	0.050	.00075		
Ni ckel	0.040	.0011		
Sel eni um	0.050	.002	0.0039	<0.050
Si l ver	0.010	.00055	-0.00049	<0.010
Sodi um	5.0	.15		
Zi nc	0.10	.00059		

Associated samples MP5709: F18741-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC Limits
(anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5709
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 07/29/03 07/29/03

Metal	BSP Result	Spielot MPFLICP	% Rec	QC Limits	BSP Result	Spielot MPFLICP	% Rec	QC Limits
Aluminum								
Arsenic	3.9	4.0	97.5	80-120	3.7	4.0	92.5	80-120
Barium	3.8	4.0	95.0	80-120	3.7	4.0	92.5	80-120
Cadmium	0.10	0.10	100.0	80-120	0.095	0.10	95.0	80-120
Calcium								
Chromium	0.39	0.40	97.5	80-120	0.37	0.40	92.5	80-120
Copper								
Iron								
Lead	1.0	1.0	100.0	80-120	0.97	1.0	97.0	80-120
Magnesium								
Manganese								
Molybdenum								
Nickel								
Selenium	4.0	4.0	100.0	80-120	3.8	4.0	95.0	80-120
Silver	0.098	0.10	98.0	80-120	0.094	0.10	94.0	80-120
Sodium								
Zinc								

Associated samples MP5709: F18741-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC Limits
 (anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP5715
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 07/31/03 07/31/03

Metal	RL	IDL	MB raw	final	MB raw	final
Mercury	0.0010	.000022	-0.00013	<0.0010	-0.0013	<0.010

Associated samples MP5715: F18741-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5715
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 07/31/03 07/31/03

Metal	F18741-2 Original	DUP	RPD	QC Limits	F18741-2 Original	MS	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	0.033	0.030	110.0	62-131

Associated samples MP5715: F18741-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5715
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 07/31/03 07/31/03

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0030	0.0030	100.0	80-120	0.031	0.030	103.3	80-120

Associated samples MP5715: F18741-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (nr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP5716
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 07/31/03

Metal	RL	IDL	MB raw	final
Mercury	0.0010	.000022	-0.000082	<0.0010

Associated samples MP5716: F18741-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5716
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 07/31/03 07/31/03

Metal	F18741-1 Original	DUP	RPD	QC Limits	F18741-1 Original	MS	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	0.033	0.030	110.0	62-131

Associated samples MP5716: F18741-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F18741
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP5716
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 07/31/03 07/31/03

Metal	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits	BSP Result	Spike lot HGFLWS1	% Rec	QC Limits
Mercury	0.0030	0.0030	100.0	80-120	0.0032	0.0030	106.7	80-120

Associated samples MP5716: F18741-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (nr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Percent Solids Raw Data Summary

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Cyanide Reactivity	GP4348/GN12348	1.5	<1.5	mg/kg	0.0*(a)	75-125%
Cyanide Reactivity	GP4349/GN12350	1.5	<1.5	mg/l	0.0*(a)	75-125%
Sulfide Reactivity	GP4343/GN12342	50	<50	mg/kg	68.0*(a)	75-125%
Sulfide Reactivity	GP4344/GN12343	50	<50	mg/l	68.0*(a)	75-125%

Associated Samples:

Batch GP4343: F18741-2

Batch GP4344: F18741-1

Batch GP4348: F18741-2

Batch GP4349: F18741-1

(a) No limits established for this method at this time.

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN12281	F18741-1		6.6	6.6		0-%
Corrosivity as pH	GN12282	F18741-2		5.6	5.6		0-%
Cyanide Reactivity	GP4348/GN12348	F18741-2	mg/kg	<1.9	<1.9	0.0	0-22%
Cyanide Reactivity	GP4349/GN12350	F18741-1	mg/l	<1.5	<1.5	0.0	0-20%
Ignitability (Flashpoint)	GN12300	F18741-1	Deg. F	>200	>200	0.0	0-25%
Ignitability (Flashpoint)	GN12301	F18800-1	Deg. F	>200	>200	0.0	0-38%
Solids, Percent	GN12287	F18740-1	%	69.6	73.1	4.9	0-30%
Sulfide Reactivity	GP4343/GN12342	F18741-2	mg/kg	<63	<63	0.0	0-20%
Sulfide Reactivity	GP4344/GN12343	F18741-1	mg/l	<50	<50	0.0	0-20%

Associated Samples:
Batch GN12281: F18741-1
Batch GN12282: F18741-2
Batch GN12287: F18741-2
Batch GN12300: F18741-1
Batch GN12301: F18741-2
Batch GP4343: F18741-2
Batch GP4344: F18741-1
Batch GP4348: F18741-2
Batch GP4349: F18741-1

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F18741
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Cyanide Reactivity	GP4348/GN12348	F18741-2	mg/kg	<1.9	1.27	<1.9	0.0*(a)	75-125%
Cyanide Reactivity	GP4349/GN12350	F18741-1	mg/l	<1.5	1.00	<1.5	0.0*(a)	75-125%
Sulfide Reactivity	GP4343/GN12342	F18741-2	mg/kg	<63	13.59	<63	58.1*(a)	75-125%
Sulfide Reactivity	GP4344/GN12343	F18741-1	mg/l	<50	10.74	<50	60.0*(a)	75-125%

Associated Samples:

Batch GP4343: F18741-2

Batch GP4344: F18741-1

Batch GP4348: F18741-2

Batch GP4349: F18741-1

(a) No limits established for this method at this time.

Percent Solids Raw Data Summary

Job Number: F18741
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: F18741-2
ClientID: IH-DS-009

Analyzed: 29-JUL-03 by LE

Method: EPA 160.3 M

Wet Weight (Total)	6.75	g
Tare Weight	1	g
Dry Weight (Total)	5.54	g
Solids, Percent	79	%

GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Gulf Coast, Inc.)

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2358-BS	GG14502.D	1	08/01/03	GP	07/26/03	OP2358	GGG431

The QC reported here applies to the following samples:

Method: SW846 8151

F18741-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	2	1.6	80	9-160
93-72-1	2,4,5-TP (Silvex)	0.4	0.31	78	28-158

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	75%	10-143%

Blank Spike Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2376-BS	GG14686.D	1	08/07/03	GP	07/30/03	OP2376	GGG437

The QC reported here applies to the following samples:

Method: SW846 8151

F18741-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	20	12.2	61	9-160
93-72-1	2,4,5-TP (Silvex)	4	1.7	43	28-158

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	76%	10-143%

Leachate Blank Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2376-LB	GG14685.D	1	08/07/03	GP	07/30/03	OP2376	GGG437

The QC reported here applies to the following samples:

Method: SW846 8151

F18741-2

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	10	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
19719-28-9	2,4-DCAA	52%	10-143%

Method Blank Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2358-MB	GG14501.D	1	08/01/03	GP	07/26/03	OP2358	GGG431

The QC reported here applies to the following samples:

Method: SW846 8151

F18741-1

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	1.0	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	0.20	ug/l	

CAS No.	Surrogate Recoveries		Limits
19719-28-9	2,4-DCAA	67%	10-143%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2358-MS	GG14503.D	1	08/01/03	GP	07/26/03	OP2358	GGG431
OP2358-MSD	GG14504.D	1	08/01/03	GP	07/26/03	OP2358	GGG431
F18741-1	GG14505.D	1	08/01/03	GP	07/26/03	OP2358	GGG431

The QC reported here applies to the following samples:

Method: SW846 8151

F18741-1

CAS No.	Compound	F18741-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	20	13.4	67	12.8	64	5	19-167/24
93-72-1	2,4,5-TP (Silvex)	ND	4	2.9	73	3.0	75	3	11-169/23

CAS No.	Surrogate Recoveries	MS	MSD	F18741-1	Limits
19719-28-9	2,4-DCAA	76%	92%	66%	10-143%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F18741
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP2376-MS	GG14687.D	1	08/07/03	GP	07/30/03	OP2376	GGG437
OP2376-MSD	GG14688.D	1	08/07/03	GP	07/30/03	OP2376	GGG437
F18741-2	GG14689.D	1	08/07/03	GP	07/30/03	OP2376	GGG437

The QC reported here applies to the following samples:

Method: SW846 8151

F18741-2

CAS No.	Compound	F18741-2 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	20	11.7	59	11.1	56	5	19-167/24
93-72-1	2,4,5-TP (Silvex)	ND	4	2.7	68	2.5	63	8	11-169/23

CAS No.	Surrogate Recoveries	MS	MSD	F18741-2	Limits
19719-28-9	2,4-DCAA	84%	79%	71%	10-143%

Semivolatile Surrogate Recovery Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Method: SW846 8151	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
F18741-1	GG14505.D	66.0
F18741-2	GG14689.D	71.0
OP2358-BS	GG14502.D	75.0
OP2358-MB	GG14501.D	67.0
OP2358-MS	GG14503.D	76.0
OP2358-MSD	GG14504.D	92.0
OP2376-BS	GG14686.D	76.0
OP2376-LB	GG14685.D	52.0
OP2376-MS	GG14687.D	84.0
OP2376-MSD	GG14688.D	79.0

Surrogate Compounds Recovery Limits

S1 = 2,4-DCAA 10-143%

(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Check Std: GGG431-CC579	Injection Date: 08/01/03
Lab File ID: GG14495.D	Injection Time: 07:27
Instrument ID: GCGG	Method: SW846 8151

S1 ^a
RT

Check Std	10.46
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP2358-MB	GG14501.D	08/01/03	10:05	10.45
OP2358-BS	GG14502.D	08/01/03	10:31	10.46
OP2358-MS	GG14503.D	08/01/03	10:58	10.45
OP2358-MSD	GG14504.D	08/01/03	11:24	10.45
F18741-1	GG14505.D	08/01/03	11:50	10.44

Surrogate Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Check Std:	GGG437-ICC585	Injection Date:	08/07/03
Lab File ID:	GG14680.D	Injection Time:	18:59
Instrument ID:	GCGG	Method:	SW846 8151

S1 ^a
RT

Check Std	10.49
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP2376-LB	GG14685.D	08/07/03	21:11	10.46
OP2376-BS	GG14686.D	08/07/03	21:37	10.46
OP2376-MS	GG14687.D	08/07/03	22:04	10.42
OP2376-MSD	GG14688.D	08/07/03	22:30	10.43
F18741-2	GG14689.D	08/07/03	22:56	10.43

Surrogate
Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG431-ICC579
Lab FileID: GG14485.D

Response Factor Report GC GG

Method : C:\HPCHEM\2\METHODS\JUL3103H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Fri Aug 01 15:05:39 2003
Response via : Initial Calibration

Calibration Files

1 =GG14483.D 2 =GG14484.D 3 =GG14485.D
4 =GG14486.D 5 =GG14487.D 6 =GG14488.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) Dal apon	1.516	1.293	1.229	1.168	1.133	1.097	1.239	E4 12.32
2) 4-Ni trophenol	8.335	7.835	8.009	7.801	6.376	7.079	7.572	E3 9.46
3) S DCAA	3.742	3.552	3.646	3.538	2.986	3.349	3.469	E3 7.79
4) Di camba	2.230	2.342	1.935	1.879	2.092	1.682	2.027	E4 11.97
5) MCPP							0.000	-1.00
6) MCPA							0.000	-1.00
7) Di chl orprop	3.425	3.507	2.864	2.886	2.416	2.572	2.945	E3 15.00
8) 2,4-D	4.166	4.726	3.499	3.470	4.623	3.868	4.058	E3 13.37
9) Pentachl orphenol	4.902	6.240	5.906	7.945	6.175	6.359	6.255	E4 15.70
10) 2,4,5-TP (SI LVEX)	3.419	4.593	5.717	5.582	5.132	6.120	5.094	E3 19.11
11) 2,4,5-T	3.614	3.805	4.239	4.898	3.670	4.346	4.095	E3 12.09
12) 2,4-DB	1.226	1.596	1.621	1.762	1.555	1.664	1.571	E3 11.65
13) Di noseb	0.631	0.904	1.049	1.242	0.985	1.212	1.004	E3 22.32

Signal #2

1) Dal apon	5.109	4.699	4.402	3.593	3.911	3.673	4.231	E4 14.33
2) 4-Ni trophenol	1.118	1.056	1.186	1.152	0.938	1.025	1.079	E4 8.48
3) S DCAA	5.951	5.028	6.450	6.336	5.363	5.729	5.809	E3 9.50
4) Di camba	5.549	5.093	4.467	4.152	3.827	3.860	4.491	E4 15.55
5) MCPP					5.947		5.947	E3 0.00
6) MCPA					3.913		3.913	E2 0.00
7) Di chl orprop	8.223	7.441	5.904	5.175	4.757	5.110	6.102	E3 23.16
8) 2,4-D	3.451	4.102	3.374	3.532	3.161	3.310	3.488	E3 9.35
9) Pentachl orphenol	1.529	1.642			1.390	1.637	1.549	E5 7.65
10) 2,4,5-TP (SI LVEX)	3.960	4.082	3.903	4.136	3.303	3.871	3.876	E4 7.71
11) 2,4,5-T	1.139	1.191	1.442	1.620	1.202	1.502	1.349	E4 14.68
12) 2,4-DB	4.276	3.472	3.050	3.157	2.849	3.069	3.312	E3 15.51
13) Di noseb	0.976	0.913	1.097	0.951	0.916	0.893	0.958	E4 7.79

(#) = Out of Range

JUL3103H.M

Fri Aug 01 15:22:55 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample: GGG431-CC579
 Lab FileID: GG14495.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG431\GG14495.D\ECD1A.CH Vial : 15
 Signal #2 : C:\HPCHEM\2\DATA\GGG431\GG14495.D\ECD2B.CH
 Acq On : 1 Aug 2003 7:27 am Operator: geral dp
 Sample : cc579-3 Inst : GC GG
 Misc : op2318, ggg431 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\JUL3103H.M (Chemstation Integrator)
 Title : Herbicides by SW846 Method 8151
 Last Update : Fri Aug 01 15:05:39 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)	R.T.
1	Dalapon			-----NA-----			
2	4-Nitrophenol			-----NA-----			
3 S	DCAA	300.000	343.568	-14.5	109	0.03	10.46
4	Dicamba			-----NA-----			
5	MCPP			-----NA-----			
6	MCPA			-----NA-----			
7	Dichloroprop			-----NA-----			
8	2,4-D	300.000	354.005	-18.0#	137	0.01	12.31
9	Pentachlorophenol			-----NA-----			
10	2,4,5-TP (SILVEX)	60.000	61.227	-2.0	91	0.03	14.22
11	2,4,5-T			-----NA-----			
12	2,4-DB			-----NA-----			
13	Dinoseb			-----NA-----			

***** Signal #2 *****

1	Dalapon			-----NA-----			
2	4-Nitrophenol			-----NA-----			
3 S	DCAA	300.000	302.710	-0.9	91	0.03	10.44
4	Dicamba			-----NA-----			
5	MCPP			-----NA-----			
6	MCPA			-----NA-----			
7	Dichloroprop			-----NA-----			
8	2,4-D	300.000	299.569	0.1	103	0.04	12.08
9	Pentachlorophenol			-----NA-----			
10	2,4,5-TP (SILVEX)	60.000	62.577	-4.3	104	0.02	13.06
11	2,4,5-T			-----NA-----			
12	2,4-DB			-----NA-----			
13	Dinoseb			-----NA-----			

(16.7 %) 1 of 6 compounds' %D > 15

(#) = Out of Range
 GG14485.D JUL3103H.M

SPCC's out = 0 CCC's out = 0
 Fri Aug 01 15:23:08 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample: GGG431-CC579
 Lab FileID: GG14500.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG431\GG14500.D\ECD1A.CH Vial : 94
 Signal #2 : C:\HPCHEM\2\DATA\GGG431\GG14500.D\ECD2B.CH
 Acq On : 1 Aug 2003 9:39 am Operator: geral dp
 Sample : cc579-4 Inst : GC GG
 Misc : op2357, ggg431 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\JUL3103H.M (Chemstation Integrator)
 Title : Herbicides by SW846 Method 8151
 Last Update : Fri Aug 01 15:05:39 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(min)	R.T.
1 Dalapon			NA			
2 4-Nitrophenol			NA			
3 S DCAA	400.000	370.901	7.3	91	0.02	10.45
4 Dicamba			NA			
5 MCPP			NA			
6 MCPA			NA			
7 Dichloroprop			NA			
8 2,4-D	400.000	435.877	-9.0	127	0.00	12.30
9 Pentachlorophenol			NA			
10 2,4,5-TP (SILVEX)	80.000	82.951	-3.7	95	0.02	14.21
11 2,4,5-T			NA			
12 2,4-DB			NA			
13 Dinoseb			NA			
***** Signal #2 *****						
1 Dalapon			NA			
2 4-Nitrophenol			NA			
3 S DCAA	400.000	405.284	-1.3	93	0.02	10.43
4 Dicamba			NA			
5 MCPP			NA			
6 MCPA			NA			
7 Dichloroprop			NA			
8 2,4-D	400.000	431.041	-7.8	106	0.03	12.07
9 Pentachlorophenol			NA			
10 2,4,5-TP (SILVEX)	80.000	75.657	5.4	89	0.02	13.05
11 2,4,5-T			NA			
12 2,4-DB			NA			
13 Dinoseb			NA			

(0.0 %) 0 of 6 compounds' %D > 15

(#) = Out of Range
 GG14486.D JUL3103H.M

SPCC's out = 0 CCC's out = 0
 Fri Aug 01 15:23:32 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample: GGG431-CC579
 Lab FileID: GG14506.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG431\GG14506.D\ECD1A.CH Vial : 100
 Signal #2 : C:\HPCHEM\2\DATA\GGG431\GG14506.D\ECD2B.CH
 Acq On : 1 Aug 2003 12:17 pm Operator: geral dp
 Sample : cc579-4 Inst : GC GG
 Misc : op2357, ggg431 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\JUL3103H.M (Chemstation Integrator)
 Title : Herbicides by SW846 Method 8151
 Last Update : Fri Aug 01 15:05:39 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)	R. T.
1	Dalapon			NA			
2	4-Nitrophenol			NA			
3 S	DCAA	400.000	390.367	2.4	96	0.02	10.45
4	Dicamba			NA			
5	MCPP			NA			
6	MCPA			NA			
7	Dichloroprop			NA			
8	2,4-D	400.000	425.215	-6.3	124	0.01	12.30
9	Pentachlorophenol			NA			
10	2,4,5-TP (SILVEX)	80.000	75.831	5.2	87	0.03	14.21
11	2,4,5-T			NA			
12	2,4-DB			NA			
13	Dinoseb			NA			

***** Signal #2 *****

1	Dalapon			NA			
2	4-Nitrophenol			NA			
3 S	DCAA	400.000	392.070	2.0	90	0.02	10.43
4	Dicamba			NA			
5	MCPP			NA			
6	MCPA			NA			
7	Dichloroprop			NA			
8	2,4-D	400.000	368.440	7.9	91	0.03	12.08
9	Pentachlorophenol			NA			
10	2,4,5-TP (SILVEX)	80.000	72.640	9.2	85	0.02	13.06
11	2,4,5-T			NA			
12	2,4-DB			NA			
13	Dinoseb			NA			

(0.0 %) 0 of 6 compounds' %D > 15

(#) = Out of Range
 GG14486.D JUL3103H.M

SPCC's out = 0 CCC's out = 0
 Fri Aug 01 15:23:33 2003

Initial Calibration Summary

Job Number: F18741
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG437-ICC585
Lab FileID: GG14680.D

Response Factor Report GC GG

Method : C:\HPCHEM\2\METHODS\AUG0703H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Fri Aug 08 09:14:22 2003
Response via : Initial Calibration

Calibration Files

1 =GG14678.D 2 =GG14679.D 3 =GG14680.D
4 =GG14681.D 5 =GG14682.D 6 =GG14683.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) Dal apon	1.405	1.305	1.194	1.165	1.133	1.190	1.232	E4 8.34
2) 4-Ni trophenol	5.939	9.246	7.318	7.274	8.343	7.082	7.534	E3 15.07
3) S DCAA	4.672	5.428	4.461	4.131	4.246	3.694	4.439	E3 13.21
4) Di camba	3.386	3.028	3.830	3.521	3.074	3.174	3.335	E4 9.20
5) MCPP							0.000	-1.00
6) MCPA							0.000	-1.00
7) Di chl orprop	3.837	4.634	3.470	4.571	4.748	4.288	4.258	E3 11.88
8) 2,4-D	5.926	7.986	8.070	8.050	8.244	7.888	7.694	E3 11.36
9) Pentachl orophenol	0.647	1.018	0.908	0.941	1.086	0.970	0.928	E5 16.29
10) 2,4,5-TP (SI LVEX)	1.239	2.184	1.736	1.817	2.101	1.974	1.842	E4 18.45
11) 2,4,5-T	1.025	1.946	1.597	1.574	1.716	1.652	1.585	E4 19.26
12) 2,4-DB	1.283	2.119	1.683	1.701	2.090	1.844	1.786	E3 17.29
13) Di noseb	0.574	1.348	0.954	1.000	1.371	1.021	1.045	E4 28.10

Signal #2

1) Dal apon	4.885	4.021	3.971	3.477	3.590	2.999	3.824	E4 16.72
2) 4-Ni trophenol	1.399	1.596	1.338	1.308	1.403	1.180	1.371	E4 10.00
3) S DCAA	6.922	7.884	6.777	6.447	6.766	5.694	6.748	E3 10.53
4) Di camba	6.759	5.982	6.276	5.920	5.657	4.786	5.897	E4 11.22
5) MCPP					5.947		5.947	E3 0.00
6) MCPA					3.913		3.913	E2 0.00
7) Di chl orprop	0.814	0.986	0.779	1.051	1.017	0.810	0.909	E4 13.33
8) 2,4-D	5.483	8.936	6.551	8.577	9.034	6.841	7.570	E3 19.55
9) Pentachl orophenol	1.991	2.594			2.568	2.021	2.294	E5 14.50
10) 2,4,5-TP (SI LVEX)	5.713	8.088	5.658	8.394	8.286	6.099	7.040	E4 19.10
11) 2,4,5-T	1.052	3.236	2.005	2.322	3.289	2.505	2.402	E4 34.74
12) 2,4-DB	8.550	9.201	6.012	7.029	6.976	5.821	7.265	E3 18.67
13) Di noseb	3.237	4.726	2.943	2.964	3.806	3.361	3.506	E4 19.27

(#) = Out of Range

AUG0703H.M

Fri Aug 08 09:32:32 2003

Continuing Calibration Summary

Job Number: F18741
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample: GGG437-CC585
 Lab FileID: GG14690.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG437\GG14690.D\ECD1A.CH Vial : 15
 Signal #2 : C:\HPCHEM\2\DATA\GGG437\GG14690.D\ECD2B.CH
 Acq On : 7 Aug 2003 11:23 pm Operator: geral dp
 Sample : cc585-2 Inst : GC GG
 Misc : op2376, ggg437 Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\AUG0703H.M (Chemstation Integrator)
 Title : Herbicides by SW846 Method 8151
 Last Update : Fri Aug 08 09:14:22 2003
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)	R. T.
1	Dalapon			-----NA-----			
2	4-Nitrophenol			-----NA-----			
3 S	DCAA	200.000	212.042	-6.0	87	0.03	10.48
4	Dicamba			-----NA-----			
5	MCPP			-----NA-----			
6	MCPA			-----NA-----			
7	Dichloroprop			-----NA-----			
8	2,4-D	200.000	205.015	-2.5	99	0.01	12.30
9	Pentachlorophenol			-----NA-----			
10	2,4,5-TP (SILVEX)	40.000	39.129	2.2	82	0.05	14.23
11	2,4,5-T	40.000	36.122	9.7	74	0.05	14.97
12	2,4-DB			-----NA-----			
13	Dinoseb			-----NA-----			

***** Signal #2 *****

1	Dalapon			-----NA-----			
2	4-Nitrophenol			-----NA-----			
3 S	DCAA	200.000	194.856	2.6	83	0.03	10.47
4	Dicamba			-----NA-----			
5	MCPP			-----NA-----			
6	MCPA			-----NA-----			
7	Dichloroprop			-----NA-----			
8	2,4-D	200.000	198.363	0.8	84	0.06	12.13
9	Pentachlorophenol			-----NA-----			
10	2,4,5-TP (SILVEX)	40.000	38.995	2.5	85	0.02	13.07
11	2,4,5-T	40.000	40.324	-0.8	75	0.06	14.00
12	2,4-DB			-----NA-----			
13	Dinoseb			-----NA-----			

(0.0 %) 0 of 8 compounds' %D > 15

(#) = Out of Range
 GG14679.D AUG0703H.M

SPCC's out = 0 CCC's out = 0
 Fri Aug 08 09:32:57 2003

General Chemistry

QC Data Summaries

(Accutest New Jersey)

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F18741

Account: ALSE - Accutest Laboratories Southeast, Inc.

Project: ITVAVAB: Indian Head

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Total Organic Halides	GP20050/GN59208	10	<10	mg/kg	98.0	80-120%
Total Organic Halides	GP20160/GN59480	0.050	<0.050	mg/l	103.8	90-110%

Associated Samples:
Batch GP20050: F18741-2
Batch GP20160: F18741-1

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F18741

Account: ALSE - Accutest Laboratories Southeast, Inc.

Project: ITVAVAB: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Total Organic Halides	GP20050/GN58993	N43930-1	mg/kg	<10	<10	0.0	0-23%
Total Organic Halides	GP20160/GN59236	N43304-1	mg/l	<0.20	<0.20	0.0	0-12%

Associated Samples:
Batch GP20050: F18741-2
Batch GP20160: F18741-1

MATRIX SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F18741

Account: ALSE - Accutest Laboratories Southeast, Inc.

Project: ITVAVAB: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	Spike Amount	MS Result	%Rec	QC Limits
Total Organic Halides	GP20050/GN58993	N43930-1	mg/kg	<10	245	250	100.4	73-132%
Total Organic Halides	GP20160/GN59236	N43304-1	mg/l	<0.20	2.0	2.1	103.0	80-124%

Associated Samples:
Batch GP20050: F18741-2
Batch GP20160: F18741-1

CHAIN-OF-CUSTODY RECORD

COC Number: 809401
 Purchase Order Number:

F18741

SHAW Environmental & Infrastructure, INC. - 5700 Thurston Ave Suite 116B - Virginia Beach, VA 23455 - (757) 363-7190

Lab Destination		Lab Location Address		Analysis Desired																			
Accutest		4406 Vineland Road Suite C-1, Orlando FL 32811 (407)426-8700																					
Project Name		Sample Location																					
Indian Head		Drill Cuttings and Development Water																					
Project Number		Client Contact Name		Client Contact Number																			
809401		Natasha Kelley Sullivan		(410)529-7598																			
Client Name		Project Name																					
LANTDIV		Dan Pringle																					
Item No	Sample Number	Date	Time	Soil	Water	Sample Description	Number of Containers	Full TCLP-RCI SW-846	BTEX SW-846 82608	TPH DROGRO SW-846 8016M	TOX 9020	PCBs by SW-846 8082											
1	IH-GW-008	07/24/03	08:00		X	DEVELOPMENT WATER FROM MONITORING WELLS	20	X	X	X	X	X											
2	IH-DS-009	07/24/03	9:20	X		DRILL CUTTINGS FROM WELL INSTALLATIONS	8	X	X	X	X	X											

Turnaround Time Required: 2 week **CONTACT NATASHA SULLIVAN** Sampled By: **E DUKE** COMMENTS: Laboratory Report No:

Transfer Number	Transfers Requested By	Date	Time	Transfers Accepted By	Date	Time	Remarks
1	<i>[Signature]</i>	7-24-03	1630	Fel Ex	7-24-03		Summary Package Deliverables: EDD Excel *** Fax results to Natasha Sullivan (410) 529-7599
2	FEDEX			Muram Mohammed	7/25/03	1000	
3							
4							

4.2

ACCUTEST LABORATORIES SOUTHEAST SAMPLE RECEIPT CONFIRMATION

F18741

Accutest's Job Number: _____

Client: Shaw Project: Indian Head

Date Received: 7/25/03 Time Received: 1000

of Coolers Received: 2 Cooler Temperatures: 4.2, 3.0

Delivery Method: FedEx UPS Accutest Courier Greyhound Delivery Other

Air Bill Number: _____

- Cooler Custody Seals Intact ? Yes No
- Chain of Custody Provided ? Yes No
- COC Match Bottle Label ID's ? Yes No
- Sample Labels Present on all bottles ? Yes No
- All Analyses Marked On COC ? Yes No
- Are All Bottles Intact ? Yes No
- Samples Preserved Correctly ? Yes No
- Correct Number of Containers Used ? Yes No
- Sufficient Sample Volume ? Yes No
- Trip Blank Provided ? Yes No
- Trip Blank on COC ? Yes No
- Trip Blank Intact ? Yes No N/A
- Trip Blank Matrix ? Soil Water N/A
- Number of Encores ? 3
- Number of Soil Field Kits ? 0

Summary of Comments: _____

Signature: Muneer Mohammed Date: 7/25/03

Sample Summary

Shaw E & I, Inc.

Job No: F18741

Indian Head
Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F18741-1	07/24/03	08:00 ED	07/25/03	AQ	Ground Water	IH-GW-008
F18741-2	07/24/03	09:20 ED	07/25/03	SO	Soil	IH-DS-009

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0017514.D	1	08/05/03	KW	n/a	n/a	VC772
Run #2	C0017528.D	2.5	08/06/03	KW	n/a	n/a	VC773

Run #	Purge Volume
Run #1	5.0 ml
Run #2	5.0 ml

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	105 ^a	2.5	1.3	ug/l	
108-88-3	Toluene	10.2	2.0	0.50	ug/l	
100-41-4	Ethylbenzene	1.4	2.0	0.50	ug/l	J
1330-20-7	Xylene (total)	9.4	6.0	1.0	ug/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	90%	91%	86-115%
17060-07-0	1,2-Dichloroethane-D4	96%	96%	78-125%
2037-26-5	Toluene-D8	106%	107%	87-113%
460-00-4	4-Bromofluorobenzene	95%	96%	84-117%

(a) Result is from Run# 2

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8260B SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016854.D	10	08/05/03	KW	07/29/03	OP8089	VB745
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	106%		86-115%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	107%		84-117%
17060-07-0	1,2-Dichloroethane-D4	106%		78-125%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

J = Indicates an estimated value

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8270C SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018151.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		19-90%
4165-62-2	Phenol-d5	41%		10-68%
118-79-6	2,4,6-Tribromophenol	95%		36-137%
4165-60-0	Nitrobenzene-d5	84%		49-119%
321-60-8	2-Fluorobiphenyl	85%		45-118%
1718-51-0	Terphenyl-d14	88%		46-135%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8015 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003329.D	1	07/29/03	JG	n/a	n/a	GHH175
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	0.350	0.10	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	105%		64-130%	
98-08-8	aaa-Trifluorotoluene	99%		59-136%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Method: SW846 8081A SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09768.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	101%		52-131%
2051-24-3	Decachlorobiphenyl	116%		16-153%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-GW-008		Date Sampled:	07/24/03
Lab Sample ID:	F18741-1		Date Received:	07/25/03
Matrix:	AQ - Ground Water		Percent Solids:	n/a
Method:	SW846 8082 SW846 3510C			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	AB26567.D	1	08/01/03	NJ	07/31/03	OP8102	GAB963
Run #2							

Run #	Initial Volume	Final Volume
Run #1	950 ml	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	0.53	0.26	ug/l	
11104-28-2	Aroclor 1221	ND	0.53	0.42	ug/l	
11141-16-5	Aroclor 1232	ND	0.53	0.42	ug/l	
53469-21-9	Aroclor 1242	ND	0.53	0.26	ug/l	
12672-29-6	Aroclor 1248 ^b	0.51	0.53	0.26	ug/l	J
11097-69-1	Aroclor 1254	ND	0.53	0.26	ug/l	
11096-82-5	Aroclor 1260	ND	0.53	0.26	ug/l	
	Total PCBs	0.51	1.1		ug/l	J

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	87%		51-129%
2051-24-3	Decachlorobiphenyl	53%		21-148%

(a) All hits confirmed by dual column analysis.

(b) Best match available.

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8015 M SW846 3510C Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	ZF09478.D	1	08/03/03	MRE	07/31/03	OP8101	GZF448
Run #2							

Run #	Initial Volume	Final Volume
Run #1	920 ml	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28) ^a	1.13	0.27	mg/l	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	76%		62-118%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008 Lab Sample ID: F18741-1 Matrix: AQ - Ground Water Method: SW846 8151 SW846 3510C Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: n/a
--	---

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14505.D	1	08/01/03	ATX	07/26/03	T:OP2358	T:GGG431
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	66%		10-143%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96)		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Indian Head	

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.15 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.0012 U	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.0045 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-GW-008	Date Sampled: 07/24/03
Lab Sample ID: F18741-1	Date Received: 07/25/03
Matrix: AQ - Ground Water	Percent Solids: n/a
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	6.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	< 1.5	1.5	mg/l	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	07/30/03	LL	SW846 1010
Sulfide Reactivity	< 50	50	mg/l	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides ^a	< 0.20	0.20	mg/l	4	08/06/03	ANJ	SW846 9020

(a) Dilution required due to matrix interference.

Report of Analysis

Client Sample ID:	IH-DS-009		Date Sampled:	07/24/03
Lab Sample ID:	F18741-2		Date Received:	07/25/03
Matrix:	SO - Soil		Percent Solids:	79.0
Method:	SW846 8260B SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	B016722.D	10	07/29/03	KW	07/28/03	OP8082	VB740
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	0.0050	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	0.0050	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	0.0050	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	0.0050	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	0.0050	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	0.0050	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	0.0050	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	0.025	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	0.0050	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	0.0050	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	0.0050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	99%		86-115%
2037-26-5	Toluene-D8	97%		87-113%
460-00-4	4-Bromofluorobenzene	117%		84-117%
17060-07-0	1,2-Dichloroethane-D4	95%		78-125%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

J = Indicates an estimated value

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	H021619.D	1	07/29/03	NAF	n/a	n/a	VH784
Run #2							

Run #	Initial Weight
Run #1	4.29 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	MDL	Units	Q
71-43-2	Benzene	ND	7.4	3.0	ug/kg	
108-88-3	Toluene	ND	7.4	3.0	ug/kg	
100-41-4	Ethylbenzene	ND	7.4	3.0	ug/kg	
1330-20-7	Xylene (total)	ND	22	6.6	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	114%		79-121%
460-00-4	4-Bromofluorobenzene	114%		77-133%
17060-07-0	1,2-Dichloroethane-D4	100%		72-133%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L018153.D	1	07/30/03	ME	07/29/03	OP8091	SL981
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	0.020	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	0.020	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	0.10	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	0.025	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	0.020	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	0.010	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	0.020	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	0.010	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	0.020	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	0.020	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	0.010	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	0.020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	56%		19-90%
4165-62-2	Phenol-d5	39%		10-68%
118-79-6	2,4,6-Tribromophenol	88%		36-137%
4165-60-0	Nitrobenzene-d5	78%		49-119%
321-60-8	2-Fluorobiphenyl	79%		45-118%
1718-51-0	Terphenyl-d14	82%		46-135%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8015		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	HH003292.D	1	07/26/03	RM	n/a	n/a	GHH172
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.61 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.9	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	94%		57-144%	
98-08-8	aaa-Trifluorotoluene	85%		65-132%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009	Date Sampled: 07/24/03
Lab Sample ID: F18741-2	Date Received: 07/25/03
Matrix: SO - Soil	Percent Solids: 79.0
Method: SW846 8081A SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD09770.D	1	07/30/03	SKW	07/29/03	OP8092	GDD374
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	0.00010	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	0.0025	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	0.00020	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	0.00010	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	0.00010	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	0.00040	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	0.015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		52-131%
2051-24-3	Decachlorobiphenyl	118%		16-153%

ND = Not detected
MCL = Maximum Contamination Level (40 CFR 261 6/96)
E = Indicates value exceeds calibration range

MDL - Method Detection Limit
J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009	Date Sampled:	07/24/03
Lab Sample ID:	F18741-2	Date Received:	07/25/03
Matrix:	SO - Soil	Percent Solids:	79.0
Method:	SW846 8082 SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	AB26533.D	1	07/31/03	NJ	07/29/03	OP8088	GAB962
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.4 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	MDL	Units	Q
12674-11-2	Aroclor 1016	ND	22	11	ug/kg	
11104-28-2	Aroclor 1221	ND	22	17	ug/kg	
11141-16-5	Aroclor 1232	ND	22	17	ug/kg	
53469-21-9	Aroclor 1242	ND	22	11	ug/kg	
12672-29-6	Aroclor 1248	ND	22	11	ug/kg	
11097-69-1	Aroclor 1254	ND	22	11	ug/kg	
11096-82-5	Aroclor 1260	ND	22	11	ug/kg	
	Total PCBs	ND	43		ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	97%		50-134%
2051-24-3	Decachlorobiphenyl	109%		48-147%

ND = Not detected MDL - Method Detection Limit
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-DS-009		Date Sampled:	07/24/03
Lab Sample ID:	F18741-2		Date Received:	07/25/03
Matrix:	SO - Soil		Percent Solids:	79.0
Method:	SW846 8015 M SW846 3550B			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	ZF09406.D	2	07/29/03	SM	07/28/03	OP8071	GZF445
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.5 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	36.4	21	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	96%		64-121%	

(a) Petroleum hydrocarbon pattern extends beyond C28.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009 Lab Sample ID: F18741-2 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 07/24/03 Date Received: 07/25/03 Percent Solids: 79.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG14689.D	1	08/07/03	ATX	07/30/03	T:OP2376	T:GGG437
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	MDL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	0.0050	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	0.0015	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	71%		10-143%

ND = Not detected	MDL - Method Detection Limit	J = Indicates an estimated value
MCL = Maximum Contamination Level (40 CFR 261 6/96)		B = Indicates analyte found in associated method blank
E = Indicates value exceeds calibration range		N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-DS-009

Lab Sample ID: F18741-2

Matrix: SO - Soil

Project: Indian Head

Date Sampled: 07/24/03

Date Received: 07/25/03

Percent Solids: 79.0

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Barium	0.73 B	D005	100	1.0	0.00049	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Lead	0.015 B	D008	5.0	0.050	0.0012	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	07/31/03	07/31/03	SL SW846 7470A
Selenium	0.021 B	D010	1.0	0.050	0.0020	mg/l	1	07/29/03	07/30/03	DM SW846 6010B
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	07/29/03	07/30/03	DM SW846 6010B

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-DS-009

Lab Sample ID: F18741-2

Matrix: SO - Soil

Project: Indian Head

Date Sampled: 07/24/03

Date Received: 07/25/03

Percent Solids: 79.0

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed	By	Method
Corrosivity as pH	5.6			1	07/28/03	SL	SW846 CHAP7
Cyanide Reactivity	< 1.9	1.9	mg/kg	1	08/06/03	SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	07/30/03	LL	SW846 1010
Solids, Percent	79		%	1	07/29/03	LE	EPA 160.3 M
Sulfide Reactivity	< 63	63	mg/kg	1	08/06/03	LL	SW846 CHAP7
Total Organic Halides	< 10	10	mg/kg	1	07/29/03	ANJ	SW846 9023

Technical Report for

Shaw E & I, Inc.

Indian Head

809401

Accutest Job Number: F14850

Report to:

Shaw E & I, Inc.

Natasha.Sullivan@theitgroup.com

ATTN: Natasha Sullivan

Total number of pages in report: 123



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certification: Florida DOH E83510

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Sample Summary

Shaw E & I, Inc.

Job No: F14850

Indian Head
Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F14850-1	09/30/02	15:40	ED	10/02/02	SO Soil	IH-SF-001
F14850-2	09/30/02	16:00	ED	10/02/02	SO Soil	IH-TS-002

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8260B SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012356.D	10	10/08/02	JG	10/07/02	OP6046	VC548
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	101%		84-117%
17060-07-0	1,2-Dichloroethane-D4	99%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Method: SW846 8260B Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K010518.D	1	10/08/02	NAF	n/a	n/a	VK417
Run #2							

Run #	Initial Weight
Run #1	3.95 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	6.9	ug/kg	
108-88-3	Toluene	ND	6.9	ug/kg	
100-41-4	Ethylbenzene	ND	6.9	ug/kg	
1330-20-7	Xylene (total)	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	101%		79-121%
460-00-4	4-Bromofluorobenzene	102%		77-133%
17060-07-0	1,2-Dichloroethane-D4	101%		72-133%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8270C SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L014737.D	1	10/08/02	ME	10/07/02	OP6048	SL816
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	74%		36-137%
4165-60-0	Nitrobenzene-d5	94%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	87%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Method: SW846 8015 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD032128.D	1	10/04/02	RM	n/a	n/a	GCD1271
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units Q
	TPH-GRO (C6-C10)	ND	6.5	mg/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		57-144%
98-08-8	aaa-Trifluorotoluene	82%		65-132%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07257.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		52-131%
2051-24-3	Decachlorobiphenyl	68%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP24379.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units Q
	TPH (C10-C28)	5.99	8.9	mg/kg J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
84-15-1	o-Terphenyl	93%		64-121%

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06534.D	1	10/09/02	ATX	10/05/02	T:OP1421	T:GGG239
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	89%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.0029 B	D004	5.0	0.010	0.0028	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Barium	0.14 B	D005	100	1.0	0.00049	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Lead	0.0074	D008	5.0	0.0050	0.0012	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Mercury	0.0030 B	D009	0.20	0.010	0.00022	mg/l	1	10/08/02	10/08/02	DM	SW846 7470A EPA 245.1
Selenium	0.0041 B	D010	1.0	0.010	0.0020	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/07/02	10/08/02	DM	SW846 3010

RL = Reporting Limit **IDL = Instrument Detection Limit**
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-SF-001		Date Sampled: 09/30/02
Lab Sample ID: F14850-1		Date Received: 10/02/02
Matrix: SO - Soil		Percent Solids: 91.9
Project: Indian Head		

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	5.0			1	10/08/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 1.6	1.6	mg/kg	1	10/03/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	10/08/02 SJL	SW846 1010
Solids, Percent	91.9		%	1	10/03/02 FR	EPA 160.3 M
Sulfide Reactivity	< 54	54	mg/kg	1	10/03/02 LL	SW846 CHAP7

RL = Reporting Limit

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Method: SW846 8260B SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012357.D	10	10/08/02	JG	10/07/02	OP6046	VC548
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
2037-26-5	Toluene-D8	98%		87-113%
460-00-4	4-Bromofluorobenzene	101%		84-117%
17060-07-0	1,2-Dichloroethane-D4	100%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002	Date Sampled: 09/30/02
Lab Sample ID: F14850-2	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 88.4
Method: SW846 8260B	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K010519.D	1	10/08/02	NAF	n/a	n/a	VK417
Run #2							

Run #	Initial Weight
Run #1	4.68 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	6.0	ug/kg	
108-88-3	Toluene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	105%		79-121%
460-00-4	4-Bromofluorobenzene	111%		77-133%
17060-07-0	1,2-Dichloroethane-D4	102%		72-133%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002		Date Sampled:	09/30/02
Lab Sample ID:	F14850-2		Date Received:	10/02/02
Matrix:	SO - Soil		Percent Solids:	88.4
Method:	SW846 8270C SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L014738.D	1	10/08/02	ME	10/07/02	OP6048	SL816
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		19-90%
4165-62-2	Phenol-d5	40%		10-68%
118-79-6	2,4,6-Tribromophenol	94%		36-137%
4165-60-0	Nitrobenzene-d5	92%		49-119%
321-60-8	2-Fluorobiphenyl	91%		45-118%
1718-51-0	Terphenyl-d14	90%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Method: SW846 8015 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD032129.D	1	10/04/02	RM	n/a	n/a	GCD1271
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.45 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units Q
	TPH-GRO (C6-C10)	ND	6.4	mg/kg
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		57-144%
98-08-8	aaa-Trifluorotoluene	81%		65-132%

ND = Not detected
RL = Reporting Limit
E = Indicates value exceeds calibration range

J = Indicates an estimated value
B = Indicates analyte found in associated method blank
N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07258.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		52-131%
2051-24-3	Decachlorobiphenyl	76%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP24382.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	9.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	95%		64-121%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06535.D	1	10/09/02	ATX	10/05/02	T:OP1421	T:GGG239
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	87%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	10/07/02	10/08/02	DM SW846 6010B	SW846 3010
Barium	0.41 B	D005	100	1.0	0.00049	mg/l	1	10/07/02	10/08/02	DM SW846 6010B	SW846 3010
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	10/07/02	10/08/02	DM SW846 6010B	SW846 3010
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	10/07/02	10/08/02	DM SW846 6010B	SW846 3010
Lead	0.0051	D008	5.0	0.0050	0.0012	mg/l	1	10/07/02	10/08/02	DM SW846 6010B	SW846 3010
Mercury	0.0031 B	D009	0.20	0.010	0.00022	mg/l	1	10/08/02	10/08/02	DM SW846 7470A	EPA 245.1
Selenium	0.0020 U	D010	1.0	0.010	0.0020	mg/l	1	10/07/02	10/08/02	DM SW846 6010B	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/07/02	10/08/02	DM SW846 6010B	SW846 3010

RL = Reporting Limit **IDL = Instrument Detection Limit**
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-TS-002	Date Sampled: 09/30/02
Lab Sample ID: F14850-2	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 88.4
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	4.8			1	10/08/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	10/03/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	10/08/02 SJL	SW846 1010
Solids, Percent	88.4		%	1	10/03/02 FR	EPA 160.3 M
Sulfide Reactivity	< 57	57	mg/kg	1	10/03/02 LL	SW846 CHAP7

RL = Reporting Limit

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC548-BS	C0012352.D	10	10/08/02	JG	n/a	n/a	VC548

The QC reported here applies to the following samples:

Method: SW846 8260B

F14850-1, F14850-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	250	218	87	76-123
108-90-7	Chlorobenzene	250	213	85	78-115
67-66-3	Chloroform	250	221	88	74-123
56-23-5	Carbon tetrachloride	250	237	95	68-137
75-35-4	1,1-Dichloroethylene	250	231	92	64-136
107-06-2	1,2-Dichloroethane	250	200	80	66-118
106-46-7	p-Dichlorobenzene	250	208	83	74-117
78-93-3	Methyl ethyl ketone	1250	1030	82	65-124
127-18-4	Tetrachloroethylene	250	226	90	75-124
79-01-6	Trichloroethylene	250	227	91	75-122
75-01-4	Vinyl chloride	250	211	84	62-142

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	86-115%
17060-07-0	1,2-Dichloroethane-D4	100%	78-125%
2037-26-5	Toluene-D8	101%	87-113%
460-00-4	4-Bromofluorobenzene	102%	84-117%

Blank Spike Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK417-BS	K010512.D	1	10/08/02	NAF	n/a	n/a	VK417

The QC reported here applies to the following samples:

Method: SW846 8260B

F14850-1, F14850-2

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
71-43-2	Benzene	50	47.1	94	73-123
100-41-4	Ethylbenzene	50	46.5	93	73-116
108-88-3	Toluene	50	46.5	93	72-116
1330-20-7	Xylene (total)	150	143	95	74-119

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	100%	70-130%
2037-26-5	Toluene-D8	99%	79-121%
460-00-4	4-Bromofluorobenzene	103%	77-133%
17060-07-0	1,2-Dichloroethane-D4	99%	72-133%

Leachate Blank Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6046-LB	C0012353.D	10	10/08/02	JG	10/07/02	OP6046	VC548

The QC reported here applies to the following samples:

Method: SW846 8260B

F14850-1, F14850-2

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	10	ug/l	
108-90-7	Chlorobenzene	ND	20	ug/l	
67-66-3	Chloroform	ND	20	ug/l	
56-23-5	Carbon tetrachloride	ND	20	ug/l	
75-35-4	1,1-Dichloroethylene	ND	20	ug/l	
107-06-2	1,2-Dichloroethane	ND	20	ug/l	
106-46-7	p-Dichlorobenzene	ND	20	ug/l	
78-93-3	Methyl ethyl ketone	ND	100	ug/l	
127-18-4	Tetrachloroethylene	ND	20	ug/l	
79-01-6	Trichloroethylene	ND	20	ug/l	
75-01-4	Vinyl chloride	ND	10	ug/l	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	100%	86-115%
17060-07-0	1,2-Dichloroethane-D4	101%	78-125%
2037-26-5	Toluene-D8	101%	87-113%
460-00-4	4-Bromofluorobenzene	103%	84-117%

Method Blank Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VK417-MB	K010513.D	1	10/08/02	NAF	n/a	n/a	VK417

The QC reported here applies to the following samples:

Method: SW846 8260B

F14850-1, F14850-2

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	5.0	ug/kg	
100-41-4	Ethylbenzene	ND	5.0	ug/kg	
108-88-3	Toluene	ND	5.0	ug/kg	
1330-20-7	Xylene (total)	ND	15	ug/kg	

CAS No.	Surrogate Recoveries		Limits
1868-53-7	Dibromofluoromethane	97%	70-130%
2037-26-5	Toluene-D8	99%	79-121%
460-00-4	4-Bromofluorobenzene	100%	77-133%
17060-07-0	1,2-Dichloroethane-D4	96%	72-133%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F14812-1MS	C0012358.D	10	10/08/02	JG	n/a	n/a	VC548
F14812-1MSD	C0012359.D	10	10/08/02	JG	n/a	n/a	VC548
F14812-1	C0012355.D	10	10/08/02	JG	10/07/02	OP6046	VC548

The QC reported here applies to the following samples:

Method: SW846 8260B

F14850-1, F14850-2

CAS No.	Compound	F14812-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	250	217	87	214	86	1	71-127/8
108-90-7	Chlorobenzene	ND	250	208	83	212	85	2	77-113/6
67-66-3	Chloroform	ND	250	217	87	216	86	0	72-125/11
56-23-5	Carbon tetrachloride	ND	250	227	91	223	89	2	61-140/13
75-35-4	1,1-Dichloroethylene	ND	250	221	88	225	90	2	60-141/14
107-06-2	1,2-Dichloroethane	ND	250	192	77	191	76	1	64-121/9
106-46-7	p-Dichlorobenzene	ND	250	204	82	203	81	0	72-116/7
78-93-3	Methyl ethyl ketone	ND	1250	1340	107	1370	110	2	63-128/16
127-18-4	Tetrachloroethylene	ND	250	222	89	224	90	1	74-123/11
79-01-6	Trichloroethylene	ND	250	214	86	217	87	1	71-124/9
75-01-4	Vinyl chloride	ND	250	211	84	222	89	5	53-149/22

CAS No.	Surrogate Recoveries	MS	MSD	F14812-1	Limits
1868-53-7	Dibromofluoromethane	100%	101%	101%	86-115%
17060-07-0	1,2-Dichloroethane-D4	99%	99%	100%	78-125%
2037-26-5	Toluene-D8	97%	99%	100%	87-113%
460-00-4	4-Bromofluorobenzene	98%	98%	101%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F14847-1MS	K010520.D	1	10/09/02	NAF	n/a	n/a	VK417
F14847-1MSD	K010521.D	1	10/09/02	NAF	n/a	n/a	VK417
F14847-1	K010517.D	1	10/08/02	NAF	n/a	n/a	VK417

The QC reported here applies to the following samples:

Method: SW846 8260B

F14850-1, F14850-2

CAS No.	Compound	F14847-1 ug/kg	Spike Q	MS ug/kg	MS %	MSD ug/kg	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	52.3	48.0	92	50.4	96	5	64-125/21
100-41-4	Ethylbenzene	ND	52.3	48.7	93	51.6	99	6	58-123/22
108-88-3	Toluene	ND	52.3	49.5	95	51.5	98	4	60-128/24
1330-20-7	Xylene (total)	ND	157	150	96	157	100	5	57-127/27

CAS No.	Surrogate Recoveries	MS	MSD	F14847-1	Limits
1868-53-7	Dibromofluoromethane	97%	97%	100%	70-130%
2037-26-5	Toluene-D8	103%	104%	100%	79-121%
460-00-4	4-Bromofluorobenzene	103%	101%	101%	77-133%
17060-07-0	1,2-Dichloroethane-D4	90%	89%	108%	72-133%

Instrument Performance Check (BFB)

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VC547-BFB	Injection Date:	10/08/02
Lab File ID:	C0012349.D	Injection Time:	15:23
Instrument ID:	GCMSC		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	6118	20.5	Pass
75	30.0 - 60.0% of mass 95	14936	50.1	Pass
95	Base peak, 100% relative abundance	29792	100.0	Pass
96	5.0 - 9.0% of mass 95	2062	6.9	Pass
173	Less than 2.0% of mass 174	273	0.92 (0.99) ^a	Pass
174	50.0 - 100.0% of mass 95	27600	92.6	Pass
175	5.0 - 9.0% of mass 174	2023	6.8 (7.3) ^a	Pass
176	95.0 - 101.0% of mass 174	26773	89.9 (97.0) ^a	Pass
177	5.0 - 9.0% of mass 176	1698	5.7 (6.3) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VC547-CC547	C0012350.D	10/08/02	15:53	00:30	Continuing cal 40PPB
VC547-BS	C0012351.D	10/08/02	16:21	00:58	Blank Spike
VC548-BS	C0012352.D	10/08/02	16:50	01:27	Blank Spike
OP6046-LB	C0012353.D	10/08/02	17:18	01:55	Leachate Blank
VC547-MB	C0012354.D	10/08/02	17:46	02:23	Method Blank
F14812-1	C0012355.D	10/08/02	18:15	02:52	(used for QC only; not part of job F14850)
F14850-1	C0012356.D	10/08/02	18:43	03:20	IH-SF-001
F14850-2	C0012357.D	10/08/02	19:12	03:49	IH-TS-002
F14812-1MS	C0012358.D	10/08/02	19:40	04:17	Matrix Spike
F14812-1MSD	C0012359.D	10/08/02	20:08	04:45	Matrix Spike Duplicate
ZZZZZZ	C0012360.D	10/08/02	20:37	05:14	(unrelated sample)
ZZZZZZ	C0012361.D	10/08/02	21:05	05:42	(unrelated sample)
ZZZZZZ	C0012362.D	10/08/02	21:34	06:11	(unrelated sample)
ZZZZZZ	C0012363.D	10/08/02	22:02	06:39	(unrelated sample)
ZZZZZZ	C0012364.D	10/08/02	22:30	07:07	(unrelated sample)
F14924-3	C0012366.D	10/08/02	23:26	08:03	(used for QC only; not part of job F14850)
F14924-3MS	C0012367.D	10/08/02	23:54	08:31	Matrix Spike
ZZZZZZ	C0012368.D	10/09/02	00:22	08:59	(unrelated sample)
ZZZZZZ	C0012369.D	10/09/02	00:50	09:27	(unrelated sample)
ZZZZZZ	C0012370.D	10/09/02	01:18	09:55	(unrelated sample)
ZZZZZZ	C0012371.D	10/09/02	01:46	10:23	(unrelated sample)
VC549-BS	C0012372.D	10/09/02	02:14	10:51	Blank Spike
VC549-MB	C0012373.D	10/09/02	02:42	11:19	Method Blank
ZZZZZZ	C0012374.D	10/09/02	03:11	11:48	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	VC547-BFB	Injection Date:	10/08/02
Lab File ID:	C0012349.D	Injection Time:	15:23
Instrument ID:	GCMSC		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	C0012375.D	10/09/02	03:39	12:16	(unrelated sample)
ZZZZZZ	C0012376.D	10/09/02	04:07	12:44	(unrelated sample)
ZZZZZZ	C0012377.D	10/09/02	04:35	13:12	(unrelated sample)
ZZZZZZ	C0012378.D	10/09/02	05:03	13:40	(unrelated sample)
ZZZZZZ	C0012379.D	10/09/02	05:31	14:08	(unrelated sample)
T3294-7	C0012380.D	10/09/02	05:59	14:36	(used for QC only; not part of job F14850)
ZZZZZZ	C0012381.D	10/09/02	06:27	15:04	(unrelated sample)
ZZZZZZ	C0012382.D	10/09/02	06:56	15:33	(unrelated sample)
ZZZZZZ	C0012383.D	10/09/02	07:24	16:01	(unrelated sample)
T3294-7MS	C0012384.D	10/09/02	07:52	16:29	Matrix Spike
T3294-7MSD	C0012385.D	10/09/02	08:20	16:57	Matrix Spike Duplicate
ZZZZZZ	C0012386.D	10/09/02	08:48	17:25	(unrelated sample)
ZZZZZZ	C0012387.D	10/09/02	09:16	17:53	(unrelated sample)
ZZZZZZ	C0012388.D	10/09/02	09:45	18:22	(unrelated sample)
ZZZZZZ	C0012389.D	10/09/02	10:13	18:50	(unrelated sample)
ZZZZZZ	C0012390.D	10/09/02	10:41	19:18	(unrelated sample)
ZZZZZZ	C0012391.D	10/09/02	11:09	19:46	(unrelated sample)
ZZZZZZ	C0012392.D	10/09/02	11:37	20:14	(unrelated sample)
ZZZZZZ	C0012393.D	10/09/02	12:05	20:42	(unrelated sample)
ZZZZZZ	C0012394.D	10/09/02	12:34	21:11	(unrelated sample)
ZZZZZZ	C0012395.D	10/09/02	13:02	21:39	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VK417-BFB	Injection Date: 10/08/02
Lab File ID: K010510.D	Injection Time: 17:50
Instrument ID: GCMSK	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	3910	22.4	Pass
75	30.0 - 60.0% of mass 95	9443	54.0	Pass
95	Base peak, 100% relative abundance	17477	100.0	Pass
96	5.0 - 9.0% of mass 95	1313	7.5	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	14466	82.8	Pass
175	5.0 - 9.0% of mass 174	989	5.7 (6.8) ^a	Pass
176	95.0 - 101.0% of mass 174	14102	80.7 (97.5) ^a	Pass
177	5.0 - 9.0% of mass 176	954	5.5 (6.8) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VK417-CC417	K010511.D	10/08/02	18:09	00:19	Continuing cal 40
VK417-BS	K010512.D	10/08/02	18:52	01:02	Blank Spike
VK417-MB	K010513.D	10/08/02	19:34	01:44	Method Blank
ZZZZZZ	K010514.D	10/08/02	20:15	02:25	(unrelated sample)
F14847-1	K010517.D	10/08/02	22:20	04:30	(used for QC only; not part of job F14850)
F14850-1	K010518.D	10/08/02	23:02	05:12	IH-SF-001
F14850-2	K010519.D	10/08/02	23:44	05:54	IH-TS-002
F14847-1MS	K010520.D	10/09/02	00:26	06:36	Matrix Spike
F14847-1MSD	K010521.D	10/09/02	01:08	07:18	Matrix Spike Duplicate
ZZZZZZ	K010522.D	10/09/02	01:49	07:59	(unrelated sample)
ZZZZZZ	K010523.D	10/09/02	02:31	08:41	(unrelated sample)
ZZZZZZ	K010524.D	10/09/02	03:13	09:23	(unrelated sample)
ZZZZZZ	K010525.D	10/09/02	03:55	10:05	(unrelated sample)
ZZZZZZ	K010526.D	10/09/02	04:37	10:47	(unrelated sample)
ZZZZZZ	K010527.D	10/09/02	05:18	11:28	(unrelated sample)
VK418-BS	K010532.D	10/09/02	10:58	17:08	Blank Spike

Instrument Performance Check (BFB)

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VC547-BFB	Injection Date:	10/08/02
Lab File ID:	C0012340.D	Injection Time:	11:17
Instrument ID:	GCMSC		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	5091	20.0	Pass
75	30.0 - 60.0% of mass 95	12393	48.7	Pass
95	Base peak, 100% relative abundance	25458	100.0	Pass
96	5.0 - 9.0% of mass 95	1832	7.2	Pass
173	Less than 2.0% of mass 174	104	0.41 (0.42) ^a	Pass
174	50.0 - 100.0% of mass 95	24680	96.9	Pass
175	5.0 - 9.0% of mass 174	1771	7.0 (7.2) ^a	Pass
176	95.0 - 101.0% of mass 174	24664	96.9 (99.9) ^a	Pass
177	5.0 - 9.0% of mass 176	1686	6.6 (6.8) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VC547-IC547	C0012342.D	10/08/02	12:10	00:53	Initial cal 1PPB
VC547-IC547	C0012343.D	10/08/02	12:38	01:21	Initial cal 5PPB
VC547-IC547	C0012344.D	10/08/02	13:06	01:49	Initial cal 20PPB
VC547-ICC547	C0012345.D	10/08/02	13:35	02:18	Initial cal 40PPB
VC547-IC547	C0012346.D	10/08/02	14:03	02:46	Initial cal 70PPB
VC547-IC547	C0012347.D	10/08/02	14:31	03:14	Initial cal 100PPB

Instrument Performance Check (BFB)

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VK417-BFB	Injection Date: 10/08/02
Lab File ID: K010502.D	Injection Time: 12:43
Instrument ID: GCMSK	

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	3850	23.7	Pass
75	30.0 - 60.0% of mass 95	8588	52.9	Pass
95	Base peak, 100% relative abundance	16239	100.0	Pass
96	5.0 - 9.0% of mass 95	1184	7.3	Pass
173	Less than 2.0% of mass 174	0	0.0 (0.0) ^a	Pass
174	50.0 - 100.0% of mass 95	13639	84.0	Pass
175	5.0 - 9.0% of mass 174	1079	6.6 (7.9) ^a	Pass
176	95.0 - 101.0% of mass 174	13577	83.6 (99.5) ^a	Pass
177	5.0 - 9.0% of mass 176	839	5.2 (6.2) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VK417-IC417	K010503.D	10/08/02	13:02	00:19	Initial cal 5
VK417-IC417	K010504.D	10/08/02	13:44	01:01	Initial cal 10
VK417-IC417	K010505.D	10/08/02	14:26	01:43	Initial cal 20
VK417-ICC417	K010506.D	10/08/02	15:08	02:25	Initial cal 40
VK417-IC417	K010507.D	10/08/02	15:49	03:06	Initial cal 100
VK417-IC417	K010508.D	10/08/02	16:31	03:48	Initial cal 200

Volatile Internal Standard Area Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VC547-CC547	Injection Date:	10/08/02
Lab File ID:	C0012350.D	Injection Time:	15:53
Instrument ID:	GCMSC	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	1079216	10.73	883511	14.01	514182	16.55	64288	7.87
Upper Limit ^a	2158432	11.23	1767022	14.51	1028364	17.05	128576	8.37
Lower Limit ^b	539608	10.23	441756	13.51	257091	16.05	32144	7.37

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VC547-BS	1034466	10.73	850492	14.01	497600	16.55	58920	7.87
VC548-BS	1079722	10.73	880864	14.01	511083	16.55	62424	7.87
OP6046-LB	1033212	10.74	829125	14.01	455886	16.55	58914	7.87
VC547-MB	973933	10.73	775277	14.01	428168	16.56	50418	7.88
F14812-1	938013	10.73	760469	14.01	408768	16.55	51775	7.87
F14850-1	877585	10.74	711735	14.01	383516	16.55	43308	7.87
F14850-2	839305	10.74	679341	14.01	366739	16.55	45297	7.87
F14812-1MS	844982	10.73	707294	14.01	421391	16.56	46801	7.87
F14812-1MSD	871122	10.73	717513	14.01	427884	16.55	50174	7.87
ZZZZZZ	881565	10.73	695574	14.01	381828	16.55	43352	7.87
ZZZZZZ	847903	10.73	694007	14.01	411359	16.56	39654	7.87
ZZZZZZ	886519	10.73	732051	14.01	407056	16.55	49218	7.88
ZZZZZZ	879601	10.73	700593	14.01	393146	16.55	44957	7.87
ZZZZZZ	838316	10.74	668828	14.01	370641	16.55	41259	7.88
F14924-3	832327	10.73	664716	14.01	387796	16.55	38285	7.88
F14924-3MS	859007	10.73	719408	14.01	436721	16.55	47263	7.87
ZZZZZZ	877861	10.74	697397	14.01	396349	16.55	44288	7.87
ZZZZZZ	826246	10.73	654670	14.01	369429	16.55	41945	7.88
ZZZZZZ	787154	10.73	626628	14.01	354788	16.56	38199	7.88
ZZZZZZ	782012	10.74	626666	14.01	345452	16.55	38444	7.88
VC549-BS	802011	10.74	680180	14.01	411801	16.55	44146	7.88
VC549-MB	784015	10.74	624008	14.01	347119	16.55	39294	7.87
ZZZZZZ	748910	10.74	602606	14.01	333022	16.55	35177	7.88
ZZZZZZ	758100	10.74	594298	14.01	326946	16.55	35649	7.87
ZZZZZZ	718773	10.73	577998	14.01	321534	16.55	34949	7.88
ZZZZZZ	727710	10.74	578713	14.01	314254	16.55	31846*	7.88
ZZZZZZ	714658	10.74	563201	14.01	317161	16.56	33050	7.87
ZZZZZZ	716663	10.74	566202	14.01	309016	16.55	32037*	7.88
T3294-7	731016	10.74	578724	14.01	317228	16.55	32141*	7.87
ZZZZZZ	714869	10.74	571618	14.01	308452	16.55	31153*	7.88
ZZZZZZ	720876	10.74	577911	14.01	312629	16.55	31846*	7.88
ZZZZZZ	717687	10.74	560439	14.01	305544	16.55	30405*	7.88
T3294-7MS	754419	10.74	646187	14.01	390215	16.55	36531	7.87
T3294-7MSD	787561	10.74	655276	14.01	397378	16.55	40878	7.87
ZZZZZZ	771355	10.74	616605	14.01	338239	16.55	38246	7.88

Volatile Internal Standard Area Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VC547-CC547	Injection Date:	10/08/02
Lab File ID:	C0012350.D	Injection Time:	15:53
Instrument ID:	GCMSC	Method:	SW846 8260B

Lab Sample ID	IS 1 AREA	IS 1 RT	IS 2 AREA	IS 2 RT	IS 3 AREA	IS 3 RT	IS 4 AREA	IS 4 RT
ZZZZZZ	741717	10.74	591432	14.01	322312	16.55	35099	7.88
ZZZZZZ	740960	10.74	588265	14.01	312260	16.55	30348*	7.88
ZZZZZZ	707896	10.74	570221	14.01	310802	16.55	27932*	7.89
ZZZZZZ	716500	10.74	564339	14.01	307318	16.55	30010*	7.88
ZZZZZZ	706441	10.74	568522	14.01	307364	16.56	28151*	7.88
ZZZZZZ	697393	10.74	551366	14.01	301769	16.55	28526*	7.89
ZZZZZZ	698230	10.74	551581	14.01	294592	16.55	28454*	7.87
ZZZZZZ	692514	10.74	549926	14.01	298209	16.55	26819*	7.88
ZZZZZZ	692332	10.74	554152	14.01	300232	16.55	27369*	7.88

IS 1 = Fluorobenzene
 IS 2 = Chlorobenzene-D5
 IS 3 = 1,4-Dichlorobenzene-d4
 IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.

(b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Internal Standard Area Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VK417-CC417	Injection Date:	10/08/02
Lab File ID:	K010511.D	Injection Time:	18:09
Instrument ID:	GCMSK	Method:	SW846 8260B

	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
	AREA		AREA		AREA		AREA	
Check Std	424423	14.67	307117	20.51	188477	25.33	35382	10.05
Upper Limit ^a	848846	15.17	614234	21.01	376954	25.83	70764	10.55
Lower Limit ^b	212212	14.17	153559	20.01	94239	24.83	17691	9.55

Lab	IS 1	RT	IS 2	RT	IS 3	RT	IS 4	RT
Sample ID	AREA		AREA		AREA		AREA	
VK417-BS	417130	14.68	311167	20.51	184272	25.34	34344	10.04
VK417-MB	407265	14.68	300946	20.52	177674	25.34	26086	10.05
ZZZZZZ	382432	14.67	267390	20.51	130956	25.33	26832	10.05
F14847-1	358784	14.67	264345	20.51	158306	25.33	46115	10.05
F14850-1	342408	14.68	247348	20.50	145632	25.33	24238	10.04
F14850-2	326460	14.67	228307	20.50	116154	25.33	21084	10.04
F14847-1MS	335523	14.67	237396	20.50	136480	25.33	12968*	10.04
F14847-1MSD	338009	14.68	237650	20.50	139570	25.34	13740*	10.05
ZZZZZZ	345653	14.67	232841	20.50	105482	25.34	26371	10.05
ZZZZZZ	336005	14.68	237912	20.51	126103	25.34	22370	10.06
ZZZZZZ	331266	14.67	237343	20.51	124298	25.33	18545	10.05
ZZZZZZ	313757	14.68	227298	20.51	125933	25.34	21642	10.05
ZZZZZZ	321052	14.67	234397	20.51	132929	25.34	22474	10.05
ZZZZZZ	294030	14.67	193574	20.50	78511*	25.34	18764	10.06
VK418-BS	399391	14.67	295182	20.49	178730	25.33	30863	10.04

- IS 1 = Fluorobenzene
- IS 2 = Chlorobenzene-D5
- IS 3 = 1,4-Dichlorobenzene-d4
- IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8260B	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F14850-1	C0012356.D	101.0	99.0	101.0	99.0
F14850-2	C0012357.D	100.0	98.0	101.0	100.0
F14812-1MS	C0012358.D	100.0	97.0	98.0	99.0
F14812-1MSD	C0012359.D	101.0	99.0	98.0	99.0
OP6046-LB	C0012353.D	100.0	101.0	103.0	101.0
VC548-BS	C0012352.D	100.0	101.0	102.0	100.0

Surrogate Compounds Recovery Limits

S1 = Dibromofluoromethane	86-115%
S2 = Toluene-D8	87-113%
S3 = 4-Bromofluorobenzene	84-117%
S4 = 1,2-Dichloroethane-D4	78-125%

Volatile Surrogate Recovery Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8260B	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F14850-1	K010518.D	96.0	101.0	102.0	101.0
F14850-2	K010519.D	100.0	105.0	111.0	102.0
F14847-1MS	K010520.D	97.0	103.0	103.0	90.0
F14847-1MSD	K010521.D	97.0	104.0	101.0	89.0
VK417-BS	K010512.D	100.0	99.0	103.0	99.0
VK417-MB	K010513.D	97.0	99.0	100.0	96.0

Surrogate Compounds	Recovery Limits
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S1 = Dibromofluoromethane	70-130%
S2 = Toluene-D8	79-121%
S3 = 4-Bromofluorobenzene	77-133%
S4 = 1,2-Dichloroethane-D4	72-133%

Initial Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC547-ICC547
 Lab FileID: C0012345.D

Response Factor Report MSVOA5

Method : C:\MSDCHEM\2\METHODS\8260.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Wed Oct 09 12:57:33 2002
 Response via : Initial Calibration

Calibration Files

1 =C0012342.D 2 =C0012343.D 3 =C0012344.D
 4 =C0012345.D 5 =C0012346.D 6 =C0012347.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) I Fluorobenzene	-----I STD-----							
2) Dichlorodifluoromethane	0.224	0.303	0.295	0.252	0.257	0.230	0.260	12.54
3) P Chloromethane	0.409	0.455	0.455	0.412	0.409	0.390	0.422	6.43
4) C Vinyl Chloride	0.357	0.452	0.429	0.377	0.368	0.344	0.388	11.02
5) Bromomethane	0.289	0.281	0.282	0.251	0.238	0.219	0.260	10.88
6) Chloroethane	0.199	0.224	0.225	0.208	0.199	0.191	0.208	6.85
7) Trichlorofluoromethane	0.348	0.387	0.408	0.381	0.387	0.377	0.381	5.15
8) Ethyl ether	0.172	0.204	0.214	0.216	0.220	0.216	0.207	8.56
9) C 1,1-Dichloroethene	0.377	0.444	0.485	0.453	0.471	0.461	0.449	8.48
10) Freon 113	0.238	0.259	0.266	0.242	0.244	0.229	0.246	5.58
11) Acetone		0.077	0.074	0.072	0.073	0.073	0.074	2.70
12) Iodomethane	0.366	0.411	0.438	0.424	0.430	0.415	0.414	6.12
13) Methyl Acetate	0.213	0.202	0.203	0.204	0.206	0.209	0.206	1.94
14) Carbon Disulfide	0.835	0.906	0.922	0.828	0.854	0.816	0.860	5.08
15) Hexane	0.273	0.264	0.299	0.294	0.308	0.298	0.289	5.89
16) Methylene Chloride	0.578	0.488	0.468	0.442	0.436	0.431	0.474	11.69
17) trans-1,2-Dichloroethene	0.364	0.426	0.435	0.412	0.438	0.423	0.416	6.52
18) Acrylonitrile	0.066	0.062	0.069	0.069	0.070	0.070	0.067	4.29
19) Methyl Tert Butyl Ether	0.492	0.594	0.642	0.655	0.678	0.700	0.627	11.95
20) P 1,1-Dichloroethane	0.488	0.548	0.529	0.517	0.534	0.533	0.525	3.95
21) Vinyl acetate	0.559	0.643	0.646	0.674	0.695	0.703	0.653	8.00
22) Diisopropyl ether	0.671	0.884	0.959	0.981	1.027	1.044	0.928	14.89
23) ETBE		0.653	0.743	0.772	0.821	0.844	0.767	9.77
24) 2,2-Dichloropropane	0.219	0.272	0.264	0.249	0.260	0.246	0.252	7.49
25) cis-1,2-Dichloroethane	0.223	0.296	0.290	0.286	0.298	0.290	0.280	10.16
26) 2-Butanone	0.113	0.106	0.111	0.116	0.117	0.119	0.114	3.96
27) Bromochloromethane	0.129	0.144	0.140	0.140	0.140	0.140	0.139	3.80
28) C Chloroform	0.489	0.505	0.486	0.481	0.491	0.486	0.490	1.69
29) Tetrahydrofuran		0.056	0.061	0.067	0.073	0.074	0.066	11.51
30) 1,1,1-Trichloroethane	0.348	0.399	0.396	0.374	0.391	0.377	0.381	4.96
31) Cyclohexane	0.292	0.359	0.420	0.415	0.452	0.430	0.395	14.97
32) S Dibromodifluoromethane	0.267	0.263	0.259	0.261	0.258	0.259	0.261	1.25
33) 1,1-Dichloropropene	0.250	0.325	0.347	0.330	0.355	0.342	0.325	11.73
34) Carbon Tetrachloride	0.312	0.377	0.367	0.346	0.375	0.359	0.356	6.76
35) S 1,2-Dichloroethane	0.298	0.296	0.292	0.293	0.292	0.296	0.294	0.95
36) Benzene	1.049	1.151	1.107	1.094	1.149	1.160	1.118	3.84
37) TAME	0.508	0.618	0.657	0.691	0.741	0.777	0.665	14.41
38) 1,2-Dichloroethane	0.506	0.430	0.400	0.393	0.404	0.413	0.424	9.92
39) Trichloroethene	0.235	0.258	0.260	0.258	0.275	0.272	0.259	5.45
40) Methylcyclohexane	0.267	0.295	0.345	0.333	0.372	0.363	0.329	12.31
41) C 1,2-Dichloropropane	0.248	0.298	0.305	0.300	0.314	0.318	0.297	8.56
42) Dibromomethane	0.162	0.177	0.172	0.171	0.172	0.176	0.172	3.19
43) Bromodichloromethane	0.338	0.372	0.368	0.368	0.381	0.378	0.368	4.17
44) 2-Nitropropane	0.056	0.065	0.069	0.072	0.075	0.078	0.069	11.22
45) 2-Chloroethyl vinyl ether		0.093	0.105	0.113	0.118	0.123	0.110	10.75
46) 4-Methyl-2-pentanone	0.204	0.256	0.272	0.277	0.284	0.293	0.264	12.10

Initial Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC547-ICC547
 Lab FileID: C0012345.D

47)	ci s-1, 3-Di chl oropro	0.381	0.419	0.433	0.460	0.462	0.431	7.78	
48) I	Chl orobenzene-d5	-----I STD-----							
49) S	Tol uene-d8	1.229	1.215	1.194	1.194	1.193	1.186	1.202	1.37
50) C	Tol uene	1.337	1.428	1.414	1.371	1.471	1.436	1.410	3.41
51)	trans-1, 3-Di chl orop	0.413	0.441	0.466	0.483	0.511	0.509	0.470	8.16
52)	1, 1, 2-Tri chl oroetha	0.252	0.251	0.248	0.244	0.250	0.245	0.248	1.27
53)	Tetrchl oroethene	0.343	0.406	0.394	0.357	0.379	0.360	0.373	6.45
54)	2-hexanone	0.162	0.195	0.225	0.226	0.236	0.237	0.214	13.78
55)	1, 3-Di chl oropropane	0.469	0.519	0.521	0.516	0.541	0.539	0.517	5.03
56)	Di bromochl oromethan	0.309	0.338	0.345	0.341	0.357	0.355	0.341	5.10
57)	1, 2-Di bromoethane	0.284	0.286	0.292	0.291	0.301	0.301	0.293	2.41
58)	1-Chl orohexane	0.302	0.387	0.380	0.423	0.407	0.380	12.22	
59) P	Chl orobenzene	0.973	1.029	0.991	0.955	1.004	0.987	0.990	2.59
60)	1, 1, 1, 2-Tetrchl oro	0.349	0.348	0.355	0.348	0.375	0.378	0.359	3.95
61) C	Ethyl benzene	1.301	1.527	1.584	1.549	1.737	1.734	1.572	10.24
62)	m, p-Xyl ene	0.927	1.171	1.245	1.233	1.391	1.401	1.228	14.13
63)	o-Xyl ene	1.161	1.298	1.312	1.485	1.500	1.351	10.50	
64)	Styrene	0.870	1.015	1.042	1.191	1.227	1.069	13.50	
65) P	Bromoform	0.221	0.225	0.235	0.239	0.253	0.254	0.238	5.75
66) I	1, 4-Di chl orobenzene-d	-----I STD-----							
67)	l sopropyl benzene	2.036	2.285	2.310	2.550	2.557	2.348	9.21	
68) S	4-Bromofl uorobenzen	0.851	0.856	0.833	0.846	0.853	0.879	0.853	1.79
69)	Bromobenzene	0.793	0.806	0.795	0.779	0.830	0.842	0.807	2.99
70) P	1, 1, 2, 2-Tetrchl oro	0.778	0.700	0.658	0.636	0.653	0.660	0.681	7.66
71)	trans-1, 4-Di chl oro-	0.026	0.064	0.107	0.130	0.149	0.160	0.106	49.05
72)	1, 2, 3-Tri chl oroprop	0.195	0.198	0.186	0.183	0.186	0.187	0.189	3.12
73)	n-Propyl benzene	2.408	3.025	3.158	3.104	3.447	3.519	3.110	12.73
74)	2-Chl orotol uene	1.851	2.220	2.189	2.202	2.458	2.553	2.246	10.93
75)	4-Chl orotol uene	1.453	1.881	1.945	1.964	2.108	2.127	1.913	12.82
76)	1, 3, 5-Tri methyl benz	1.611	1.964	2.145	2.143	2.398	2.491	2.125	14.87
77)	Benzyl chl ori de	0.969	0.974	1.185	1.220	1.279	1.314	1.157	12.99
78)	sec-Butyl benzene	1.940	2.166	2.473	2.381	2.614	2.589	2.361	11.12
79)	1, 3-Di chl orobenzene	1.358	1.480	1.425	1.362	1.440	1.423	1.415	3.33
80)	4-l sopropyl tol uene	1.471	1.877	2.126	2.053	2.233	2.267	2.005	14.79
81)	1, 4-Di chl orobenzene	1.711	1.557	1.487	1.431	1.485	1.479	1.525	6.53
82)	tert-Butyl benzene	0.919	1.058	1.214	1.199	1.280	1.290	1.160	12.46
83)	n-Butyl benzene	1.752	1.726	1.984	1.933	2.048	2.077	1.920	7.77
84)	1, 2-Di chl orobenzene	1.296	1.404	1.392	1.329	1.389	1.374	1.364	3.09
85)	1, 2, 4-Tri methyl benz	2.194	2.303	2.226	2.440	2.474	2.328	5.39	
86)	1, 2-Di bromo-3-Chl or	0.107	0.107	0.107	0.111	0.110	0.113	0.109	2.29
87)	1, 2, 4-Tri chl orobenz	0.957	0.789	0.872	0.907	0.938	0.939	0.900	6.89
88)	Hexachl orobutadi ene	0.366	0.367	0.343	0.349	0.349	0.355	3.08	
89)	Naphthal ene	1.405	1.788	1.905	1.958	2.008	1.813	13.35	
90)	1, 2, 3-Tri chl orobenz	1.030	0.717	0.796	0.822	0.832	0.830	0.838	12.37
91) I	Tert Butyl alcohol -d1	-----I STD-----							
92)	Acrolei n	0.692	0.850	0.972	0.971	0.985	0.995	0.911	13.14
93)	Tert-Butyl Alcohol	1.980	1.812	1.896	1.903	1.909	1.941	1.907	2.93
94)	1, 4-Di oxane	0.201	0.156	0.200	0.208	0.207	0.209	0.197	10.36
95)	Cycl ohexanone	0.420	0.590	0.588	0.606	0.637	0.568	15.03	

Average % RSD = 8.3

(#) = Out of Range

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC547-CC547
 Lab FileID: C0012350.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\100802\C0012350.D Vial : 8
 Acq On : 8 Oct 2002 3:53 pm Operator: JuanG
 Sample : CC547-40ppb Inst : MSVOA5
 Misc : ms1792,vc547,,,,, Multiplr: 1.00
 MS Integration Params: Rteint.p

Method : C:\MSDCHEM\2\METHODS\8260.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Wed Oct 09 12:57:33 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)
1 I	Fluorobenzene	1.000	1.000	0.0	124	0.00
2	Dichlorodifluoromethane	0.260	0.290	-11.5	142	0.00
3 P	Chloromethane	0.422	0.410	2.8	123	0.00
4 C	Vinyl Chloride	0.388	0.373	3.9	122	0.00
5	Bromomethane	0.260	0.236	9.2	116	0.00
6	Chloroethane	0.208	0.197	5.3	117	0.00
7	Trichlorofluoromethane	0.381	0.396	-3.9	129	0.00
8	Ethyl ether	0.207	0.215	-3.9	123	0.00
9 C	1,1-Dichloroethene	0.449	0.452	-0.7	123	0.00
10	Freon 113	0.246	0.234	4.9	120	0.00
11	Acetone	0.074	0.080	-8.1	138	0.00
12	Iodomethane	0.414	0.407	1.7	119	0.00
13	Methyl Acetate	0.206	0.200	2.9	121	0.00
14	Carbon Disulfide	0.860	0.817	5.0	122	0.00
15	Hexane	0.289	0.300	-3.8	126	0.00
16	Methylene Chloride	0.474	0.423	10.8	118	0.00
17	trans-1,2-Dichloroethene	0.416	0.419	-0.7	126	0.00
18	Acrylonitrile	0.067	0.068	-1.5	123	0.00
19	Methyl Tert Butyl Ether	0.627	0.676	-7.8	128	0.00
20 P	1,1-Dichloroethane	0.525	0.518	1.3	124	0.00
21	Vinyl acetate	0.653	0.671	-2.8	123	0.00
22	Diisopropyl ether	0.928	0.983	-5.9	124	0.00
23	ETBE	0.767	0.794	-3.5	127	0.00
24	2,2-Dichloropropane	0.252	0.248	1.6	123	0.00
25	cis-1,2-Dichloroethene	0.280	0.290	-3.6	126	-0.01
26	2-Butanone	0.114	0.117	-2.6	125	0.00
27	Bromochloromethane	0.139	0.141	-1.4	124	0.00
28 C	Chloroform	0.490	0.483	1.4	124	0.00
29	Tetrahydrofuran	0.066	0.069	-4.5	127	0.00
30	1,1,1-Trichloroethane	0.381	0.371	2.6	123	0.00
31	Cyclohexane	0.395	0.416	-5.3	124	0.00
32 S	Dibromofluoromethane	0.261	0.262	-0.4	124	0.00
33	1,1-Dichloropropene	0.325	0.338	-4.0	127	0.00
34	Carbon Tetrachloride	0.356	0.357	-0.3	127	0.00
35 S	1,2-Dichloroethane-d4	0.294	0.298	-1.4	126	0.00
36	Benzene	1.118	1.101	1.5	124	0.00
37	TAME	0.665	0.706	-6.2	126	0.00
38	1,2-Dichloroethane	0.424	0.401	5.4	126	0.00
39	Trichloroethene	0.259	0.264	-1.9	127	0.00
40	Methylcyclohexane	0.329	0.347	-5.5	129	0.00
41 C	1,2-Dichloropropane	0.297	0.298	-0.3	123	0.00
42	Dibromomethane	0.172	0.173	-0.6	125	0.00

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC547-CC547
 Lab FileID: C0012350.D

43	Bromodi chl oromethane	0.368	0.368	0.0	124	0.00
44	2-Ni trop propane	0.069	0.072	-4.3	122	0.00
45	2-Chl oroethyl vinyl ether	0.110	0.106	3.6	116	0.00
46	4-Methyl -2-pentanone	0.264	0.274	-3.8	123	0.00
47	ci s-1, 3-Di chl oropropene	0.431	0.443	-2.8	127	0.00
48 I	Chl orobenzene-d5	1.000	1.000	0.0	122	0.00
49 S	Tol uene-d8	1.202	1.213	-0.9	124	0.00
50 C	Tol uene	1.410	1.424	-1.0	127	0.00
51	trans-1, 3-Di chl oropropene	0.470	0.502	-6.8	127	0.00
52	1, 1, 2-Tri chl oroethane	0.248	0.242	2.4	121	0.00
53	Tetrachl oroethene	0.373	0.363	2.7	124	0.00
54	2-hexanone	0.214	0.229	-7.0	124	0.00
55	1, 3-Di chl oropropane	0.517	0.522	-1.0	124	0.00
56	Di bromochl oromethane	0.341	0.348	-2.1	124	0.00
57	1, 2-Di bromoethane	0.293	0.294	-0.3	123	0.00
58	1-Chl orohexane	0.380	0.390	-2.6	125	0.00
59 P	Chl orobenzene	0.990	0.971	1.9	124	0.00
60	1, 1, 1, 2-Tetrachl oroethane	0.359	0.359	0.0	126	0.00
61 C	Ethyl benzene	1.572	1.620	-3.1	128	0.00
62	m, p-Xyl ene	1.228	1.282	-4.4	127	0.00
63	o-Xyl ene	1.351	1.367	-1.2	127	0.00
64	Styrene	1.069	1.085	-1.5	127	0.00
65 P	Bromoform	0.238	0.242	-1.7	124	0.00
66 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	120	0.00
67	Isopropyl benzene	2.348	2.433	-3.6	126	0.00
68 S	4-Bromofl uorobenzene	0.853	0.871	-2.1	123	0.00
69	Bromobenzene	0.807	0.797	1.2	122	0.00
70 P	1, 1, 2, 2-Tetrachl oroethane	0.681	0.656	3.7	123	0.00
71	trans-1, 4-Di chl oro-2-butene	0.106	0.167	-57.5#	154	0.00
72	1, 2, 3-Tri chl oropropane	0.189	0.189	0.0	124	0.00
73	n-Propyl benzene	3.110	3.240	-4.2	125	0.00
74	2-Chl orotol uene	2.246	2.321	-3.3	126	0.00
75	4-Chl orotol uene	1.913	2.047	-7.0	125	0.00
76	1, 3, 5-Tri methyl benzene	2.125	2.273	-7.0	127	0.00
77	Benzyl chl ori de	1.157	1.322	-14.3	130	0.00
78	sec-Butyl benzene	2.361	2.485	-5.3	125	0.00
79	1, 3-Di chl orobenzene	1.415	1.400	1.1	123	0.00
80	4-Isopropyl tol uene	2.005	2.154	-7.4	125	0.00
81	1, 4-Di chl orobenzene	1.525	1.471	3.5	123	0.00
82	tert-Butyl benzene	1.160	1.249	-7.7	125	0.00
83	n-Butyl benzene	1.920	1.996	-4.0	123	0.00
84	1, 2-Di chl orobenzene	1.364	1.359	0.4	122	0.00
85	1, 2, 4-Tri methyl benzene	2.328	2.364	-1.5	127	0.00
86	1, 2-Di bromo-3-Chl oropropane	0.109	0.112	-2.8	120	0.00
87	1, 2, 4-Tri chl orobenzene	0.900	0.923	-2.6	122	0.00
88	Hexachl orobutadi ene	0.355	0.359	-1.1	125	0.00
89	Naphthal ene	1.813	1.942	-7.1	122	0.00
90	1, 2, 3-Tri chl orobenzene	0.838	0.836	0.2	122	0.00
91 I	Tert Butyl al cohol -d10	1.000	1.000	0.0	133	0.00
92	Acrolei n	0.911	1.057	-16.0	145	0.00
93	Tert-Butyl Al cohol	1.907	1.836	3.7	128	0.00
94	1, 4-Di oxane	0.197	0.202	-2.5	129	0.00
95	Cycl ohexanone	0.568	0.564	0.7	128	0.00

Average % D = 4.2

Continuing Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VC547-CC547
Lab FileID: C0012350.D

(#) = Out of Range
C0012345.D 8260.M

SPCC's out = 0 CCC's out = 0
Wed Oct 09 13:04:02 2002 RPT1

Initial Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VK417-ICC417
 Lab FileID: K010506.D

Response Factor Report MSVOA2

Method : C:\HPCHEM\1\METHODS\8260S.M (RTE Integrator)
 Title : SWA 5035/8260B
 Last Update : Tue Oct 08 17:17:29 2002
 Response via : Initial Calibration

Calibration Files

1 =K010503.D 2 =K010504.D 3 =K010505.D
 4 =K010506.D 5 =K010507.D 6 =K010508.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) I Fluorobenzene	-----I STD-----							
2) Di chlorodi fluoromet	0.260	0.232	0.224	0.223	0.217	0.206	0.227	8.03
3) P Chloromethane	0.247	0.237	0.284	0.279	0.273	0.278	0.266	7.31
4) C Vinyl Chloride	0.337	0.333	0.342	0.330	0.310	0.292	0.324	5.86
5) Bromomethane	0.245	0.235	0.230	0.230	0.229	0.218	0.231	3.83
6) Chloroethane	0.157	0.161	0.169	0.174	0.170	0.163	0.166	3.81
7) Tri chlorofluorometh		0.147	0.155	0.173	0.175	0.171	0.164	7.71
8) Ethyl ether	0.272	0.243	0.245	0.236	0.245	0.245	0.248	5.08
9) Freon 113	0.276	0.288	0.281	0.276	0.261	0.248	0.272	5.30
10) C 1,1-Di chloroethene	0.598	0.587	0.578	0.559	0.549	0.535	0.568	4.25
11) Acetone		0.125	0.131	0.105	0.122	0.120	0.121	7.84
12) Iodomethane	0.583	0.551	0.566	0.576	0.563	0.555	0.566	2.10
13) Carbon Disulfide	0.898	0.869	0.918	0.918	0.898	0.889	0.898	2.07
14) Methyl acetate	0.376	0.319	0.337	0.281	0.321	0.318	0.325	9.53
15) Methylene Chloride	0.821	0.681	0.611	0.559	0.532	0.511	0.619	18.78
16) trans-1,2-Dichloroe	0.587	0.578	0.562	0.553	0.538	0.526	0.557	4.18
17) Acrylonitrile		0.076	0.081	0.065	0.077	0.076	0.075	7.98
18) Methyl Tert Butyl E	0.392	0.379	0.377	0.351	0.348	0.312	0.360	8.05
19) Hexane	0.461	0.404	0.395	0.366	0.349	0.333	0.384	11.98
20) P 1,1-Di chloroethane	0.666	0.635	0.640	0.627	0.614	0.588	0.628	4.18
21) Vinyl acetate		0.932	0.909	0.804	0.798	0.695	0.828	11.56
22) Di-isopropyl ether	1.264	1.199	1.176	1.158	1.123	1.066	1.165	5.77
23) Ethyl tert-Butyl Et	0.609	0.610	0.599	0.575	0.520	0.469	0.564	10.24
24) 2,2-Di chloropropane	0.352	0.349	0.352	0.335	0.302	0.275	0.327	9.79
25) cis-1,2-Di chloroeth	0.355	0.345	0.341	0.336	0.330	0.321	0.338	3.54
26) 2-Butanone	0.238	0.203	0.213	0.181	0.210	0.205	0.209	8.81
27) Bromochloromethane	0.191	0.183	0.181	0.185	0.185	0.183	0.185	1.93
28) C Chloroform	0.821	0.703	0.687	0.660	0.639	0.614	0.687	10.60
29) Tetrahydrofuran		0.135	0.133	0.110	0.127	0.120	0.125	8.27
30) 1,1,1-Tri chloroetha	0.511	0.496	0.487	0.500	0.461	0.446	0.484	5.16
31) S Dibromofluoromethan	0.342	0.338	0.341	0.335	0.344	0.346	0.341	1.14
32) Cyclohexane	0.546	0.564	0.552	0.546	0.523	0.496	0.538	4.53
33) 1,1-Di chloropropene	0.474	0.452	0.452	0.441	0.422	0.403	0.441	5.69
34) Carbon Tetrachlorid	0.463	0.471	0.480	0.468	0.451	0.429	0.460	3.93
35) S 1,2-Di chloroethane-	0.467	0.461	0.457	0.426	0.443	0.429	0.447	3.82
36) Benzene	1.202	1.136	1.116	1.092	1.065	1.016	1.105	5.76
37) 1,2-Di chloroethane	0.703	0.647	0.635	0.609	0.613	0.579	0.631	6.72
38) Tert-Amyl Methyl Et	0.690	0.641	0.630	0.603	0.581	0.511	0.610	9.97
39) Tri chloroethene	0.371	0.360	0.364	0.360	0.346	0.329	0.355	4.26
40) Methyl cyclohexane	0.457	0.465	0.443	0.448	0.416	0.388	0.436	6.64
41) C 1,2-Di chloropropane	0.375	0.369	0.356	0.358	0.350	0.337	0.357	3.78
42) Dibromomethane	0.285	0.263	0.254	0.258	0.265	0.256	0.264	4.27
43) Bromodichloromethan	0.496	0.471	0.497	0.505	0.511	0.495	0.496	2.71
44) 2-Nitropropane	0.137	0.126	0.140	0.125	0.145	0.142	0.136	6.17
45) 2-Chloroethyl vinyl	0.101	0.099	0.100	0.092	0.101	0.099	0.099	3.43
46) 4-Methyl -2-pentanon	0.534	0.467	0.490	0.416	0.467	0.436	0.468	8.87

Initial Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VK417-ICC417
 Lab FileID: K010506.D

47)	ci s-1, 3-Di chl oropro	0.556	0.537	0.537	0.536	0.557	0.544	0.545	1.76
48) I	Chl orobenzene-d5	-----I STD-----							
49) S	Tol uene-d8	1.281	1.305	1.303	1.312	1.301	1.309	1.302	0.84
50) C	Tol uene	1.760	1.696	1.667	1.663	1.576	1.512	1.646	5.37
51)	trans-1, 3-Di chl orop	0.709	0.683	0.693	0.705	0.738	0.725	0.709	2.83
52)	1, 1, 2-Tri chl oroetha	0.367	0.360	0.358	0.351	0.367	0.353	0.359	1.90
53)	Tetrchl oroethene	0.561	0.545	0.527	0.521	0.473	0.444	0.512	8.70
54)	2-hexanone	0.543	0.457	0.493	0.418	0.470	0.439	0.470	9.35
55)	1, 3-Di chl oropropane	0.762	0.696	0.697	0.690	0.678	0.643	0.694	5.61
56)	Di bromochl oromethan	0.478	0.475	0.504	0.527	0.548	0.545	0.513	6.30
57)	1, 2-Di bromoethane	0.468	0.441	0.456	0.449	0.474	0.468	0.459	2.74
58)	1-Chl orohexane	0.568	0.547	0.542	0.540	0.505	0.488	0.532	5.53
59) P	Chl orobenzene	1.169	1.136	1.097	1.077	1.050	1.015	1.091	5.14
60)	1, 1, 1, 2-Tetrchl oro	0.463	0.448	0.449	0.462	0.452	0.427	0.450	2.94
61) C	Ethyl benzene	2.040	1.966	1.912	1.891	1.773	1.664	1.874	7.23
62)	m, p-Xyl ene	1.731	1.642	1.605	1.573	1.472	1.366	1.565	8.26
63)	o-Xyl ene	1.786	1.690	1.678	1.662	1.553	1.451	1.637	7.19
64)	Styrene	1.128	1.098	1.106	1.119	1.070	1.014	1.089	3.87
65) P	Bromoform	0.342	0.354	0.379	0.391	0.442	0.444	0.392	11.03
66) I	1, 4-Di chl orobenzene-d	-----I STD-----							
67)	l sopropyl benzene	2.988	2.865	2.896	2.893	2.648	2.545	2.806	6.08
68) S	4-Bromofl uorobenzen	0.990	0.977	0.990	0.978	0.975	0.994	0.984	0.85
69)	Bromobenzene	0.994	0.939	0.903	0.892	0.863	0.844	0.906	5.96
70) P	1, 1, 2, 2-Tetrchl oro	1.057	0.962	1.018	0.929	0.998	1.001	0.994	4.47
71)	trans-1, 4-Di chl oro-	0.341	0.315	0.333	0.314	0.342	0.343	0.331	4.10
72)	1, 2, 3-Tri chl oroprop	0.345	0.283	0.281	0.267	0.283	0.277	0.289	9.65
73)	n-Propyl benzene	4.100	3.899	3.884	3.791	3.443	3.324	3.740	7.93
74)	2-Chl orotol uene	3.057	2.828	2.798	2.655	2.485	2.355	2.696	9.39
75)	4-Chl orotol uene	2.796	2.630	2.584	2.520	2.361	2.286	2.530	7.33
76)	1, 3, 5-Tri methyl benz	2.987	2.829	2.833	2.719	2.491	2.369	2.705	8.59
77)	sec-Butyl benzene	3.399	3.355	3.302	3.257	2.983	2.868	3.194	6.78
78)	1, 3-Di chl orobenzene	1.839	1.720	1.686	1.637	1.558	1.482	1.654	7.59
79)	4-Isopropyl tol uene	2.873	2.717	2.704	2.647	2.455	2.342	2.623	7.34
80)	Benzyl chl oride	1.528	1.421	1.475	1.400	1.539	1.520	1.481	3.98
81)	1, 4-Di chl orobenzene	1.922	1.745	1.731	1.653	1.578	1.512	1.690	8.53
82)	tert-Butyl benzene	2.292	2.256	2.227	2.191	2.038	1.943	2.158	6.36
83)	n-Butyl benzene	3.036	2.958	2.911	2.841	2.567	2.456	2.795	8.27
84)	1, 2-Di chl orobenzene	1.785	1.654	1.637	1.611	1.544	1.496	1.621	6.17
85)	1, 2, 4-Tri methyl benz	3.097	2.857	2.888	2.804	2.660	2.533	2.807	6.94
86)	1, 2-Di bromo-3-Chl or	0.244	0.214	0.224	0.203	0.243	0.245	0.229	7.81
87)	1, 2, 4-Tri chl orobenz	1.498	1.338	1.327	1.274	1.218	1.133	1.298	9.54
88)	Hexachl orobutadi ene	0.860	0.847	0.851	0.831	0.745	0.702	0.806	8.16
89)	Naphthal ene	3.191	2.643	2.693	2.468	2.626	2.498	2.687	9.76
90)	1, 2, 3-Tri chl orobenz	1.412	1.306	1.287	1.205	1.182	1.110	1.250	8.55
91) I	Tert Butyl Alcohol -d1	-----I STD-----							
92)	Acrolei n	1.068	1.054	1.083	1.185	1.152	1.093	1.106	4.64
93)	Tert Butyl Alcohol	2.623	2.442	2.380	2.544	2.492	2.327	2.468	4.39
94)	1, 4-Di oxane	0.195	0.169	0.233	0.258	0.243	0.235	0.222	14.99
95)	Cycl ohexanone	1.214	0.946	1.016	1.131	1.090	1.107	1.084	8.58

Average % RSD = 6.4

(#) = Out of Range

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VK417-CC417
 Lab FileID: K010511.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\100802\K010511.D Vial : 1
 Acq On : 8 Oct 2002 6:09 pm Operator: NancyF
 Sample : CC417-40 Inst : MSV0A2
 Misc : ms1793,vk417,,,,, Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8260S.M (RTE Integrator)
 Title : SWA 5035/8260B
 Last Update : Tue Oct 08 17:17:29 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)
1 I	Fluorobenzene	1.000	1.000	0.0	108	0.00
2	Dichlorodifluoromethane	0.227	0.308	-35.7#	149	0.00
3 P	Chloromethane	0.266	0.344	-29.3#	133	-0.01
4 C	Vinyl Chloride	0.324	0.375	-15.7	122	0.00
5	Bromomethane	0.231	0.261	-13.0	122	0.00
6	Chloroethane	0.166	0.197	-18.7	122	0.00
7	Trichlorofluoromethane	0.164	0.209	-27.4#	130	-0.01
8	Ethyl ether	0.248	0.259	-4.4	118	0.00
9	Freon 113	0.272	0.310	-14.0	121	-0.01
10 C	1,1-Dichloroethene	0.568	0.617	-8.6	119	0.00
11	Acetone	0.121	0.156	-28.9#	159	0.00
12	Iodomethane	0.566	0.597	-5.5	112	0.00
13	Carbon Disulfide	0.898	1.015	-13.0	119	-0.01
14	Methyl acetate	0.325	0.367	-12.9	141	0.00
15	Methylene Chloride	0.619	0.589	4.8	113	0.00
16	trans-1,2-Dichloroethene	0.557	0.607	-9.0	118	0.00
17	Acrylonitrile	0.075	0.095	-26.7#	157	0.00
18	Methyl Tert Butyl Ether	0.360	0.368	-2.2	113	0.00
19	Hexane	0.384	0.611	-59.1#	180	0.00
20 P	1,1-Dichloroethane	0.628	0.678	-8.0	116	0.00
21	Vinyl acetate	0.828	1.059	-27.9#	142	0.00
22	Diisopropyl ether	1.165	1.226	-5.2	114	0.00
23	Ethyl tert-Butyl Ether	0.564	0.587	-4.1	110	0.00
24	2,2-Dichloropropane	0.327	0.351	-7.3	113	0.00
25	cis-1,2-Dichloroethene	0.338	0.365	-8.0	117	0.00
26	2-Butanone	0.209	0.250	-19.6	148	0.00
27	Bromochloromethane	0.185	0.198	-7.0	115	0.00
28 C	Chloroform	0.687	0.711	-3.5	116	0.00
29	Tetrahydrofuran	0.125	0.150	-20.0	148	0.00
30	1,1,1-Trichloroethane	0.484	0.519	-7.2	112	0.00
31 S	Dibromofluoromethane	0.341	0.338	0.9	108	0.00
32	Cyclohexane	0.538	0.611	-13.6	120	0.00
33	1,1-Dichloropropene	0.441	0.493	-11.8	120	0.00
34	Carbon Tetrachloride	0.460	0.506	-10.0	116	0.00
35 S	1,2-Dichloroethane-d4	0.447	0.435	2.7	110	0.00
36	Benzene	1.105	1.189	-7.6	117	0.00
37	1,2-Dichloroethane	0.631	0.650	-3.0	115	0.00
38	Tert-Amyl Methyl Ether	0.610	0.642	-5.2	115	0.00
39	Trichloroethene	0.355	0.398	-12.1	119	0.00
40	Methyl cyclohexane	0.436	0.528	-21.1#	127	-0.01
41 C	1,2-Dichloropropane	0.357	0.386	-8.1	116	0.00
42	Dibromomethane	0.264	0.287	-8.7	120	0.00

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VK417-CC417
 Lab FileID: K010511.D

43	Bromodi chl oromethane	0.496	0.539	-8.7	115	0.00
44	2-Ni trop propane	0.136	0.165	-21.3#	142	0.00
45	2-Chl oroethyl vinyl ether	0.099	0.106	-7.1	124	-0.01
46	4-Methyl -2-pentanone	0.468	0.553	-18.2	143	-0.01
47	ci s-1, 3-Di chl oropropene	0.545	0.603	-10.6	121	0.00
48 I	Chl orobenzene-d5	1.000	1.000	0.0	107	0.00
49 S	Tol uene-d8	1.302	1.312	-0.8	107	0.00
50 C	Tol uene	1.646	1.797	-9.2	116	-0.01
51	trans-1, 3-Di chl oropropene	0.709	0.806	-13.7	122	-0.01
52	1, 1, 2-Tri chl oroethane	0.359	0.401	-11.7	123	-0.01
53	Tetrachl oroethene	0.512	0.597	-16.6	123	-0.02
54	2-hexanone	0.470	0.581	-23.6#	149	0.00
55	1, 3-Di chl oropropane	0.694	0.772	-11.2	120	0.00
56	Di bromochl oromethane	0.513	0.577	-12.5	117	0.00
57	1, 2-Di bromoethane	0.459	0.520	-13.3	124	-0.01
58	1-Chl orohexane	0.532	0.620	-16.5	123	0.00
59 P	Chl orobenzene	1.091	1.210	-10.9	120	-0.01
60	1, 1, 1, 2-Tetrachl oroethane	0.450	0.486	-8.0	113	-0.01
61 C	Ethyl benzene	1.874	2.068	-10.4	117	-0.01
62	m, p-Xyl ene	1.565	1.748	-11.7	119	-0.01
63	o-Xyl ene	1.637	1.798	-9.8	116	-0.01
64	Styrene	1.089	1.235	-13.4	118	-0.01
65 P	Bromoform	0.392	0.459	-17.1	126	-0.01
66 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	109	0.00
67	l sopropyl benzene	2.806	3.108	-10.8	117	-0.01
68 S	4-Bromofl uorobenzene	0.984	0.965	1.9	108	-0.01
69	Bromobenzene	0.906	0.984	-8.6	120	0.00
70 P	1, 1, 2, 2-Tetrachl oroethane	0.994	1.108	-11.5	130	-0.01
71	trans-1, 4-Di chl oro-2-Butene	0.331	0.362	-9.4	126	-0.01
72	1, 2, 3-Tri chl oropropane	0.289	0.314	-8.7	128	-0.02
73	n-Propyl benzene	3.740	4.139	-10.7	119	-0.01
74	2-Chl orotol uene	2.696	2.905	-7.8	119	-0.01
75	4-Chl orotol uene	2.530	2.810	-11.1	122	-0.01
76	1, 3, 5-Tri methyl benzene	2.705	2.963	-9.5	119	-0.01
77	sec-Butyl benzene	3.194	3.592	-12.5	120	-0.01
78	1, 3-Di chl orobenzene	1.654	1.854	-12.1	123	-0.01
79	4-l sopropyl tol uene	2.623	3.005	-14.6	124	-0.01
80	Benzyl chl ori de	1.481	1.886	-27.3#	147	-0.02
81	1, 4-Di chl orobenzene	1.690	1.887	-11.7	124	-0.02
82	tert-Butyl benzene	2.158	2.356	-9.2	117	-0.02
83	n-Butyl benzene	2.795	3.267	-16.9	125	-0.01
84	1, 2-Di chl orobenzene	1.621	1.783	-10.0	121	-0.01
85	1, 2, 4-Tri methyl benzene	2.807	3.089	-10.0	120	-0.01
86	1, 2-Di bromo-3-Chl oropropane	0.229	0.272	-18.8	146	0.00
87	1, 2, 4-Tri chl orobenzene	1.298	1.524	-17.4	130	0.00
88	Hexachl orobutadi ene	0.806	0.939	-16.5	123	0.00
89	Naphthal ene	2.687	3.040	-13.1	134	0.00
90	1, 2, 3-Tri chl orobenzene	1.250	1.416	-13.3	128	0.00
91 I	Tert Butyl Alcohol -d10	1.000	1.000	0.0	153	0.00
92	Acrolei n	1.106	1.194	-8.0	155	-0.01
93	Tert Butyl Alcohol	2.468	2.517	-2.0	152	0.00
94	1, 4-Di oxane	0.222	0.223	-0.5	133	0.00
95	Cycl ohexanone	1.084	1.063	1.9	144	-0.02

Average % D = 12.5

Continuing Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VK417-CC417
Lab FileID: K010511.D

(#) = Out of Range
K010506.D 8260S.M

SPCC's out = 0 CCC's out = 0
Wed Oct 09 13:27:28 2002 RP1

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6048-LBS	L014735.D	1	10/08/02	ME	10/07/02	OP6048	SL816

The QC reported here applies to the following samples:

Method: SW846 8270C

F14850-1, F14850-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	441	88	51-102
	3&4-Methylphenol	1000	812	81	44-99
87-86-5	Pentachlorophenol	500	517	103	36-141
95-95-4	2,4,5-Trichlorophenol	500	498	100	46-132
88-06-2	2,4,6-Trichlorophenol	500	476	95	39-130
106-46-7	1,4-Dichlorobenzene	500	462	92	48-111
121-14-2	2,4-Dinitrotoluene	500	526	105	75-126
118-74-1	Hexachlorobenzene	500	484	97	74-115
87-68-3	Hexachlorobutadiene	500	417	83	41-105
67-72-1	Hexachloroethane	500	479	96	42-115
98-95-3	Nitrobenzene	500	482	96	66-115
110-86-1	Pyridine	500	300	60	19-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	69%	19-90%
4165-62-2	Phenol-d5	48%	10-68%
118-79-6	2,4,6-Tribromophenol	103%	36-137%
4165-60-0	Nitrobenzene-d5	97%	49-119%
321-60-8	2-Fluorobiphenyl	93%	45-118%
1718-51-0	Terphenyl-d14	108%	46-135%

Leachate Blank Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6048-LB	L014736.D	1	10/08/02	ME	10/07/02	OP6048	SL816

The QC reported here applies to the following samples:

Method: SW846 8270C

F14850-1, F14850-2

CAS No.	Compound	Result	RL	Units	Q
95-48-7	2-Methylphenol	ND	50	ug/l	
	3&4-Methylphenol	ND	50	ug/l	
87-86-5	Pentachlorophenol	ND	250	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	50	ug/l	
118-74-1	Hexachlorobenzene	ND	50	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	ug/l	
67-72-1	Hexachloroethane	ND	50	ug/l	
98-95-3	Nitrobenzene	ND	50	ug/l	
110-86-1	Pyridine	ND	50	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	65%	19-90%
4165-62-2	Phenol-d5	43%	10-68%
118-79-6	2,4,6-Tribromophenol	96%	36-137%
4165-60-0	Nitrobenzene-d5	100%	49-119%
321-60-8	2-Fluorobiphenyl	94%	45-118%
1718-51-0	Terphenyl-d14	101%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6048-MS	L014739.D	1	10/08/02	ME	10/07/02	OP6048	SL816
OP6048-MSD	L014740.D	1	10/08/02	ME	10/07/02	OP6048	SL816
F14850-2	L014738.D	1	10/08/02	ME	10/07/02	OP6048	SL816

The QC reported here applies to the following samples:

Method: SW846 8270C

F14850-1, F14850-2

CAS No.	Compound	F14850-2 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	400	80	392	78	2	51-110/21
	3&4-Methylphenol	ND	1000	726	73	714	71	2	51-108/21
87-86-5	Pentachlorophenol	ND	500	487	97	484	97	1	33-147/29
95-95-4	2,4,5-Trichlorophenol	ND	500	481	96	461	92	4	57-122/26
88-06-2	2,4,6-Trichlorophenol	ND	500	456	91	456	91	0	49-122/24
106-46-7	1,4-Dichlorobenzene	ND	500	447	89	423	85	6	46-112/23
121-14-2	2,4-Dinitrotoluene	ND	500	494	99	451	90	9	67-131/20
118-74-1	Hexachlorobenzene	ND	500	478	96	458	92	4	65-123/18
87-68-3	Hexachlorobutadiene	ND	500	415	83	399	80	4	41-106/24
67-72-1	Hexachloroethane	ND	500	460	92	446	89	3	42-115/25
98-95-3	Nitrobenzene	ND	500	476	95	454	91	5	55-122/22
110-86-1	Pyridine	ND	500	261	52	104	21	86*	17-100/38

CAS No.	Surrogate Recoveries	MS	MSD	F14850-2	Limits
367-12-4	2-Fluorophenol	62%	63%	60%	19-90%
4165-62-2	Phenol-d5	41%	43%	40%	10-68%
118-79-6	2,4,6-Tribromophenol	99%	97%	94%	36-137%
4165-60-0	Nitrobenzene-d5	94%	91%	92%	49-119%
321-60-8	2-Fluorobiphenyl	94%	92%	91%	45-118%
1718-51-0	Terphenyl-d14	99%	98%	90%	46-135%

Instrument Performance Check (DFTPP)

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SL816-DFTPP	Injection Date:	10/08/02
Lab File ID:	L014727.D	Injection Time:	12:35
Instrument ID:	GCM5L		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	109094	41.9	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) ^a	Pass
69	Mass 69 relative abundance	94575	36.3	Pass
70	Less than 2.0% of mass 69	615	0.24 (0.65) ^a	Pass
127	40.0 - 60.0% of mass 198	123701	47.5	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	260501	100.0	Pass
199	5.0 - 9.0% of mass 198	17885	6.9	Pass
275	10.0 - 30.0% of mass 198	55365	21.3	Pass
365	1.0 - 100.0% of mass 198	5165	2.0	Pass
441	Present, but less than mass 443	27212	10.4 (74.6) ^b	Pass
442	40.0 - 100.0% of mass 198	189315	72.7	Pass
443	17.0 - 23.0% of mass 442	36477	14.0 (19.3) ^c	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SL816-ICC816	L014728.D	10/08/02	12:54	00:19	Initial cal 75
SL816-IC816	L014729.D	10/08/02	13:24	00:49	Initial cal 5
SL816-IC816	L014730.D	10/08/02	13:54	01:19	Initial cal 25
SL816-IC816	L014731.D	10/08/02	14:24	01:49	Initial cal 50
SL816-IC816	L014732.D	10/08/02	14:55	02:20	Initial cal 100
SL816-IC816	L014733.D	10/08/02	15:25	02:50	Initial cal 125
OP6048-LBS	L014735.D	10/08/02	16:25	03:50	Blank Spike
OP6048-LB	L014736.D	10/08/02	16:56	04:21	Leachate Blank
F14850-1	L014737.D	10/08/02	17:26	04:51	IH-SF-001
F14850-2	L014738.D	10/08/02	17:56	05:21	IH-TS-002
OP6048-MS	L014739.D	10/08/02	18:26	05:51	Matrix Spike
OP6048-MSD	L014740.D	10/08/02	18:57	06:22	Matrix Spike Duplicate
ZZZZZZ	L014741.D	10/08/02	19:27	06:52	(unrelated sample)
OP5998-BS2	L014742.D	10/08/02	19:57	07:22	Blank Spike
OP5998-MB2	L014743.D	10/08/02	20:27	07:52	Method Blank
ZZZZZZ	L014744.D	10/08/02	20:58	08:23	(unrelated sample)
OP5998-MB	L014747.D	10/08/02	22:28	09:53	Method Blank
ZZZZZZ	L014748.D	10/08/02	22:58	10:23	(unrelated sample)
ZZZZZZ	L014749.D	10/08/02	23:29	10:54	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	SL816-DFTPP	Injection Date:	10/08/02
Lab File ID:	L014727.D	Injection Time:	12:35
Instrument ID:	GCMSL		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	L014750.D	10/08/02	23:59	11:24	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	SL816-ICC816	Injection Date:	10/08/02
Lab File ID:	L014728.D	Injection Time:	12:54
Instrument ID:	GCMSL	Method:	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	279127	5.43	983119	6.69	469216	9.10	658770	11.65	326041	16.61	197690	19.11
Upper Limit ^a	558254	5.93	1966238	7.19	938432	9.60	1317540	12.15	652082	17.11	395380	19.61
Lower Limit ^b	139564	4.93	491560	6.19	234608	8.60	329385	11.15	163021	16.11	98845	18.61

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP6048-LBS	274910	5.43	1014948	6.69	530569	9.10	771581	11.65	351461	16.60	205971	19.11
OP6048-LB	247785	5.43	853196	6.69	442039	9.10	674489	11.64	351775	16.60	190686	19.11
F14850-1	290265	5.43	1010057	6.69	506259	9.10	768222	11.64	481329	16.60	300839	19.11
F14850-2	297907	5.43	1000678	6.69	478146	9.09	681825	11.65	387759	16.59	240265	19.10
OP6048-MS	255618	5.43	896366	6.69	433915	9.10	614327	11.65	322248	16.60	206609	19.10
OP6048-MSD	319583	5.43	1123878	6.69	522199	9.10	704099	11.65	339618	16.60	213561	19.10
ZZZZZZ	357835	5.43	1290390	6.69	635651	9.09	895708	11.64	410777	16.59	236647	19.11
OP5998-BS2	275852	5.43	1013386	6.69	491610	9.10	674618	11.65	356943	16.60	212494	19.10
OP5998-MB2	363406	5.43	1289647	6.69	626000	9.09	868716	11.65	421506	16.59	245236	19.11
ZZZZZZ	307006	5.42	1011787	6.69	425967	9.09	588114	11.64	313455	16.59	172192	19.10
OP5998-MB	280186	5.42	956679	6.69	483710	9.09	730375	11.64	384210	16.59	221703	19.10
ZZZZZZ	359174	5.43	1149487	6.69	469663	9.09	583951	11.64	266115	16.59	156531	19.10
ZZZZZZ	276856	5.43	902924	6.69	428235	9.09	612275	11.65	310675	16.59	175989	19.10
ZZZZZZ	311304	5.43	968606	6.69	402218	9.09	532720	11.64	251178	16.59	141461	19.10

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8270C	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
F14850-1	L014737.D	45.0	32.0	74.0	94.0	89.0	87.0
F14850-2	L014738.D	60.0	40.0	94.0	92.0	91.0	90.0
OP6048-LB	L014736.D	65.0	43.0	96.0	100.0	94.0	101.0
OP6048-LBS	L014735.D	69.0	48.0	103.0	97.0	93.0	108.0
OP6048-MS	L014739.D	62.0	41.0	99.0	94.0	94.0	99.0
OP6048-MSD	L014740.D	63.0	43.0	97.0	91.0	92.0	98.0

Surrogate Compounds	Recovery Limits
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S1 = 2-Fluorophenol	19-90%
S2 = Phenol-d5	10-68%
S3 = 2,4,6-Tribromophenol	36-137%
S4 = Nitrobenzene-d5	49-119%
S5 = 2-Fluorobiphenyl	45-118%
S6 = Terphenyl-d14	46-135%

Initial Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL816-ICC816
 Lab FileID: L014728.D

Response Factor Report MSBNA02

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Wed Oct 09 09:11:39 2002
 Response via : Initial Calibration

Calibration Files

5 =L014729.D 25 =L014730.D 50 =L014731.D
 75 =L014728.D 100 =L014732.D 125 =L014733.D

Compound	5	25	50	75	100	125	Avg	%RSD
-----I STD-----								
1) I 1,4-Dichlorobenzene-d								
2) 1,4-Dioxane	0.506	0.508	0.521	0.511	0.498	0.497	0.507	1.75
3) N-nitrosodimethyl am	0.625	0.707	0.682	0.689	0.712	0.644	0.676	5.16
4) Pyridine	1.237	1.348	1.294	1.288	1.323	1.255	1.291	3.20
5) Benzaldehyde		0.679	0.535	0.421	0.408	0.363	0.481	26.51
6) Aniline	2.069	2.052	1.910	1.863	1.890	1.720	1.917	6.76
7) S 2-Fluorophenol	1.365	1.310	1.229	1.167	1.136	1.069	1.213	9.13
8) bis(2-Chloroethyl)e	1.318	1.342	1.271	1.231	1.233	1.167	1.260	5.08
9) S Phenol-d5	1.651	1.583	1.451	1.370	1.392	1.276	1.454	9.63
10) C Phenol	1.763	1.735	1.597	1.603	1.629	1.484	1.635	6.21
11) 2-Chlorophenol	1.510	1.478	1.426	1.376	1.379	1.309	1.413	5.23
12) 1,3-Dichlorobenzene	1.648	1.590	1.518	1.470	1.453	1.402	1.513	6.06
13) C 1,4-Dichlorobenzene	1.637	1.572	1.502	1.462	1.432	1.385	1.498	6.22
14) 1,2-Dichlorobenzene	1.555	1.523	1.420	1.371	1.384	1.316	1.428	6.50
15) Benzyl alcohol	0.893	0.891	0.839	0.859	0.894	0.803	0.863	4.29
16) bis(2-chloroisoprop	2.649	2.619	2.425	2.348	2.262	2.153	2.410	8.15
17) 2-Methylphenol	1.285	1.288	1.182	1.158	1.200	1.091	1.201	6.34
18) Acetophenone	1.850	1.829	1.608	1.548	1.548	1.426	1.635	10.35
19) Hexachloroethane	0.568	0.564	0.539	0.533	0.520	0.497	0.537	5.01
20) P N-Nitroso-di-n-prop	0.984	0.977	0.868	0.838	0.856	0.763	0.881	9.69
21) 3&4-Methylphenol	1.376	1.323	1.204	1.163	1.174	1.072	1.218	9.19
-----I STD-----								
22) I Naphthalene-d8								
23) S Nitrobenzene-d5	0.368	0.370	0.357	0.349	0.347	0.347	0.356	2.95
24) Nitrobenzene	0.374	0.369	0.347	0.345	0.341	0.339	0.353	4.22
25) Isophorone	0.727	0.716	0.664	0.652	0.650	0.613	0.670	6.45
26) C 2-Nitrophenol	0.188	0.204	0.211	0.200	0.204	0.201	0.201	3.82
27) 2,4-Dimethylphenol	0.383	0.367	0.347	0.334	0.333	0.320	0.347	6.76
28) bis(2-Chloroethoxy)	0.455	0.443	0.414	0.397	0.389	0.379	0.413	7.34
29) Benzoic Acid		0.227	0.240	0.241	0.283	0.256	0.250	8.54
30) C 2,4-Dichlorophenol	0.329	0.332	0.310	0.296	0.298	0.287	0.309	5.91
31) 1,2,4-Tri chlorobenz	0.366	0.347	0.335	0.319	0.311	0.314	0.332	6.55
32) Naphthalene	1.190	1.104	1.014	0.952	0.952	0.947	1.027	9.77
33) 4-Chloroaniline	0.481	0.470	0.423	0.402	0.390	0.378	0.424	10.03
34) 2,6-Dichlorophenol	0.334	0.317	0.294	0.277	0.270	0.267	0.293	9.30
35) C Hexachlorobutadiene	0.197	0.188	0.180	0.171	0.163	0.169	0.178	7.20
36) Caprolactam	0.115	0.115	0.101	0.100	0.104	0.092	0.105	8.81
37) C 4-Chloro-3-methylph	0.302	0.305	0.280	0.274	0.278	0.257	0.283	6.32
38) 2-Methylnaphthalene	0.758	0.727	0.671	0.638	0.628	0.604	0.671	8.95
39) 1-Methylnaphthalene	0.736	0.711	0.652	0.623	0.604	0.585	0.652	9.29
40) 1,2,4,5-Tetrachloro	0.343	0.324	0.298	0.277	0.270	0.261	0.296	10.93
-----I STD-----								
41) I Acenaphthene-d10								
42) P Hexachlorocyclopent	0.295	0.309	0.325	0.330	0.329	0.343	0.322	5.37
43) C 2,4,6-Tri chlorophen	0.453	0.449	0.437	0.417	0.424	0.425	0.434	3.35
44) 2,4,5-Tri chlorophen	0.463	0.474	0.457	0.440	0.432	0.407	0.446	5.39

Initial Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SL816-ICC816
 Lab FileID: L014728.D

45)	S	2-Fluorobiphenyl	1.636	1.545	1.473	1.384	1.359	1.345	1.457	7.99	
46)		1,1'-Bi phenyl	1.795	1.730	1.680	1.624	1.605	1.603	1.673	4.64	
47)		2-Chloronaphthalene	1.444	1.356	1.292	1.200	1.182	1.175	1.275	8.58	
48)		2-Nitroaniline	0.322	0.348	0.341	0.331	0.341	0.328	0.335	2.94	
49)		Acenaphthylene	2.076	1.997	1.885	1.793	1.753	1.725	1.871	7.52	
50)		Dimethyl phthalate	1.517	1.490	1.379	1.299	1.278	1.184	1.358	9.51	
51)		2,6-Dinitrotoluene	0.251	0.310	0.300	0.290	0.304	0.279	0.289	7.51	
52)	C	Acenaphthene	1.320	1.249	1.174	1.122	1.089	1.081	1.173	8.14	
53)		3-Nitroaniline	0.327	0.356	0.327	0.328	0.333	0.306	0.329	4.82	
54)	P	2,4-Dinitrophenol		0.139	0.147	0.147	0.170	0.162	0.153	8.08	
55)		Dibenzofuran	1.934	1.733	1.557	1.478	1.444	1.429	1.596	12.51	
56)		2,4-Dinitrotoluene	0.327	0.406	0.369	0.343	0.343	0.329	0.353	8.53	
57)	P	4-Nitrophenol	0.157	0.167	0.151	0.148	0.154	0.143	0.153	5.38	
58)		2,3,4,6-Tetrachloro Fluorene	0.302	0.311	0.284	0.284	0.280	0.278	0.290	4.60	
59)		Fluorene	1.492	1.417	1.311	1.208	1.187	1.170	1.298	10.27	
60)		4-Chlorophenyl-phen	0.716	0.653	0.630	0.563	0.563	0.552	0.613	10.64	
61)		Diethyl phthalate	1.400	1.373	1.251	1.201	1.171	1.094	1.248	9.52	
62)		4-Nitroaniline	0.341	0.326	0.295	0.291	0.298	0.281	0.305	7.57	
63)	I	Phenanthrene-d10	-----I STD-----								
64)		4,6-Dinitro-2-methy	0.137	0.143	0.139	0.151	0.150	0.144		4.24	
65)	C	n-Nitrosodiphenyl am	0.652	0.641	0.614	0.584	0.591	0.558	0.607	5.91	
66)		1,2-Diphenylhydrazin	0.892	0.833	0.805	0.811	0.797	0.761	0.816	5.39	
67)	S	2,4,6-Tribromopheno	0.090	0.088	0.084	0.081	0.079	0.076	0.083	6.51	
68)		4-Bromophenyl-pheny	0.231	0.223	0.215	0.208	0.203	0.198	0.213	5.73	
69)		Hexachlorobenzene	0.218	0.204	0.199	0.185	0.185	0.186	0.196	6.82	
70)		Atrazine	0.211	0.226	0.205	0.194	0.187	0.185	0.201	7.80	
71)	C	Pentachlorophenol	0.117	0.135	0.128	0.127	0.125	0.124	0.126	4.78	
72)		Phenanthrene	1.283	1.194	1.123	1.069	1.060	1.012	1.123	8.88	
73)		Anthracene	1.288	1.245	1.163	1.105	1.066	1.039	1.151	8.65	
74)		Carbazole	1.152	1.071	0.946	0.966	0.940	0.947	1.004	8.77	
75)		Di-n-butyl phthalate	1.297	1.346	1.295	1.198	1.141	1.156	1.239	6.87	
76)	C	Fluoranthene	1.176	1.167	1.080	1.003	0.956	0.997	1.063	8.73	
77)	I	Chrysene-d12	-----I STD-----								
78)		Benzo[a]fluoranthene	0.493	0.683	0.528	0.625	0.593	0.591	0.585	11.57	
79)		Pyrene	2.054	2.134	1.926	1.970	1.947	1.804	1.972	5.73	
80)	S	Terphenyl-d14	1.110	1.151	1.063	1.127	1.091	0.992	1.089	5.18	
81)		Butyl benzyl phthalat	0.747	0.882	0.880	0.892	0.842	0.825	0.845	6.41	
82)		3,3'-Dichlorobenzid	0.427	0.436	0.382	0.425	0.436	0.437	0.424	4.96	
83)		Benzo[a]anthracene	1.397	1.424	1.404	1.373	1.367	1.364	1.388	1.73	
84)		Chrysene	1.422	1.428	1.382	1.351	1.334	1.345	1.377	2.93	
85)		bis(2-Ethylhexyl)ph	0.941	1.124	1.146	1.126	1.078	1.091	1.084	6.86	
86)	I	Perylene-d12	-----I STD-----								
87)	C	Di-n-octyl phthalate	2.265	2.908	2.988	2.941	2.560	2.505	2.694	10.89	
88)		Benzo[b]fluoranthene	1.738	1.834	1.820	1.731	1.694	1.642	1.743	4.21	
89)		Benzo[k]fluoranthene	1.942	1.914	1.821	1.756	1.643	1.670	1.791	6.91	
90)	C	Benzo[a]pyrene	1.630	1.633	1.556	1.557	1.530	1.488	1.566	3.64	
91)		Indeno[1,2,3-cd]pyr	1.211	1.144	1.062	1.212	1.185	1.335	1.192	7.55	
92)		Dibenz[a,h]anthracene	1.113	1.091	1.048	1.154	1.176	1.298	1.147	7.57	
93)		Benzo[g,h,i]perylene	1.340	1.185	1.109	1.227	1.230	1.405	1.249	8.55	

(#) = Out of Range

GC Volatiles

QC Data Summaries

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Surrogate Recovery Summaries**
- **GC Surrogate Retention Time Summaries**
- **Initial and Continuing Calibration Summaries**

Blank Spike Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1271-BS	CD032126.D	1	10/04/02	RM	n/a	n/a	GCD1271

The QC reported here applies to the following samples:

Method: SW846 8015

F14850-1, F14850-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH-GRO (C6-C10)	20	18.8	94	67-136

CAS No.	Surrogate Recoveries	BSP	Limits
460-00-4	4-Bromofluorobenzene	91%	57-144%
98-08-8	aaa-Trifluorotoluene	94%	65-132%

Method Blank Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
GCD1271-MB	CD032127.D 1		10/04/02	RM	n/a	n/a	GCD1271

The QC reported here applies to the following samples:

Method: SW846 8015

F14850-1, F14850-2

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	5.0	mg/kg	

CAS No.	Surrogate Recoveries		Limits
460-00-4	4-Bromofluorobenzene	74%	57-144%
98-08-8	aaa-Trifluorotoluene	81%	65-132%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F14850-2MS	CD032130.D 1		10/04/02	RM	n/a	n/a	GCD1271
F14850-2MSD	CD032131.D 1		10/04/02	RM	n/a	n/a	GCD1271
F14850-2	CD032129.D 1		10/04/02	RM	n/a	n/a	GCD1271

The QC reported here applies to the following samples:

Method: SW846 8015

F14850-1, F14850-2

CAS No.	Compound	F14850-2 mg/kg	Spike Q	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH-GRO (C6-C10)	ND	25.4	25.3	100	24.7	97	2	58-151/18

CAS No.	Surrogate Recoveries	MS	MSD	F14850-2	Limits
460-00-4	4-Bromofluorobenzene	86%	93%	72%	57-144%
98-08-8	aaa-Trifluorotoluene	96%	98%	81%	65-132%

Volatile Surrogate Recovery Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8015	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F14850-1	CD032128.D	72.0	82.0
F14850-2	CD032129.D	72.0	81.0
F14850-2MS	CD032130.D	86.0	96.0
F14850-2MSD	CD032131.D	93.0	98.0
GCD1271-BS	CD032126.D	91.0	94.0
GCD1271-MB	CD032127.D	74.0	81.0

Surrogate Compounds	Recovery Limits
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S1 = 4-Bromofluorobenzene	57-144%
S2 = aaa-Trifluorotoluene	65-132%

(a) Recovery from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std: GCD1271-CC1256	Injection Date: 10/04/02
Lab File ID: CD032125.D	Injection Time: 17:29
Instrument ID: GCCD	Method: SW846 8015

S1^a S2^a
 RT RT

Check Std	13.68	9.98
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
GCD1271-BS	CD032126.D	10/04/02	17:57	13.69	9.98
GCD1271-MB	CD032127.D	10/04/02	18:24	13.69	9.98
F14850-1	CD032128.D	10/04/02	18:52	13.69	9.98
F14850-2	CD032129.D	10/04/02	19:19	13.69	9.98
F14850-2MS	CD032130.D	10/04/02	19:47	13.68	9.98
F14850-2MSD	CD032131.D	10/04/02	20:15	13.68	9.98
ZZZZZZ	CD032132.D	10/04/02	20:42	13.68	9.98
ZZZZZZ	CD032133.D	10/04/02	21:10	13.68	9.98
ZZZZZZ	CD032134.D	10/04/02	21:38	13.68	9.98
ZZZZZZ	CD032135.D	10/04/02	22:05	13.68	9.98

Surrogate
 Compounds

S1 = 4-Bromofluorobenzene
 S2 = aaa-Trifluorotoluene

(a) Retention time from GC signal #2

Initial Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GCD1256-ICC1256
Lab FileID: CD031858.D

Response Factor Report VOA2

Method : C:\HPCHEM\1\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B/TPHGRO by GC-PID/FID
Last Update : Thu Sep 26 14:36:24 2002
Response via : Initial Calibration

Calibration Files

1 =CD031856.D 2 =CD031857.D 3 =CD031858.D
4 =CD031855.D 5 =CD031859.D 6 =CD031860.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) S a, a, a-TFT	1.516	1.518	1.528	1.620	1.711	1.771	1.611 E3	6.82
2) S BFB	4.656	4.612	4.734	4.792	5.176	5.293	4.877 E3	5.87

Signal #2

4) S a, a, a-TFT#2	1.564	1.553	1.774	1.859	1.927	2.069	1.791 E4	11.41
5) S BFB #2	1.081	1.070	1.156	1.216	1.254	1.426	1.200 E4	11.00
6) H TPH-GRO (C6-C10)	1.713	1.478	1.400	1.401	1.342	1.322	1.443 E4	9.93

----- Linear regression ----- Coefficient = 0.9993
Response Ratio = 455869.99930 + 12869.78036 *A

(#) = Out of Range

GRO.M

Fri Sep 27 12:01:10 2002 CDUV

Continuing Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GCD1271-CC1256
Lab FileID: CD032125.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100402\CD032125.D\FID1B.CH Vial : 15
Signal #2 : C:\HPCHEM\1\DATA\100402\CD032125.D\FID2A.CH
Acq On : 4 Oct 2002 5:29 pm Operator: RondaM
Sample : CC1256-400 Inst : VOA2
Misc : gc2009,gcd1271,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B/TPHGRO by GC-PID/FID
Last Update : Mon Sep 30 15:38:43 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 S	a, a, a-TFT	20.000	19.916	0.4	105	0.02
2 S	BFB	20.000	18.575	7.1	96	0.02

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
4 S	a, a, a-TFT#2	20.000	18.229	8.9	92	0.02
5 S	BFB #2	20.000	17.046	14.8	88	0.02
6 H	TPH-GRO (C6-C10)	400.000	373.774	6.6	94	0.00

Average % D = 7.5

(#) = Out of Range
CD031858.D GRO.M

SPCC's out = 0 CCC's out = 0
Sat Oct 05 09:45:49 2002 CDUV

Continuing Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GCD1271-CC1256
Lab FileID: CD032136.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\1\DATA\100402\CD032136.D\FID1B.CH Vial : 25
Signal #2 : C:\HPCHEM\1\DATA\100402\CD032136.D\FID2A.CH
Acq On : 4 Oct 2002 10:33 pm Operator: RondaM
Sample : CC1256-600 Inst : VOA2
Misc : gc2009,gcd1271,,,,, Multiplr: 1.00
IntFile Signal #1: PID.E IntFile Signal #2: events2.e

Method : C:\HPCHEM\1\METHODS\GRO.M (Chemstation Integrator)
Title : EPA 8015B/TPHGRO by GC-PID/FID
Last Update : Mon Sep 30 15:38:43 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
1 S	a, a, a-TFT	20.000	21.511	-7.6	107	0.02
2 S	BFB	20.000	19.938	0.3	101	0.01

Signal #2

	Compound	Amount	Calc.	%Dev	Area%	Dev(min)
4 S	a, a, a-TFT#2	20.000	19.205	4.0	93	0.02
5 S	BFB #2	20.000	18.252	8.7	90	0.01
6 H	TPH-GRO (C6-C10)	600.000	548.583	8.6	89	0.00

Average % D = 5.8

(#) = Out of Range
CD031855.D GRO.M

SPCC's out = 0 CCC's out = 0
Sat Oct 05 09:46:31 2002 CDUV

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- DDT/Endrin Breakdown Checks
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6030-BS	OP24378.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862

The QC reported here applies to the following samples:

Method: SW846 8015 M

F14850-1, F14850-2

CAS No.	Compound	Spike mg/kg	BSP mg/kg	BSP %	Limits
	TPH (C10-C28)	33.3	32.0	96	55-118

CAS No.	Surrogate Recoveries	BSP	Limits
84-15-1	o-Terphenyl	99%	64-121%

Blank Spike Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6049-LBS	DD07255.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274

The QC reported here applies to the following samples:

Method: SW846 8081A

F14850-1, F14850-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
58-89-9	gamma-BHC (Lindane)	5	4.5	90	71-132
72-20-8	Endrin	5	4.4	88	44-156
76-44-8	Heptachlor	5	4.5	90	64-132
1024-57-3	Heptachlor epoxide	5	4.5	90	73-134
72-43-5	Methoxychlor	5	4.0	80	71-135

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	83%	52-131%
2051-24-3	Decachlorobiphenyl	70%	16-153%

Leachate Blank Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6049-LB	DD07256.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274

The QC reported here applies to the following samples:

Method: SW846 8081A

F14850-1, F14850-2

CAS No.	Compound	Result	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.50	ug/l	
12789-03-6	Chlordane	ND	5.0	ug/l	
72-20-8	Endrin	ND	1.0	ug/l	
76-44-8	Heptachlor	ND	0.50	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.50	ug/l	
72-43-5	Methoxychlor	ND	1.0	ug/l	
8001-35-2	Toxaphene	ND	25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	80%	52-131%
2051-24-3	Decachlorobiphenyl	69%	16-153%

Method Blank Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6030-MB	OP24377.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862

The QC reported here applies to the following samples:

Method: SW846 8015 M

F14850-1, F14850-2

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	8.3	mg/kg	

CAS No.	Surrogate Recoveries	Limits
84-15-1	o-Terphenyl	96% 64-121%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6030-MS	OP24380.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
OP6030-MSD	OP24381.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
F14850-1	OP24379.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862

The QC reported here applies to the following samples:

Method: SW846 8015 M

F14850-1, F14850-2

CAS No.	Compound	F14850-1 mg/kg	Spike Q	mg/kg	MS mg/kg	MS %	MSD mg/kg	MSD %	RPD	Limits Rec/RPD
	TPH (C10-C28)	5.99	J	35.8	32.6	74	34.0	79	4	31-145/34

CAS No.	Surrogate Recoveries	MS	MSD	F14850-1	Limits
84-15-1	o-Terphenyl	92%	96%	93%	64-121%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6049-MS	DD07260.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
OP6049-MSD	DD07261.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
F14850-1	DD07257.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274

The QC reported here applies to the following samples:

Method: SW846 8081A

F14850-1, F14850-2

CAS No.	Compound	F14850-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	5	6.9	138	4.6	92	40*	59-139/23
72-20-8	Endrin	ND	5	7.1	142	4.6	92	43*	61-152/25
76-44-8	Heptachlor	ND	5	6.8	136*	4.5	90	41*	60-132/23
1024-57-3	Heptachlor epoxide	ND	5	6.9	138*	4.4	88	44*	68-136/21
72-43-5	Methoxychlor	ND	5	6.4	128	4.0	80	46*	56-145/27

CAS No.	Surrogate Recoveries	MS	MSD	F14850-1	Limits
877-09-8	Tetrachloro-m-xylene	138%*	86%	86%	52-131%
2051-24-3	Decachlorobiphenyl	108%	70%	68%	16-153%

DDT/Endrin Breakdown Check

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GDD274-DDT	Injection Date:	10/08/02
Lab File ID:	DD07251.D	Injection Time:	11:40
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	21743	31657
4,4'-DDE	0	0
4,4'-DDT	220141	345233

DDT Breakdown ^a	9 %	8.4 %
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Endrin aldehyde	3233	4170
Endrin ketone	7750	13155
Endrin	308945	586579

Endrin Breakdown ^b	3.4 %	2.9 %
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(a) Calculated as: $(\text{DDD} + \text{DDE}) / (\text{DDD} + \text{DDE} + \text{DDT}) \times 100$

(b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD274-CC273	DD07252.D	10/08/02	12:38	00:58	Continuing cal 40
OP6049-LBS	DD07255.D	10/08/02	13:59	02:19	Blank Spike
OP6049-LB	DD07256.D	10/08/02	14:26	02:46	Leachate Blank
F14850-1	DD07257.D	10/08/02	14:53	03:13	IH-SF-001
F14850-2	DD07258.D	10/08/02	15:20	03:40	IH-TS-002
ZZZZZZ	DD07259.D	10/08/02	15:47	04:07	(unrelated sample)
OP6049-MS	DD07260.D	10/08/02	16:14	04:34	Matrix Spike
OP6049-MSD	DD07261.D	10/08/02	16:40	05:00	Matrix Spike Duplicate
GDD274-CC273	DD07262.D	10/08/02	17:07	05:27	Continuing cal 40
GDD274-CC273	DD07269.D	10/08/02	20:15	08:35	Continuing cal 40
GDD274-ECC273	DD07275.D	10/08/02	22:56	11:16	Ending cal 20

DDT/Endrin Breakdown Check

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	GDD273-DDT	Injection Date:	10/07/02
Lab File ID:	DD07215.D	Injection Time:	10:44
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	9920	16169
4,4'-DDE	0	0
4,4'-DDT	311303	481450

DDT Breakdown ^a	3.1 %	3.2 %
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Endrin aldehyde	3425	3819
Endrin ketone	10776	15708
Endrin	366524	676657

Endrin Breakdown ^b	3.7 %	2.8 %
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(a) Calculated as: $(\text{DDD} + \text{DDE}) / (\text{DDD} + \text{DDE} + \text{DDT}) \times 100$

(b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD273-IC273	DD07216.D	10/07/02	11:11	00:27	Initial cal 5
GDD273-IC273	DD07217.D	10/07/02	11:38	00:54	Initial cal 10
GDD273-IC273	DD07218.D	10/07/02	12:05	01:21	Initial cal 20
GDD273-ICC273	DD07219.D	10/07/02	12:31	01:47	Initial cal 40
GDD273-IC273	DD07220.D	10/07/02	12:58	02:14	Initial cal 60
GDD273-IC273	DD07221.D	10/07/02	13:25	02:41	Initial cal 80

Semivolatile Surrogate Recovery Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8081A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F14850-1	DD07257.D	86.0	68.0
F14850-2	DD07258.D	91.0	76.0
OP6049-LB	DD07256.D	80.0	69.0
OP6049-LBS	DD07255.D	83.0	70.0
OP6049-MS	DD07260.D	138.0*	108.0
OP6049-MSD	DD07261.D	86.0	70.0

Surrogate Compounds Recovery Limits

S1 = Tetrachloro-m-xylene 52-131%
S2 = Decachlorobiphenyl 16-153%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8015 M	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
F14850-1	OP24379.D	93.0
F14850-2	OP24382.D	95.0
OP6030-BS	OP24378.D	99.0
OP6030-MB	OP24377.D	96.0
OP6030-MS	OP24380.D	92.0
OP6030-MSD	OP24381.D	96.0

Surrogate Compounds	Recovery Limits
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S1 = o-Terphenyl	64-121%
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(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std: GDD274-CC273	Injection Date: 10/08/02
Lab File ID: DD07252.D	Injection Time: 12:38
Instrument ID: GCDD	Method: SW846 8081A

S1^a S2^a
RT RT

Check Std	6.37	16.10
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
OP6049-LBS	DD07255.D	10/08/02	13:59	6.37	16.10
OP6049-LB	DD07256.D	10/08/02	14:26	6.37	16.10
F14850-1	DD07257.D	10/08/02	14:53	6.37	16.10
F14850-2	DD07258.D	10/08/02	15:20	6.37	16.10
ZZZZZ	DD07259.D	10/08/02	15:47	6.37	16.10
OP6049-MS	DD07260.D	10/08/02	16:14	6.37	16.10
OP6049-MSD	DD07261.D	10/08/02	16:40	6.37	16.10

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GOP862-ICC862	Injection Date:	10/08/02
Lab File ID:	OP24373.D	Injection Time:	18:14
Instrument ID:	GCOP	Method:	SW846 8015 M

S1^a
RT

Check Std	4.26
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP6030-MB	OP24377.D	10/08/02	19:26	4.26
OP6030-BS	OP24378.D	10/08/02	19:44	4.26
F14850-1	OP24379.D	10/08/02	20:02	4.26
OP6030-MS	OP24380.D	10/08/02	20:20	4.26
OP6030-MSD	OP24381.D	10/08/02	20:38	4.26
F14850-2	OP24382.D	10/08/02	20:56	4.26
ZZZZZZ	OP24383.D	10/08/02	21:14	4.26
GOP862-ECC862	OP24384.D	10/08/02	21:32	4.26

Surrogate
Compounds

S1 = o-Terphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GOP862-ICC862
Lab FileID: OP24373.D

Response Factor Report FID 2

Method : C:\HPCHEM\2\METHODS\DRO_F.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Wed Oct 09 08:03:47 2002
Response via : Initial Calibration

Calibration Files

1 =OP24369.D 2 =OP24370.D 3 =OP24371.D
4 =OP24372.D 5 =OP24373.D 6 =OP24374.D

Compound	1	2	3	4	5	6	Avg	%RSD
1) S 0-TERPHENYL	3.718	3.746	3.957	4.100	3.943	4.027	3.915 E4	3.90
2) H TPH (C10-C28)	3.080	3.284	3.493	3.810	3.637	3.544	3.474 E4	7.46

Average % RSD = 5.7

(#) = Out of Range

DRO_F.M

Wed Oct 09 08:52:52 2002

Continuing Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GOP862-ECC862
Lab FileID: OP24384.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\2\DATA\1008DRO\OP24384.D Vial : 6
Acq On : 8 Oct 2002 9:32 pm Operator: nareshj
Sample : ECC862-2000 Inst : FID 2
Misc : op6030, gop862, 30.2, , , 1, , soil Multiplr: 1.00
IntFile : events.e

Method : C:\HPCHEM\2\METHODS\DRO_F.M (Chemstation Integrator)
Title : TPH by SW846 8015B
Last Update : Wed Oct 09 08:03:47 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 25% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area	% Dev(mi n)
1 S	O-TERPHENYL	100.000	104.060	-4.1	103	0.00
2 H	TPH (C10-C28)	2000.000	2146.536	-7.3	103	0.00

Average % D = 5.7

(#) = Out of Range
OP24373.D DRO_F.M

SPCC's out = 0 CCC's out = 0
Wed Oct 09 08:53:05 2002

Initial Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD273-ICC273
 Lab FileID: DD07219.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 09 10:33:57 2002
 Response via : Initial Calibration

Calibration Files

5 =DD07216.D 10 =DD07217.D 20 =DD07218.D
 40 =DD07219.D 60 =DD07220.D 80 =DD07221.D c200 =DD07223.D

Compound	5	10	20	40	60	80	c200	Avg	%RSD
1)S Tetrachl oro-m-xyl	5.698	6.005	6.339	6.235	6.548	6.843		6.278	E3 6.41
2) al pha-BHC	0.868	0.959	1.043	1.093	1.165	1.205		1.055	E4 12.04
3) gamma-BHC (Li ndan	7.696	8.727	9.136	9.265	9.546	9.950		9.053	E3 8.62
4) beta-BHC	3.123	3.319	3.252	3.085	3.260	3.311		3.225	E3 3.05
5) Heptachl or	7.536	8.254	8.612	8.625	9.349	9.454		8.639	E3 8.24
6) del ta-BHC	6.414	7.309	7.428	7.804	8.331	8.470		7.626	E3 9.90
7) Aldrin	7.371	7.752	8.102	8.204	8.732	9.028		8.198	E3 7.45
8) Heptachl or Epoxi d	6.698	7.378	7.381	7.291	7.600	7.824		7.362	E3 5.14
9) gamma-Chl ordane	6.486	7.053	7.168	7.228	7.678	7.954		7.261	E3 7.05
10) al pha-Chl ordane	6.335	6.908	7.187	6.981	7.519	7.497		7.071	E3 6.24
11) Endosul fan I	6.753	6.979	6.924	6.857	7.358	7.316		7.031	E3 3.54
12) 4, 4' -DDE	5.776	6.489	6.619	6.855	7.172	7.781		6.782	E3 9.95
13) Di el drin	6.428	7.103	7.436	7.414	8.083	8.075		7.423	E3 8.42
14) Endrin	5.955	6.729	6.603	6.842	7.220	7.444		6.799	E3 7.65
15) 4, 4' -DDD	5.258	5.639	5.970	5.861	6.297	6.677		5.950	E3 8.35
16) Endosul fan II	5.839	6.181	6.261	6.455	6.800	6.764		6.383	E3 5.76
17) 4, 4' -DDT	5.067	5.411	5.475	5.700	6.137	6.590		5.730	E3 9.60
18) Endrin Al dehyde	3.957	4.200	4.250	4.102	4.377	4.348		4.206	E3 3.74
19) Endosul fan Sul fat	5.468	5.857	5.494	5.435	5.908	5.690		5.642	E3 3.67
20) Methoxychl or	2.457	2.675	2.487	2.428	2.554	2.718		2.553	E3 4.67
21) Endrin Ketone	4.966	5.451	5.477	5.440	5.994	5.709		5.506	E3 6.18
22)L1Chl ordane-A							2.597	2.597	E2 0.00
23)L1Chl ordane-B							3.684	3.684	E2 0.00
24)L1Chl ordane-C							1.015	1.015	E3 0.00
25)L1Chl ordane-D							6.351	6.351	E2 0.00
26)L1Chl ordane-E							1.369	1.369	E2 0.00
27)L1Chl ordane-F							2.821	2.821	E2 0.00
28)H Toxaphene								1.008	E5 0.00
29)SCDecachl orobi pheny	3.076	2.907	2.709	2.491	2.596	2.640		2.736	E3 7.92

Signal #2

1)S Tetrachl oro-m-xyl	0.937	1.057	1.101	1.092	1.154	1.210		1.092	E4 8.50
2) al pha-BHC	1.524	1.768	1.943	2.001	2.180	2.300		1.953	E4 14.34
3) gamma-BHC (Li ndan	1.521	1.747	1.866	1.896	2.043	2.114		1.864	E4 11.42
4) beta-BHC	6.201	6.757	6.714	6.371	6.705	6.926		6.612	E3 4.09
5) Heptachl or	1.580	1.771	1.886	1.909	2.026	2.092		1.877	E4 9.79
6) del ta-BHC	1.245	1.420	1.501	1.584	1.692	1.788		1.538	E4 12.66
7) Aldrin	1.412	1.607	1.671	1.722	1.832	1.910		1.692	E4 10.38
8) Heptachl or Epoxi d	1.237	1.385	1.430	1.435	1.520	1.587		1.432	E4 8.39
9) gamma-Chl ordane	1.199	1.327	1.391	1.378	1.497	1.547		1.390	E4 8.89
10) al pha-Chl ordane	1.146	1.284	1.307	1.301	1.397	1.463		1.316	E4 8.22
11) Endosul fan I	1.082	1.214	1.248	1.257	1.340	1.380		1.254	E4 8.32
12) 4, 4' -DDE	1.000	1.126	1.205	1.236	1.349	1.397		1.219	E4 11.92
13) Di el drin	1.101	1.250	1.346	1.355	1.477	1.547		1.346	E4 11.83
14) Endrin	1.022	1.134	1.180	1.209	1.313	1.397		1.209	E4 10.94
15) 4, 4' -DDD	0.827	0.906	0.935	0.950	1.048	1.093		0.960	E4 10.08
16) Endosul fan II	0.891	0.986	0.988	1.005	1.083	1.123		1.012	E4 8.06

Initial Calibration Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GDD273-ICC273
Lab FileID: DD07219.D

17)	4, 4' -DDT	6.971	7.800	8.161	8.441	9.016	9.660	8.341	E3	11.25
18)	Endrin Aldehyde	4.327	4.860	4.863	4.821	5.094	5.350	4.886	E3	6.95
19)	Endosulfan Sulfat	7.101	7.627	7.757	7.753	8.126	8.391	7.793	E3	5.68
20)	Methoxychlor	3.786	3.889	3.872	3.841	4.018	4.272	3.946	E3	4.48
21)	Endrin Ketone	7.041	7.306	7.312	7.313	7.999	8.036	7.501	E3	5.51
22)	L1Chlordane-A							5.571	E2	0.00
23)	L1Chlordane-B							7.714	E2	0.00
24)	L1Chlordane-C							1.413	E3	0.00
25)	L1Chlordane-D							1.236	E3	0.00
26)	L1Chlordane-E							1.069	E3	0.00
27)	L1Chlordane-F							4.418	E2	0.00
28)	H Toxaphene							1.426	E5	0.00
29)	SCDecachlorobiphenyl	4.609	4.651	4.388	4.148	4.249	4.437	4.414	E3	4.46

(#) = Out of Range ### Number of calibration levels exceeded format ###

8081A.M

Wed Oct 09 11:05:09 2002

GCECD2

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD274-CC273
 Lab FileID: DD07252.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1008PEST\DD07252.D\ECD1B.CH Vial : 3
 Signal #2 : C:\HPCHEM\2\DATA\1008PEST\DD07252.D\ECD2A.CH
 Acq On : 08 Oct 2002 12:38 pm Operator: stephw
 Sample : CC273-40 Inst : ECD 4
 Misc : op6016,gdd274,30.0,,,10,1,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 09 10:33:57 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	39.037	2.4	98	0.00
2	alpha-BHC	40.000	39.601	1.0	96	0.00
3	gamma-BHC (Lindane)	40.000	39.218	2.0	96	0.00
4	beta-BHC	40.000	36.806	8.0	96	0.00
5	Heptachlor	40.000	37.525	6.2	94	0.00
6	delta-BHC	40.000	37.745	5.6	92	0.00
7	Aldrin	40.000	37.295	6.8	93	0.00
8	Heptachlor Epoxide	40.000	38.189	4.5	96	0.00
9	gamma-Chlordane	40.000	36.512	8.7	92	0.00
10	alpha-Chlordane	40.000	36.906	7.7	93	0.00
11	Endosulfan I	40.000	36.533	8.7	94	0.00
12	4,4'-DDE	40.000	37.714	5.7	93	0.00
13	Dieldrin	40.000	37.364	6.6	94	0.00
14	Endrin	40.000	37.565	6.1	93	0.00
15	4,4'-DDD	40.000	37.430	6.4	95	0.00
16	Endosulfan II	40.000	36.602	8.5	90	0.00
17	4,4'-DDT	40.000	33.794	15.5#	85	0.00
18	Endrin Aldehyde	40.000	36.995	7.5	95	0.00
19	Endosulfan Sulfate	40.000	34.229	14.4	89	0.00
20	Methoxychlor	40.000	32.252	19.4#	85	0.00
21	Endrin Ketone	40.000	34.305	14.2	87	0.00
29 SC	Decachlorobiphenyl	40.000	29.512	26.2	81	0.01

Signal #2

1 S	Tetrachloro-m-xylene	40.000	40.790	-2.0	102	0.00
2	alpha-BHC	40.000	41.068	-2.7	100	0.00
3	gamma-BHC (Lindane)	40.000	39.811	0.5	98	0.00
4	beta-BHC	40.000	37.443	6.4	97	0.00
5	Heptachlor	40.000	40.405	-1.0	99	0.00
6	delta-BHC	40.000	38.931	2.7	95	0.00
7	Aldrin	40.000	39.665	0.8	97	0.00
8	Heptachlor Epoxide	40.000	38.853	2.9	97	0.00
9	gamma-Chlordane	40.000	39.428	1.4	99	0.00
10	alpha-Chlordane	40.000	38.804	3.0	98	0.00
11	Endosulfan I	40.000	38.806	3.0	97	0.00
12	4,4'-DDE	40.000	39.895	0.3	98	0.00
13	Dieldrin	40.000	40.274	-0.7	100	0.00
14	Endrin	40.000	40.451	-1.1	101	0.00
15	4,4'-DDD	40.000	39.405	1.5	100	0.00
16	Endosulfan II	40.000	38.922	2.7	98	0.00

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD274-CC273
 Lab FileID: DD07252.D

17	4, 4' -DDT	40.000	36.685	8.3	91	0.00
18	Endrin Aldehyde	40.000	38.539	3.7	98	0.01
19	Endosulfan Sulfate	40.000	37.788	5.5	95	0.01
20	Methoxychlor	40.000	35.103	12.2	90	0.01
21	Endrin Ketone	40.000	36.339	9.2	93	0.02
29 SC	Decachlorobiphenyl	40.000	32.893	17.8	87	0.02

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1008PEST\DD07252.D\ECD1B.CH Vial : 3
 Signal #2 : C:\HPCHEM\2\DATA\1008PEST\DD07252.D\ECD2A.CH
 Acq On : 08 Oct 2002 12:38 pm Operator: stephw
 Sample : CC273-40 Inst : ECD 4
 Misc : op6016,gdd274,30.0,,,10,1,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 09 10:33:57 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.37#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.62#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.30#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.51#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.59#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.96#
28 H Toxaphene	-1.000	0.000	0.0	0	-13.14#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.88#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-9.11#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-11.03#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-11.14#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.16#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-12.17#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.94#

(#) = Out of Range
 DD07219.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Wed Oct 09 16:05:06 2002 GCECD2

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD274-CC273
 Lab FileID: DD07262.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1008PEST\DD07262.D\ECD1B.CH Vial : 13
 Signal #2 : C:\HPCHEM\2\DATA\1008PEST\DD07262.D\ECD2A.CH
 Acq On : 08 Oct 2002 5:07 pm Operator: stephw
 Sample : CC273-40 Inst : ECD 4
 Misc : op6049,gdd274,100,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 09 10:33:57 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	39.777	0.6	100	0.00
2	alpha-BHC	40.000	39.054	2.4	94	0.00
3	gamma-BHC (Lindane)	40.000	39.758	0.6	97	0.00
4	beta-BHC	40.000	37.390	6.5	98	0.00
5	Heptachlor	40.000	38.830	2.9	97	0.00
6	delta-BHC	40.000	38.879	2.8	95	0.00
7	Aldrin	40.000	39.146	2.1	98	0.00
8	Heptachlor Epoxide	40.000	37.549	6.1	95	0.00
9	gamma-Chlordane	40.000	37.288	6.8	94	0.00
10	alpha-Chlordane	40.000	38.898	2.8	99	0.00
11	Endosulfan I	40.000	37.763	5.6	97	0.00
12	4,4'-DDE	40.000	38.559	3.6	95	0.00
13	Dieldrin	40.000	38.241	4.4	96	0.00
14	Endrin	40.000	39.210	2.0	97	0.00
15	4,4'-DDD	40.000	39.136	2.2	99	0.00
16	Endosulfan II	40.000	37.831	5.4	94	0.00
17	4,4'-DDT	40.000	36.198	9.5	91	0.00
18	Endrin Aldehyde	40.000	36.451	8.9	93	0.00
19	Endosulfan Sulfate	40.000	36.999	7.5	96	0.00
20	Methoxychlor	40.000	34.405	14.0	90	0.00
21	Endrin Ketone	40.000	36.236	9.4	92	0.00
29 SC	Decachlorobiphenyl	40.000	32.533	18.7	89	0.02

Signal #2

1 S	Tetrachloro-m-xylene	40.000	42.995	-7.5	107	0.00
2	alpha-BHC	40.000	41.521	-3.8	101	0.00
3	gamma-BHC (Lindane)	40.000	40.860	-2.1	100	0.00
4	beta-BHC	40.000	39.193	2.0	102	0.00
5	Heptachlor	40.000	40.875	-2.2	101	0.00
6	delta-BHC	40.000	40.406	-1.0	98	0.00
7	Aldrin	40.000	40.628	-1.6	100	0.00
8	Heptachlor Epoxide	40.000	40.169	-0.4	100	0.00
9	gamma-Chlordane	40.000	42.220	-5.5	106	0.00
10	alpha-Chlordane	40.000	41.231	-3.1	104	0.00
11	Endosulfan I	40.000	41.164	-2.9	103	0.00
12	4,4'-DDE	40.000	40.722	-1.8	100	0.00
13	Dieldrin	40.000	42.122	-5.3	105	0.00
14	Endrin	40.000	41.223	-3.1	103	0.00
15	4,4'-DDD	40.000	40.921	-2.3	103	0.00
16	Endosulfan II	40.000	40.714	-1.8	103	0.00

Continuing Calibration Summary

Job Number: F14850
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD274-CC273
 Lab FileID: DD07262.D

17	4, 4' -DDT	40.000	39.890	0.3	99	0.00
18	Endrin Aldehyde	40.000	39.666	0.8	101	0.01
19	Endosulfan Sulfate	40.000	38.973	2.6	98	0.01
20	Methoxychlor	40.000	38.294	4.3	98	0.01
21	Endrin Ketone	40.000	38.944	2.6	100	0.02
29 SC	Decachlorobiphenyl	40.000	35.719	10.7	95	0.02

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1008PEST\DD07262.D\ECD1B.CH Vial : 13
 Signal #2 : C:\HPCHEM\2\DATA\1008PEST\DD07262.D\ECD2A.CH
 Acq On : 08 Oct 2002 5:07 pm Operator: stephw
 Sample : CC273-40 Inst : ECD 4
 Misc : op6049,gdd274,100,,,10,1,water Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Wed Oct 09 10:33:57 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.37#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.62#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.30#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.51#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.59#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.96#
28 H Toxaphene	-1.000	0.000	0.0	0	-13.14#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.88#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-9.11#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-11.03#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-11.14#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.16#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-12.17#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.94#

(#) = Out of Range
 DD07219.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Wed Oct 09 16:05:09 2002 GCECD2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC Date Analyzed: 10/08/02 Methods: SW846 6010B
Analyst: DM Run ID: MA3009
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
10: 20	MA3009-I CV1	1		
10: 23	MA3009-I CB1	1		
10: 27	MA3009-CRI 1	1		
10: 37	MA3009-I CSA1	1		
10: 42	MA3009-I CSA2	1		
10: 43	MA3009-I CSAB1	1		
10: 52	MA3009-CCV1	1		
10: 59	MA3009-CCB1	1		
11: 04	MP4790-MB1	1		
11: 08	MP4790-B1	1		
11: 15	F14880-2	1		(sample used for QC only; not part of login F14850)
11: 20	MP4790-D1	1		
11: 24	MP4790-SD1	5		
11: 29	MP4790-S1	1		
11: 33	MP4790-S2	1		
11: 41	ZZZZZZ	1		
11: 46	ZZZZZZ	1		
11: 50	ZZZZZZ	1		
11: 55	MA3009-CCV2	1		
12: 02	MA3009-CCB2	1		
12: 06	ZZZZZZ	1		
12: 11	ZZZZZZ	1		
12: 15	ZZZZZZ	1		
12: 20	ZZZZZZ	1		
12: 24	ZZZZZZ	1		
12: 29	ZZZZZZ	1		
12: 33	ZZZZZZ	1		
12: 38	ZZZZZZ	1		
12: 42	ZZZZZZ	1		
12: 47	ZZZZZZ	1		
12: 51	MA3009-CCV3	1		
12: 58	MA3009-CCB3	1		
13: 18	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC Date Analyzed: 10/08/02 Methods: SW846 6010B
Analyst: DM Run ID: MA3009
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
13:22	ZZZZZZ	1		
13:25	ZZZZZZ	1		
13:29	ZZZZZZ	1		
13:33	MP4791-MB1	1		
13:37	MP4791-B1	1		
13:44	F14850-1	1		
13:47	MP4791-D1	1		
13:51	MP4791-SD1	5		
13:55	MP4791-S1	1		
14:02	MA3009-CCV4	1		
14:08	MA3009-CCB4	1		
14:12	F14850-2	1		
14:16	ZZZZZZ	1		
14:20	MP4791-MB2	1		
----->	Last reportable sample/prep for job F14850			
14:24	MP4792-MB1	1		
14:27	MP4792-B1	1		
14:34	F14871-9	1		(sample used for QC only; not part of login F14850)
14:38	MP4792-D1	1		
14:42	MP4792-SD1	5		
14:46	MP4792-S1	1		
14:49	MP4792-S2	1		
14:57	MA3009-CCV5	1		
15:03	MA3009-CCB5	1		
----->	Last reportable CCB for job F14850			
15:07	ZZZZZZ	1		
15:11	ZZZZZZ	1		
15:15	ZZZZZZ	1		
15:19	ZZZZZZ	1		
15:23	ZZZZZZ	1		
15:27	ZZZZZZ	1		
15:31	ZZZZZZ	1		
15:35	ZZZZZZ	1		
15:39	ZZZZZZ	1		
15:42	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC Date Analyzed: 10/08/02 Methods: SW846 6010B
Analyst: DM Run ID: MA3009
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
15:46	MA3009-CCV6	1		
15:53	MA3009-CCB6	1		
15:57	ZZZZZZ	1		
16:01	ZZZZZZ	1		
16:04	ZZZZZZ	1		
16:08	ZZZZZZ	1		
16:12	ZZZZZZ	1		
16:16	ZZZZZZ	1		
16:20	ZZZZZZ	1		
16:24	ZZZZZZ	1		
16:28	ZZZZZZ	1		
16:32	MA3009-CCV7	1		
16:38	MA3009-CCB7	1		

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC
QC Limits: result < RL

Date Analyzed: 10/08/02
Run ID: MA3009

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	6.6	anr							
Antimony	5.0	1.5								
Arsenic	10	2.8	1.6	<10	0.090	<10	1.8	<10	-1.5	<10
Barium	200	.49	-0.32	<200	-0.84	<200	-0.85	<200	-0.79	<200
Beryllium	5.0	.26	anr							
Cadmium	5.0	.26	-0.22	<5.0	-1.1	<5.0	-1.3	<5.0	-1.2	<5.0
Calcium	1000	3.8	anr							
Chromium	10	.43	-0.15	<10	-0.65	<10	-0.82	<10	-0.67	<10
Cobalt	50	.5								
Copper	25	.44	anr							
Iron	300	7.1	anr							
Lead	5.0	1.2	1.5	<5.0	0.39	<5.0	0.56	<5.0	0.50	<5.0
Magnesium	5000	9.9	anr							
Manganese	15	.16	anr							
Molybdenum	50	.75								
Nickel	40	1.1	anr							
Potassium	5000	14	anr							
Selenium	10	2	-0.53	<10	0.72	<10	-0.14	<10	-2.0	<10
Silver	10	.55	0.030	<10	-0.34	<10	0.24	<10	0.0	<10
Sodium	5000	150	anr							
Thallium	10	1.5								
Tin	50	2.2								
Vanadium	50	.47								
Zinc	20	.59	anr							

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC
QC Limits: result < RL

Date Analyzed: 10/08/02
Run ID: MA3009

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	CCB raw	final	CCB raw	final
Aluminum	200	6.6	anr			
Antimony	5.0	1.5				
Arsenic	10	2.8	-1.6	<10	-0.86	<10
Barium	200	.49	-0.77	<200	-0.81	<200
Beryllium	5.0	.26	anr			
Cadmium	5.0	.26	-1.2	<5.0	-1.3	<5.0
Calcium	1000	3.8	anr			
Chromium	10	.43	-0.74	<10	-0.88	<10
Cobalt	50	.5				
Copper	25	.44	anr			
Iron	300	7.1	anr			
Lead	5.0	1.2	0.070	<5.0	1.1	<5.0
Magnesium	5000	9.9	anr			
Manganese	15	.16	anr			
Molybdenum	50	.75				
Nickel	40	1.1	anr			
Potassium	5000	14	anr			
Selenium	10	2	0.0	<10	-0.21	<10
Silver	10	.55	-0.33	<10	-0.060	<10
Sodium	5000	150	anr			
Thallium	10	1.5				
Tin	50	2.2				
Vanadium	50	.47				
Zinc	20	.59	anr			

(*) Outside of QC Limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 10/08/02
Run ID: MA3009

Methods: SW846 6010B
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	2000	1980	99.0	2000	1990	99.5	2000	2020	101.0
Barium	2000	2030	101.5	2000	2010	100.5	2000	2030	101.5
Beryllium	anr								
Cadmium	2000	2080	104.0	2000	2100	105.0	2000	2130	106.5
Calcium	anr								
Chromium	2000	1940	97.0	2000	1950	97.5	2000	1980	99.0
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	2000	100.0	2000	2020	101.0	2000	2040	102.0
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	2000	2020	101.0	2000	2050	102.5	2000	2100	105.0
Silver	250	256	102.4	250	258	103.2	250	258	103.2
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC Limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 10/08/02
Run ID: MA3009

Methods: SW846 6010B
Units: ug/l

Metal	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum	anr								
Antimony									
Arsenic	2000	2060	103.0	2000	2020	101.0	2000	1990	99.5
Barium	2000	2060	103.0	2000	2060	103.0	2000	2020	101.0
Beryllium	anr								
Cadmium	2000	2150	107.5	2000	2110	105.5	2000	2080	104.0
Calcium	anr								
Chromium	2000	2000	100.0	2000	1970	98.5	2000	1950	97.5
Cobalt									
Copper	anr								
Iron	anr								
Lead	2000	2060	103.0	2000	2030	101.5	2000	2010	100.5
Magnesium	anr								
Manganese	anr								
Molybdenum									
Nickel	anr								
Potassium	anr								
Selenium	2000	2130	106.5	2000	2060	103.0	2000	2020	101.0
Silver	250	256	102.4	250	255	102.0	250	254	101.6
Sodium	anr								
Thallium									
Tin									
Vanadium									
Zinc	anr								

(*) Outside of QC Limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F14850
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

File ID: IR1008M5.ASC
 QC Limits: 70 to 130 % Recovery

Date Analyzed: 10/08/02
 Run ID: MA3009

Methods: SW846 6010B
 Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Aluminum	400		anr	
Antimony	10			
Arsenic	20		18.2	91.0
Barium	400		399	99.8
Beryllium	10		anr	
Cadmium	10		9.3	93.0
Calcium	2000		anr	
Chromium	20		19.9	99.5
Cobalt	100			
Copper	50		anr	
Iron	600		anr	
Lead	10		11.2	112.0
Magnesium	10000		anr	
Manganese	30		anr	
Molybdenum	100			
Nickel	80		anr	
Potassium	10000		anr	
Selenium	10		9.0	90.0
Silver	20		18.6	93.0
Sodium	10000		anr	
Thallium	20			
Tin	100			
Vanadium	100			
Zinc	40		anr	

(*) Outside of QC Limits
 (anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1008M5.ASC Date Analyzed: 10/08/02 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA3009 Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSA Results	% Rec	ICSAB Results	% Rec
Aluminum	500000	500000			509000	101.8	507000	101.4
Antimony		1000			-0.030		1030	103.0
Arsenic		1000			-0.73		1040	104.0
Barium		500			1.2		514	102.8
Beryllium		500			-2.3		489	97.8
Cadmium		1000			1.2		986	98.6
Calcium	500000	500000			468000	93.6	462000	92.4
Chromium		500			1.9		472	94.4
Cobalt		500			-0.25		473	94.6
Copper		500			-0.37		522	104.4
Iron	200000	200000			200000	100.0	199000	99.5
Lead		1000			-3.2		972	97.2
Magnesium	500000	500000			531000	106.2	527000	105.4
Manganese		500			-0.87		500	100.0
Molybdenum		1000			-2.8		962	96.2
Nickel		1000			2.2		964	96.4
Potassium					658		406	
Selenium		1000			-4.7		1060	106.0
Silver		1000			0.020		1050H	105.0
Sodium					79.8		398	
Thallium		1000			-5.5		985	98.5
Tin		1000			-1.9		1000	100.0
Vanadium		500			1.1		505	101.0
Zinc		1000			-6.2		953	95.3

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21008W1.PRN
Analyst: DM
Parameters: Hg

Date Analyzed: 10/08/02 Methods: SW846 7470A
Run ID: MA3011

Time	Sample Description	Dilution Factor	PS Recov	Comments
19:34	MA3011-ICV1	1		
19:36	MA3011-ICB1	1		
19:38	MA3011-CRI 1	1		
19:40	MA3011-CCV1	1		
19:42	MA3011-CCB1	1		
19:44	MP4794-MB1	1		
19:46	MP4794-MB2	1		
19:48	MP4794-B1	1		
19:50	F14850-1	1		
19:51	MP4794-D1	1		
19:53	MP4794-S1	1		
19:55	MP4794-S2	1		
19:57	F14850-2	1		
----->	Last reportable sample/prep for job F14850			
20:00	ZZZZZ	1		
20:02	MA3011-CCV2	1		
20:04	MA3011-CCB2	1		
----->	Last reportable CCB for job F14850			
	Refer to raw data for calibration curve and standards.			

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21008W1.PRN Date Analyzed: 10/08/02 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA3011 Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final
Mercury	1.0	.022	0.0	<1.0	-0.026	<1.0	0.021	<1.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21008W1.PRN Date Analyzed: 10/08/02 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA3011 Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	3.0	100.0	3.0	3.0	100.0	3.0	3.2	106.7

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21008W1.PRN
QC Limits: to % Recovery

Date Analyzed: 10/08/02
Run ID: MA3011

Methods: SW846 7470A
Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Mercury	0.20		0.25	125.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4791
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 10/07/02 10/07/02

Metal	RL	IDL	MB raw	fi nal	MB raw	fi nal
Aluminum	0.20	.0066				
Antimony	0.0050	.0015				
Arsenic	0.010	.0028	-0.0015	<0.010	-0.0040	<0.010
Barium	1.0	.00049	-0.0011	<1.0	0.027	<1.0
Beryllium	0.0050	.00026				
Cadmium	0.0050	.00026	-0.0015	<0.0050	-0.0012	<0.0050
Calcium	5.0	.0038				
Chromium	0.010	.00043	-0.0013	<0.010	-0.00079	<0.010
Cobalt	0.050	.0005				
Copper	0.025	.00044				
Iron	0.30	.0071				
Lead	0.0050	.0012	0.00052	<0.0050	0.0011	<0.0050
Magnesium	5.0	.0099				
Manganese	0.015	.00016				
Molybdenum	0.050	.00075				
Nickel	0.040	.0011				
Potassium	5.0	.014				
Selenium	0.010	.002	-0.00031	<0.010	0.0045	<0.010
Silver	0.010	.00055	-0.00039	<0.010	-0.000050	<0.010
Sodium	5.0	.15				
Thallium	0.010	.0015				
Tin	0.050	.0022				
Vanadium	0.050	.00047				
Zinc	0.10	.00059				

Associated samples MP4791: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F14850
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4791
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/07/02 10/07/02

Metal	F14850-1 Original	DUP	RPD	QC Limits	F14850-1 Original	MS	Spike lot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.0029	0.0	200.0(a)	0-29	0.0029	3.9	4.0	97.4	75-120
Barium	0.14	0.14	0.0	0-20	0.14	3.8	4.0	91.5	72-120
Beryllium									
Cadmium	0.0	0.0	NC	0-20	0.0	0.092	0.10	92.0	72-120
Calcium									
Chromium	0.0	0.0	NC	0-47	0.0	0.36	0.40	90.0	69-122
Cobalt									
Copper									
Iron									
Lead	0.0074	0.0057	26.0	0-44	0.0074	0.93	1.0	92.3	70-126
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	0.0041	0.0025	48.5 (a)	0-36	0.0041	4.0	4.0	99.9	74-120
Silver	0.0	0.0	NC	0-20	0.0	0.097	0.10	97.0	52-126
Sodium									
Thallium									
Tin									
Vanadium									
Zinc									

Associated samples MP4791: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F14850
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4791
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/07/02

Metal	BSP Result	Spielot MPFLICP	% Rec	QC Limits
Aluminum				
Antimony				
Arsenic	3.9	4.0	97.5	80-120
Barium	4.0	4.0	100.0	80-120
Beryllium				
Cadmium	0.10	0.10	100.0	80-120
Calcium				
Chromium	0.40	0.40	100.0	80-120
Cobalt				
Copper				
Iron				
Lead	1.0	1.0	100.0	80-120
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	4.0	4.0	100.0	80-120
Silver	0.10	0.10	100.0	80-120
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP4791: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F14850
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4791
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/07/02

Metal	F14850-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	2.85	0.00	100.0(a)	0-10
Barium	140	147	5.6	0-10
Beryllium				
Cadmium	0.00	0.00	NC	0-10
Calcium				
Chromium	0.00	0.00	NC	0-10
Cobalt				
Copper				
Iron				
Lead	7.38	9.94	34.7 (a)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	4.10	0.00	100.0(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP4791: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4794
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 10/08/02 10/08/02

Metal	RL	IDL	MB raw	final	MB raw	final
Mercury	0.0010	.000022	0.000031	<0.0010	0.00030	<0.010

Associated samples MP4794: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F14850
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4794
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/08/02 10/08/02

Metal	F14850-1 Original	DUP	RPD	QC Limits	F14850-1 Original	MS	Spike lot HGFLWS	% Rec	QC Limits
Mercury	0.0030	0.0037	20.9 (a)	0-20	0.0030	0.033	0.030	100.0	62-131

Associated samples MP4794: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F14850
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4794
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/08/02

Metal	F14850-1 Original	MSD	Spike lot HGFLWS	% Rec	QC Limits
Mercury	0.0030	0.036	0.030	110.0	62-131

Associated samples MP4794: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4794
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 10/08/02

Metal	BSP Result	Spike lot HGFLWS	% Rec	QC Limits
Mercury	0.0035	0.0030	116.0	80-120

Associated samples MP4794: F14850-1, F14850-2

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(nr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Percent Solids Raw Data Summary

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Cyanide Reactivity	GP3550/GN10377	1.5	<1.5	mg/kg		
Sulfide Reactivity	GP3535/GN10359	50	<50	mg/kg		

Associated Samples:

Batch GP3535: F14850-1, F14850-2

Batch GP3550: F14850-1, F14850-2

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F14850
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN10380	F14812-1		5.3	5.4		0-%
Cyanide Reactivity	GP3550/GN10377	F14812-1	mg/kg	<1.6	<1.6	0.0	0-20%
Ignitability (Flashpoint)	GN10382	F14812-1	Deg. F	200	200	0.0	0-2%
Solids, Percent	GN10334	F14813-1	%	16.6	18.3	9.7*	0-5%
Sulfide Reactivity	GP3535/GN10359	F14812-1	mg/kg	<53	<53	0.0	0-15.1%

Associated Samples:

Batch GN10334: F14850-1, F14850-2
Batch GN10380: F14850-1, F14850-2
Batch GN10382: F14850-1, F14850-2
Batch GP3535: F14850-1, F14850-2
Batch GP3550: F14850-1, F14850-2

Percent Solids Raw Data Summary

Job Number: F14850
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: F14850-1 Analyzed: 03-OCT-02 by FR Method: EPA 160.3 M
ClientID: IH-SF-001

Wet Weight (Total)	8.11	g
Tare Weight	.97	g
Dry Weight (Total)	7.53	g
Solids, Percent	91.9	%

Sample: F14850-2 Analyzed: 03-OCT-02 by FR Method: EPA 160.3 M
ClientID: IH-TS-002

Wet Weight (Total)	4.5	g
Tare Weight	.97	g
Dry Weight (Total)	4.09	g
Solids, Percent	88.4	%

GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Gulf Coast, Inc.)

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Surrogate Recovery Summaries**
- **GC Surrogate Retention Time Summaries**
- **Initial and Continuing Calibration Summaries**

Blank Spike Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1421-BS	GG06532.D	1	10/09/02	JH	10/05/02	OP1421	GGG239

The QC reported here applies to the following samples:

Method: SW846 8151

F14850-1, F14850-2

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	20	19.3	97	50-150 ^a
93-72-1	2,4,5-TP (Silvex)	4	4.0	100	50-150 ^a

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	97%	10-150%

(a) Advisory control limits.

Duplicate Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1421-DUP	GG06537.D	1	10/09/02	JH	10/05/02	OP1421	GGG239
F14812-1	GG06536.D	1	10/09/02	JH	10/05/02	OP1421	GGG239

The QC reported here applies to the following samples:

Method: SW846 8151

F14850-1, F14850-2

CAS No.	Compound	F14812-1 ug/l	DUP Q	ug/l	Q	RPD	Limits
94-75-7	2,4-D	ND		ND		nc	
93-72-1	2,4,5-TP (Silvex)	ND		ND		nc	

CAS No.	Surrogate Recoveries	DUP	F14812-1	Limits
19719-28-9	2,4-DCAA	89%	86%	10-150%

Leachate Blank Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1421-LB	GG06533.D	1	10/09/02	JH	10/05/02	OP1421	GGG239

The QC reported here applies to the following samples:

Method: SW846 8151

F14850-1, F14850-2

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	10	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries		Limits
19719-28-9	2,4-DCAA	81%	10-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14850
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1421-MS	GG06538.D	1	10/09/02	JH	10/05/02	OP1421	GGG239
OP1421-MSD	GG06539.D	1	10/09/02	JH	10/05/02	OP1421	GGG239
F14812-1	GG06536.D	1	10/09/02	JH	10/05/02	OP1421	GGG239

The QC reported here applies to the following samples:

Method: SW846 8151

F14850-1, F14850-2

CAS No.	Compound	F14812-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	20	20.6	103	21.3	107	3	50-150/30 ^a
93-72-1	2,4,5-TP (Silvex)	ND	4	4.3	108	4.6	115	7	50-150/30 ^a

CAS No.	Surrogate Recoveries	MS	MSD	F14812-1	Limits
19719-28-9	2,4-DCAA	108%	105%	86%	10-150%

(a) Advisory control limits.

Semivolatile Surrogate Recovery Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Method: SW846 8151	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
F14850-1	GG06534.D	89.0
F14850-2	GG06535.D	87.0
OP1421-BS	GG06532.D	97.0
OP1421-DUP	GG06537.D	89.0
OP1421-LB	GG06533.D	81.0
OP1421-MS	GG06538.D	108.0
OP1421-MSD	GG06539.D	105.0

Surrogate Compounds	Recovery Limits
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S1 = 2,4-DCAA	10-150%
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(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Check Std: GGG239-ICC239	Injection Date: 10/09/02
Lab File ID: GG06528.D	Injection Time: 11:30
Instrument ID: GCGG	Method: SW846 8151

S1^a
RT

Check Std	10.35
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP1421-BS	GG06532.D	10/09/02	13:14	10.34
OP1421-LB	GG06533.D	10/09/02	13:41	10.35
F14850-1	GG06534.D	10/09/02	14:07	10.34
F14850-2	GG06535.D	10/09/02	14:33	10.34
F14812-1	GG06536.D	10/09/02	15:00	10.34
OP1421-DUP	GG06537.D	10/09/02	15:26	10.34
OP1421-MS	GG06538.D	10/09/02	15:52	10.34
OP1421-MSD	GG06539.D	10/09/02	16:19	10.34

Surrogate Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG239-ICC239
Lab FileID: GG06528.D

Response Factor Report GC GG

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Sep 26 15:13:12 2002

Calibration Files

1 =GG06526.D 2 =GG06527.D 3 =GG06528.D
4 =GG06529.D 5 =GG06530.D 6 =GG06531.D

Compound	1	2	3	4	5	6	Avg		%RSD
1) Dalapon	9.621	9.415	8.301	7.943	7.606	7.717	8.434	E3	10.38
2) 4-Nitrophenol	8.804	8.347	7.153	6.957	6.599	6.477	7.389	E3	13.01
3) S DCAA	5.572	5.088	4.302	4.143	3.887	3.800	4.465	E3	15.90
4) Dicamba	2.172	2.182	1.885	1.870	1.792	1.774	1.946	E4	9.46
5) MCPP	6.501						6.501	E3	0.00
6) MCPA	9.632						9.632	E3	0.00
7) Dichlorprop	5.730	5.340	4.510	4.402	4.160	4.054	4.699	E3	14.45
8) 2,4-D	3.312	3.930	3.550	3.708	3.637	3.645	3.630	E3	5.56
9) Pentachlorophenol	1.457	1.398	1.193	1.176	1.111	1.090	1.238	E5	12.38
10) 2,4,5-TP (SILVEX)	2.914	3.267	2.934	3.023	2.901	2.889	2.988	E4	4.84
11) 2,4,5-T	3.063	3.431	3.043	3.133	2.995	2.969	3.105	E4	5.45
12) 2,4-DB	2.942	3.040	2.654	2.699	2.584	2.563	2.747	E3	7.19
13) Dinoseb	2.318	2.403	2.079	2.093	2.007	1.975	2.146	E4	8.11
14) Picloram	2.031	2.658	2.453	2.832	2.581	2.634	2.532	E4	10.84

Signal #2 Calibration Files

1 =GG06526.D 2 =GG06527.D 3 =GG06528.D
4 =GG06529.D 5 =GG06530.D 6 =GG06531.D

Compound	1	2	3	4	5	6	Avg		%RSD
1) Dalapon	2.046	1.921	1.664	1.574	1.499	1.508	1.702	E4	13.47
2) 4-Nitrophenol	1.422	1.363	1.143	1.087	1.021	0.990	1.171	E4	15.42
3) S DCAA	8.822	8.303	6.733	6.587	6.252	6.042	7.123	E3	16.19
4) Dicamba	4.388	4.226	3.665	3.618	3.452	3.377	3.788	E4	11.06
5) MCPP	8.944						8.944	E3	0.00
6) MCPA	1.446						1.446	E4	0.00
7) Dichlorprop	1.102	0.994	0.839	0.813	0.767	0.746	0.877	E4	16.07
8) 2,4-D	1.412	1.246	1.045	1.015	0.953	0.921	1.098	E4	17.40
9) Pentachlorophenol	2.109	2.218	1.968	1.995	1.921	1.888	2.016	E5	6.17
10) 2,4,5-TP (SILVEX)	7.118	7.138	6.160	6.156	5.828	5.661	6.344	E4	10.05
11) 2,4,5-T	6.984	6.862	5.903	5.864	5.527	5.353	6.082	E4	11.25
12) 2,4-DB	6.501	6.261	5.325	5.343	5.026	4.906	5.560	E3	11.91
13) Dinoseb	6.223	5.881	5.001	4.859	4.644	4.479	5.181	E4	13.63
14) Picloram	4.822	5.918	5.348	6.123	5.599	5.643	5.575	E4	8.18

(#) = Out of Range

OC092H.M

Wed Oct 09 16:38:52 2002 RPT1

Continuing Calibration Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG239-CC239
Lab FileID: GG06540.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG239\GG06540.D\ECD1A.CH Vial : 18
Signal #2 : C:\HPCHEM\2\DATA\GGG239\GG06540.D\ECD2B.CH
Acq On : 9 Oct 2002 4:45 pm Operator: jennifer
Sample : cc239-3 Inst : GC GG
Misc : op1421, ggg239, Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Sep 26 15:13:12 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	Dalapon	300.000	308.109	-2.7	104	0.00
2	4-Nitrophenol	300.000	316.594	-5.5	109	-0.04
3 S	DCAA	300.000	303.995	-1.3	105	-0.02
4	Dicamba	60.000	62.101	-3.5	107	-0.01
7	Dichloroprop	300.000	309.527	-3.2	108	-0.01
8	2,4-D	300.000	335.304	-11.8	114	-0.02
9	Pentachlorophenol	15.000	15.379	-2.5	106	0.00
10	2,4,5-TP (SILVEX)	60.000	64.023	-6.7	109	0.00
11	2,4,5-T	60.000	64.233	-7.1	109	-0.01
12	2,4-DB	600.000	645.517	-7.6	111	-0.01
13	Dinoseb	60.000	61.529	-2.5	106	0.00
14	Picloram	60.000	62.596	-4.3	108	0.00

Signal #2

1	Dalapon	300.000	302.630	-0.9	103	0.00
2	4-Nitrophenol	300.000	304.668	-1.6	104	-0.04
3 S	DCAA	300.000	305.205	-1.7	108	-0.02
4	Dicamba	60.000	61.881	-3.1	107	0.00
7	Dichloroprop	300.000	306.437	-2.1	107	-0.01
8	2,4-D	300.000	303.953	-1.3	107	-0.02
9	Pentachlorophenol	15.000	15.701	-4.7	107	0.00
10	2,4,5-TP (SILVEX)	60.000	62.777	-4.6	108	0.00
11	2,4,5-T	60.000	62.533	-4.2	107	0.00
12	2,4-DB	600.000	617.001	-2.8	107	0.00
13	Dinoseb	60.000	61.198	-2.0	106	0.00
14	Picloram	60.000	58.739	2.1	102	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\GGG239\GG06540.D\ECD1A.CH Vial : 18
Signal #2 : C:\HPCHEM\2\DATA\GGG239\GG06540.D\ECD2B.CH
Acq On : 9 Oct 2002 4:45 pm Operator: jennifer
Sample : cc239-3 Inst : GC GG
Misc : op1421, ggg239, Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Sep 26 15:13:12 2002

Continuing Calibration Summary

Job Number: F14850
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG239-CC239
Lab FileID: GG06540.D

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
5	MCP	-1.000	0.000	0.0	0	-10.67#
6	MCP	-1.000	0.000	0.0	0	-11.04#

Signal #2

5	MCP	-1.000	0.000	0.0	0	-10.56#
6	MCP	-1.000	0.000	0.0	0	-10.99#

(#) = Out of Range
GG06528.D 0C092H.M

SPCC's out = 0 CCC's out = 0
Wed Oct 09 17:07:51 2002 RPT1

Sample Summary

Shaw E & I, Inc.

Job No: F14850

Indian Head
Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F14850-1	09/30/02	15:40	ED	10/02/02	SO Soil	IH-SF-001
F14850-2	09/30/02	16:00	ED	10/02/02	SO Soil	IH-TS-002

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8260B SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012356.D	10	10/08/02	JG	10/07/02	OP6046	VC548
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	101%		86-115%
2037-26-5	Toluene-D8	99%		87-113%
460-00-4	4-Bromofluorobenzene	101%		84-117%
17060-07-0	1,2-Dichloroethane-D4	99%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-SF-001	Date Sampled:	09/30/02
Lab Sample ID:	F14850-1	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K010518.D	1	10/08/02	NAF	n/a	n/a	VK417
Run #2							

Run #	Initial Weight
Run #1	3.95 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	6.9	ug/kg	
108-88-3	Toluene	ND	6.9	ug/kg	
100-41-4	Ethylbenzene	ND	6.9	ug/kg	
1330-20-7	Xylene (total)	ND	21	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		70-130%
2037-26-5	Toluene-D8	101%		79-121%
460-00-4	4-Bromofluorobenzene	102%		77-133%
17060-07-0	1,2-Dichloroethane-D4	101%		72-133%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001	Date Sampled: 09/30/02
Lab Sample ID: F14850-1	Date Received: 10/02/02
Matrix: SO - Soil	Percent Solids: 91.9
Method: SW846 8270C SW846 1311	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L014737.D	1	10/08/02	ME	10/07/02	OP6048	SL816
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	45%		19-90%
4165-62-2	Phenol-d5	32%		10-68%
118-79-6	2,4,6-Tribromophenol	74%		36-137%
4165-60-0	Nitrobenzene-d5	94%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	87%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-SF-001	Date Sampled:	09/30/02
Lab Sample ID:	F14850-1	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8015		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD032128.D	1	10/04/02	RM	n/a	n/a	GCD1271
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.20 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.5	mg/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
460-00-4	4-Bromofluorobenzene	72%		57-144%
98-08-8	aaa-Trifluorotoluene	82%		65-132%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07257.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	86%		52-131%
2051-24-3	Decachlorobiphenyl	68%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-SF-001	Date Sampled:	09/30/02
Lab Sample ID:	F14850-1	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	91.9
Method:	SW846 8015 M SW846 3550B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP24379.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.7 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	5.99	8.9	mg/kg	J
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	93%		64-121%	

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001 Lab Sample ID: F14850-1 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 91.9
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06534.D	1	10/09/02	ATX	10/05/02	T:OP1421	T:GGG239
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	89%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-SF-001

Lab Sample ID: F14850-1

Matrix: SO - Soil

Project: Indian Head

Date Sampled: 09/30/02

Date Received: 10/02/02

Percent Solids: 91.9

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.0029 B	D004	5.0	0.010	0.0028	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Barium	0.14 B	D005	100	1.0	0.00049	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Lead	0.0074	D008	5.0	0.0050	0.0012	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Mercury	0.0030 B	D009	0.20	0.010	0.00022	mg/l	1	10/08/02	10/08/02	DM	EPA 245.1
Selenium	0.0041 B	D010	1.0	0.010	0.0020	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/07/02	10/08/02	DM	SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-SF-001	
Lab Sample ID: F14850-1	Date Sampled: 09/30/02
Matrix: SO - Soil	Date Received: 10/02/02
	Percent Solids: 91.9
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	5.0			1	10/08/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 1.6	1.6	mg/kg	1	10/03/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	10/08/02 SJL	SW846 1010
Solids, Percent	91.9		%	1	10/03/02 FR	EPA 160.3 M
Sulfide Reactivity	< 54	54	mg/kg	1	10/03/02 LL	SW846 CHAP7

Report of Analysis

Client Sample ID:	IH-TS-002		Date Sampled:	09/30/02
Lab Sample ID:	F14850-2		Date Received:	10/02/02
Matrix:	SO - Soil		Percent Solids:	88.4
Method:	SW846 8260B SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012357.D	10	10/08/02	JG	10/07/02	OP6046	VC548
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		86-115%
2037-26-5	Toluene-D8	98%		87-113%
460-00-4	4-Bromofluorobenzene	101%		84-117%
17060-07-0	1,2-Dichloroethane-D4	100%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8260B		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	K010519.D	1	10/08/02	NAF	n/a	n/a	VK417
Run #2							

Run #	Initial Weight
Run #1	4.68 g
Run #2	

Purgeable Aromatics

CAS No.	Compound	Result	RL	Units	Q
71-43-2	Benzene	ND	6.0	ug/kg	
108-88-3	Toluene	ND	6.0	ug/kg	
100-41-4	Ethylbenzene	ND	6.0	ug/kg	
1330-20-7	Xylene (total)	ND	18	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	100%		70-130%
2037-26-5	Toluene-D8	105%		79-121%
460-00-4	4-Bromofluorobenzene	111%		77-133%
17060-07-0	1,2-Dichloroethane-D4	102%		72-133%

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8270C SW846 1311		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	L014738.D	1	10/08/02	ME	10/07/02	OP6048	SL816
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	60%		19-90%
4165-62-2	Phenol-d5	40%		10-68%
118-79-6	2,4,6-Tribromophenol	94%		36-137%
4165-60-0	Nitrobenzene-d5	92%		49-119%
321-60-8	2-Fluorobiphenyl	91%		45-118%
1718-51-0	Terphenyl-d14	90%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002	Date Sampled:	09/30/02
Lab Sample ID:	F14850-2	Date Received:	10/02/02
Matrix:	SO - Soil	Percent Solids:	88.4
Method:	SW846 8015		
Project:	Indian Head		

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	CD032129.D	1	10/04/02	RM	n/a	n/a	GCD1271
Run #2							

Run #	Initial Weight	Final Volume	Methanol Aliquot
Run #1	4.45 g	5.0 ml	100 ul
Run #2			

CAS No.	Compound	Result	RL	Units	Q
	TPH-GRO (C6-C10)	ND	6.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
460-00-4	4-Bromofluorobenzene	72%		57-144%	
98-08-8	aaa-Trifluorotoluene	81%		65-132%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-TS-002		Date Sampled:	09/30/02
Lab Sample ID:	F14850-2		Date Received:	10/02/02
Matrix:	SO - Soil		Percent Solids:	88.4
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07258.D	1	10/08/02	SKW	10/08/02	OP6049	GDD274
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		52-131%
2051-24-3	Decachlorobiphenyl	76%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Method: SW846 8015 M SW846 3550B Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
--	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	OP24382.D	1	10/08/02	NJ	10/04/02	OP6030	GOP862
Run #2							

Run #	Initial Weight	Final Volume
Run #1	30.2 g	1.0 ml
Run #2		

CAS No.	Compound	Result	RL	Units	Q
	TPH (C10-C28)	ND	9.4	mg/kg	
CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits	
84-15-1	o-Terphenyl	95%		64-121%	

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002 Lab Sample ID: F14850-2 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 09/30/02 Date Received: 10/02/02 Percent Solids: 88.4
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06535.D	1	10/09/02	ATX	10/05/02	T:OP1421	T:GGG239
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	87%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-TS-002

Lab Sample ID: F14850-2

Matrix: SO - Soil

Project: Indian Head

Date Sampled: 09/30/02

Date Received: 10/02/02

Percent Solids: 88.4

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.0028 U	D004	5.0	0.010	0.0028	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Barium	0.41 B	D005	100	1.0	0.00049	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Cadmium	0.00026 U	D006	1.0	0.0050	0.00026	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Chromium	0.00043 U	D007	5.0	0.010	0.00043	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Lead	0.0051	D008	5.0	0.0050	0.0012	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Mercury	0.0031 B	D009	0.20	0.010	0.00022	mg/l	1	10/08/02	10/08/02	DM	EPA 245.1
Selenium	0.0020 U	D010	1.0	0.010	0.0020	mg/l	1	10/07/02	10/08/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/07/02	10/08/02	DM	SW846 3010

RL = Reporting Limit IDL = Instrument Detection Limit
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-TS-002
Lab Sample ID: F14850-2
Matrix: SO - Soil
Project: Indian Head

Date Sampled: 09/30/02
Date Received: 10/02/02
Percent Solids: 88.4

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	4.8			1	10/08/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 1.7	1.7	mg/kg	1	10/03/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	10/08/02 SJL	SW846 1010
Solids, Percent	88.4		%	1	10/03/02 FR	EPA 160.3 M
Sulfide Reactivity	< 57	57	mg/kg	1	10/03/02 LL	SW846 CHAP7

Technical Report for

Shaw E & I, Inc.

Indian Head

809401

Accutest Job Number: F14972

Report to:

Shaw E & I, Inc.

Natasha.Sullivan@theitgroup.com

ATTN: Natasha Sullivan

Total number of pages in report: 97



Test results contained within this data package meet the requirements of the National Environmental Laboratory Accreditation Conference and/or state specific certification programs as applicable.


Harry Behzadi, Ph.D.
Laboratory Director

Certification: Florida DOH E83510

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Sample Summary

Shaw E & I, Inc.

Job No: F14972

Indian Head
Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F14972-1	10/07/02	14:00	ED	10/08/02	SO Soil	IH-WD-005

Soil samples reported on a dry weight basis unless otherwise indicated on result page.

Report of Analysis

Client Sample ID: IH-WD-005	Date Sampled: 10/07/02
Lab Sample ID: F14972-1	Date Received: 10/08/02
Matrix: SO - Soil	Percent Solids: 92.0
Method: SW846 8260B	
Project: Indian Head	

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012535.D	10	10/14/02	JG	10/11/02	MS1808	VC556
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
2037-26-5	Toluene-D8	105%		87-113%
460-00-4	4-Bromofluorobenzene	103%		84-117%
17060-07-0	1,2-Dichloroethane-D4	101%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Method: SW846 8270C SW846 1311 Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W012512.D	1	10/14/02	ME	10/11/02	OP6086	SW675
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		19-90%
4165-62-2	Phenol-d5	39%		10-68%
118-79-6	2,4,6-Tribromophenol	100%		36-137%
4165-60-0	Nitrobenzene-d5	99%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	107%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Method: SW846 8081A SW846 1311 Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07466.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		52-131%
2051-24-3	Decachlorobiphenyl	97%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Method: SW846 8082 SW846 3550B Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MN16259.D	100	10/10/02	NJ	10/09/02	OP6062	GMN623
Run #2							

	Initial Weight	Final Volume
Run #1	29.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units Q
12674-11-2	Aroclor 1016	ND	3700	ug/kg
11104-28-2	Aroclor 1221	ND	3700	ug/kg
11141-16-5	Aroclor 1232	ND	3700	ug/kg
53469-21-9	Aroclor 1242	ND	3700	ug/kg
12672-29-6	Aroclor 1248	ND	3700	ug/kg
11097-69-1	Aroclor 1254	ND	3700	ug/kg
11096-82-5	Aroclor 1260	ND	3700	ug/kg
	Total PCBs	ND	7500	ug/kg

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	0% ^b		50-134%
2051-24-3	Decachlorobiphenyl	0% ^b		48-147%

- (a) Dilution required due to matrix interference.
 (b) Outside control limits due to dilution.

ND = Not detected
 RL = Reporting Limit
 E = Indicates value exceeds calibration range

J = Indicates an estimated value
 B = Indicates analyte found in associated method blank
 N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
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	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06709.D	1	10/13/02	ATX	10/11/02	T:OP1451	T:GGG244
Run #2							

	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	130%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
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Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.023	D004	5.0	0.010	0.0028	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Barium	0.27 B	D005	100	1.0	0.00049	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Cadmium	0.0022 B	D006	1.0	0.010	0.00026	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Chromium	0.024	D007	5.0	0.010	0.00043	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Lead	0.057	D008	5.0	0.0050	0.0012	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/11/02	10/15/02	DM	SW846 7470A
Selenium	0.0077 B	D010	1.0	0.010	0.0020	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/11/02	10/15/02	DM	SW846 3010

RL = Reporting Limit **IDL = Instrument Detection Limit**
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-WD-005	Date Sampled: 10/07/02
Lab Sample ID: F14972-1	Date Received: 10/08/02
Matrix: SO - Soil	Percent Solids: 92.0
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	5.2			1	10/15/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 1.6	1.6	mg/kg	1	10/14/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	10/15/02 SJL	SW846 1010
Solids, Percent	92		%	1	10/10/02 SJL	EPA 160.3 M
Sulfide Reactivity	< 54	54	mg/kg	1	10/09/02 LL	SW846 CHAP7

RL = Reporting Limit

GC/MS Volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (BFB)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
VC556-BS	C0012531.D	10	10/14/02	JG	n/a	n/a	VC556

The QC reported here applies to the following samples:

Method: SW846 8260B

F14972-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
71-43-2	Benzene	250	221	88	76-123
108-90-7	Chlorobenzene	250	222	89	78-115
67-66-3	Chloroform	250	224	90	74-123
56-23-5	Carbon tetrachloride	250	213	85	68-137
75-35-4	1,1-Dichloroethylene	250	228	91	64-136
107-06-2	1,2-Dichloroethane	250	200	80	66-118
106-46-7	p-Dichlorobenzene	250	221	88	74-117
78-93-3	Methyl ethyl ketone	1250	1010	81	65-124
127-18-4	Tetrachloroethylene	250	244	98	75-124
79-01-6	Trichloroethylene	250	220	88	75-122
75-01-4	Vinyl chloride	250	256	102	62-142

CAS No.	Surrogate Recoveries	BSP	Limits
1868-53-7	Dibromofluoromethane	94%	86-115%
17060-07-0	1,2-Dichloroethane-D4	98%	78-125%
2037-26-5	Toluene-D8	105%	87-113%
460-00-4	4-Bromofluorobenzene	102%	84-117%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
F14972-1MS	C0012536.D	10	10/14/02	JG	n/a	n/a	VC556
F14972-1MSD	C0012537.D	10	10/14/02	JG	n/a	n/a	VC556
F14972-1	C0012535.D	10	10/14/02	JG	10/11/02	MS1808	VC556

The QC reported here applies to the following samples:

Method: SW846 8260B

F14972-1

CAS No.	Compound	F14972-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
71-43-2	Benzene	ND	250	217	87	210	84	3	71-127/8
108-90-7	Chlorobenzene	ND	250	221	88	209	84	6	77-113/6
67-66-3	Chloroform	ND	250	217	87	210	84	3	72-125/11
56-23-5	Carbon tetrachloride	ND	250	206	82	202	81	2	61-140/13
75-35-4	1,1-Dichloroethylene	ND	250	221	88	209	84	6	60-141/14
107-06-2	1,2-Dichloroethane	ND	250	196	78	192	77	2	64-121/9
106-46-7	p-Dichlorobenzene	ND	250	220	88	214	86	3	72-116/7
78-93-3	Methyl ethyl ketone	ND	1250	993	79	973	78	2	63-128/16
127-18-4	Tetrachloroethylene	ND	250	235	94	231	92	2	74-123/11
79-01-6	Trichloroethylene	ND	250	214	86	212	85	1	71-124/9
75-01-4	Vinyl chloride	ND	250	253	101	246	98	3	53-149/22

CAS No.	Surrogate Recoveries	MS	MSD	F14972-1	Limits
1868-53-7	Dibromofluoromethane	96%	94%	96%	86-115%
17060-07-0	1,2-Dichloroethane-D4	99%	97%	101%	78-125%
2037-26-5	Toluene-D8	103%	103%	105%	87-113%
460-00-4	4-Bromofluorobenzene	100%	101%	103%	84-117%

Instrument Performance Check (BFB)

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VC555-BFB	Injection Date:	10/14/02
Lab File ID:	C0012528.D	Injection Time:	11:58
Instrument ID:	GCMSC		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	3919	19.7	Pass
75	30.0 - 60.0% of mass 95	9418	47.3	Pass
95	Base peak, 100% relative abundance	19898	100.0	Pass
96	5.0 - 9.0% of mass 95	1511	7.6	Pass
173	Less than 2.0% of mass 174	95	0.48 (0.59) ^a	Pass
174	50.0 - 100.0% of mass 95	16200	81.4	Pass
175	5.0 - 9.0% of mass 174	1167	5.9 (7.2) ^a	Pass
176	95.0 - 101.0% of mass 174	15646	78.6 (96.6) ^a	Pass
177	5.0 - 9.0% of mass 176	1136	5.7 (7.3) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VC555-CC547	C0012529.D	10/14/02	12:54	00:56	Continuing cal 40PPB
VC555-BS	C0012530.D	10/14/02	13:22	01:24	Blank Spike
VC556-BS	C0012531.D	10/14/02	13:50	01:52	Blank Spike
OP6084-LB	C0012532.D	10/14/02	14:18	02:20	Leachate Blank
VC555-MB	C0012533.D	10/14/02	14:46	02:48	Method Blank
ZZZZZZ	C0012534.D	10/14/02	15:15	03:17	(unrelated sample)
F14972-1	C0012535.D	10/14/02	15:44	03:46	IH-WD-005
F14972-1MS	C0012536.D	10/14/02	16:12	04:14	Matrix Spike
F14972-1MSD	C0012537.D	10/14/02	16:41	04:43	Matrix Spike Duplicate
ZZZZZZ	C0012538.D	10/14/02	17:09	05:11	(unrelated sample)
ZZZZZZ	C0012539.D	10/14/02	17:38	05:40	(unrelated sample)
ZZZZZZ	C0012540.D	10/14/02	18:06	06:08	(unrelated sample)
F14914-2	C0012541.D	10/14/02	18:34	06:36	(used for QC only; not part of job F14972)
ZZZZZZ	C0012542.D	10/14/02	19:02	07:04	(unrelated sample)
ZZZZZZ	C0012543.D	10/14/02	19:30	07:32	(unrelated sample)
ZZZZZZ	C0012544.D	10/14/02	19:58	08:00	(unrelated sample)
F14914-2MS	C0012545.D	10/14/02	20:26	08:28	Matrix Spike
F14914-2MSD	C0012546.D	10/14/02	20:54	08:56	Matrix Spike Duplicate
ZZZZZZ	C0012547.D	10/14/02	21:22	09:24	(unrelated sample)
ZZZZZZ	C0012548.D	10/14/02	21:50	09:52	(unrelated sample)
ZZZZZZ	C0012549.D	10/14/02	22:18	10:20	(unrelated sample)

Instrument Performance Check (BFB)

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	VC547-BFB	Injection Date:	10/08/02
Lab File ID:	C0012340.D	Injection Time:	11:17
Instrument ID:	GCMSC		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
50	15.0 - 40.0% of mass 95	5091	20.0	Pass
75	30.0 - 60.0% of mass 95	12393	48.7	Pass
95	Base peak, 100% relative abundance	25458	100.0	Pass
96	5.0 - 9.0% of mass 95	1832	7.2	Pass
173	Less than 2.0% of mass 174	104	0.41 (0.42) ^a	Pass
174	50.0 - 100.0% of mass 95	24680	96.9	Pass
175	5.0 - 9.0% of mass 174	1771	7.0 (7.2) ^a	Pass
176	95.0 - 101.0% of mass 174	24664	96.9 (99.9) ^a	Pass
177	5.0 - 9.0% of mass 176	1686	6.6 (6.8) ^b	Pass

(a) Value is % of mass 174

(b) Value is % of mass 176

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
VC547-IC547	C0012342.D	10/08/02	12:10	00:53	Initial cal 1PPB
VC547-IC547	C0012343.D	10/08/02	12:38	01:21	Initial cal 5PPB
VC547-IC547	C0012344.D	10/08/02	13:06	01:49	Initial cal 20PPB
VC547-ICC547	C0012345.D	10/08/02	13:35	02:18	Initial cal 40PPB
VC547-IC547	C0012346.D	10/08/02	14:03	02:46	Initial cal 70PPB
VC547-IC547	C0012347.D	10/08/02	14:31	03:14	Initial cal 100PPB

Volatile Internal Standard Area Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	VC555-CC547	Injection Date:	10/14/02
Lab File ID:	C0012529.D	Injection Time:	12:54
Instrument ID:	GCMSC	Method:	SW846 8260B

	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
Check Std	1080417	10.73	829919	14.01	487068	16.55	51176	7.87
Upper Limit ^a	2160834	11.23	1659838	14.51	974136	17.05	102352	8.37
Lower Limit ^b	540209	10.23	414960	13.51	243534	16.05	25588	7.37

Lab Sample ID	IS 1 AREA	RT	IS 2 AREA	RT	IS 3 AREA	RT	IS 4 AREA	RT
VC555-BS	1101294	10.74	834226	14.01	484244	16.55	50959	7.88
VC556-BS	1095965	10.74	831920	14.01	483711	16.55	54032	7.87
OP6084-LB	1048782	10.73	768479	14.01	414045	16.55	48582	7.88
VC555-MB	997160	10.74	721171	14.01	390819	16.55	40124	7.88
ZZZZZZ	949535	10.74	715832	14.01	375480	16.56	45817	7.87
F14972-1	954173	10.73	697190	14.01	376850	16.55	45772	7.87
F14972-1MS	999771	10.73	776004	14.01	462789	16.55	48790	7.88
F14972-1MSD	1067405	10.73	812517	14.01	476740	16.55	52528	7.87
ZZZZZZ	1016960	10.73	729121	14.01	397571	16.55	41028	7.87
ZZZZZZ	977138	10.73	709717	14.01	386900	16.55	41620	7.87
ZZZZZZ	940791	10.74	689677	14.01	376621	16.55	37343	7.88
F14914-2	946135	10.74	695335	14.01	372721	16.55	38237	7.89
ZZZZZZ	937173	10.74	688004	14.01	377749	16.55	37565	7.88
ZZZZZZ	919721	10.74	672480	14.01	363325	16.55	37618	7.88
ZZZZZZ	914183	10.74	664284	14.01	377687	16.56	33130	7.88
F14914-2MS	1018490	10.73	791508	14.01	471464	16.55	43092	7.87
F14914-2MSD	1038763	10.73	792146	14.01	470304	16.55	47440	7.87
ZZZZZZ	960136	10.74	698411	14.01	385899	16.55	41889	7.88
ZZZZZZ	952423	10.74	688293	14.01	375956	16.55	39279	7.88
ZZZZZZ	942931	10.74	691295	14.01	371596	16.55	35739	7.88

- IS 1 = Fluorobenzene
- IS 2 = Chlorobenzene-D5
- IS 3 = 1,4-Dichlorobenzene-d4
- IS 4 = Tert Butyl Alcohol-D10

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Volatile Surrogate Recovery Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8260B	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4
F14972-1	C0012535.D	96.0	105.0	103.0	101.0
F14972-1MS	C0012536.D	96.0	103.0	100.0	99.0
F14972-1MSD	C0012537.D	94.0	103.0	101.0	97.0
VC556-BS	C0012531.D	94.0	105.0	102.0	98.0

Surrogate Compounds	Recovery Limits
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S1 = Dibromofluoromethane	86-115%
S2 = Toluene-D8	87-113%
S3 = 4-Bromofluorobenzene	84-117%
S4 = 1,2-Dichloroethane-D4	78-125%

Initial Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC547-ICC547
 Lab FileID: C0012345.D

Response Factor Report MSVOA5

Method : C:\MSDCHEM\2\METHODS\8260.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Wed Oct 09 12:57:33 2002
 Response via : Initial Calibration

Calibration Files

1 =C0012342.D 2 =C0012343.D 3 =C0012344.D
 4 =C0012345.D 5 =C0012346.D 6 =C0012347.D

Compound	1	2	3	4	5	6	Avg	%RSD
-----I STD-----								
1) I Fluorobenzene								
2) Dichlorodifluoromethane	0.224	0.303	0.295	0.252	0.257	0.230	0.260	12.54
3) P Chloromethane	0.409	0.455	0.455	0.412	0.409	0.390	0.422	6.43
4) C Vinyl Chloride	0.357	0.452	0.429	0.377	0.368	0.344	0.388	11.02
5) Bromomethane	0.289	0.281	0.282	0.251	0.238	0.219	0.260	10.88
6) Chloroethane	0.199	0.224	0.225	0.208	0.199	0.191	0.208	6.85
7) Trichlorofluoromethane	0.348	0.387	0.408	0.381	0.387	0.377	0.381	5.15
8) Ethyl ether	0.172	0.204	0.214	0.216	0.220	0.216	0.207	8.56
9) C 1,1-Dichloroethene	0.377	0.444	0.485	0.453	0.471	0.461	0.449	8.48
10) Freon 113	0.238	0.259	0.266	0.242	0.244	0.229	0.246	5.58
11) Acetone		0.077	0.074	0.072	0.073	0.073	0.074	2.70
12) Iodomethane	0.366	0.411	0.438	0.424	0.430	0.415	0.414	6.12
13) Methyl Acetate	0.213	0.202	0.203	0.204	0.206	0.209	0.206	1.94
14) Carbon Disulfide	0.835	0.906	0.922	0.828	0.854	0.816	0.860	5.08
15) Hexane	0.273	0.264	0.299	0.294	0.308	0.298	0.289	5.89
16) Methylene Chloride	0.578	0.488	0.468	0.442	0.436	0.431	0.474	11.69
17) trans-1,2-Dichloroethane	0.364	0.426	0.435	0.412	0.438	0.423	0.416	6.52
18) Acrylonitrile	0.066	0.062	0.069	0.069	0.070	0.070	0.067	4.29
19) Methyl Tert Butyl Ether	0.492	0.594	0.642	0.655	0.678	0.700	0.627	11.95
20) P 1,1-Dichloroethane	0.488	0.548	0.529	0.517	0.534	0.533	0.525	3.95
21) Vinyl acetate	0.559	0.643	0.646	0.674	0.695	0.703	0.653	8.00
22) Diisopropyl ether	0.671	0.884	0.959	0.981	1.027	1.044	0.928	14.89
23) ETBE		0.653	0.743	0.772	0.821	0.844	0.767	9.77
24) 2,2-Dichloropropane	0.219	0.272	0.264	0.249	0.260	0.246	0.252	7.49
25) cis-1,2-Dichloroethane	0.223	0.296	0.290	0.286	0.298	0.290	0.280	10.16
26) 2-Butanone	0.113	0.106	0.111	0.116	0.117	0.119	0.114	3.96
27) Bromochloromethane	0.129	0.144	0.140	0.140	0.140	0.140	0.139	3.80
28) C Chloroform	0.489	0.505	0.486	0.481	0.491	0.486	0.490	1.69
29) Tetrahydrofuran		0.056	0.061	0.067	0.073	0.074	0.066	11.51
30) 1,1,1-Trichloroethane	0.348	0.399	0.396	0.374	0.391	0.377	0.381	4.96
31) Cyclohexane	0.292	0.359	0.420	0.415	0.452	0.430	0.395	14.97
32) S Dibromodifluoromethane	0.267	0.263	0.259	0.261	0.258	0.259	0.261	1.25
33) 1,1-Dichloropropene	0.250	0.325	0.347	0.330	0.355	0.342	0.325	11.73
34) Carbon Tetrachloride	0.312	0.377	0.367	0.346	0.375	0.359	0.356	6.76
35) S 1,2-Dichloroethane	0.298	0.296	0.292	0.293	0.292	0.296	0.294	0.95
36) Benzene	1.049	1.151	1.107	1.094	1.149	1.160	1.118	3.84
37) TAME	0.508	0.618	0.657	0.691	0.741	0.777	0.665	14.41
38) 1,2-Dichloroethane	0.506	0.430	0.400	0.393	0.404	0.413	0.424	9.92
39) Trichloroethene	0.235	0.258	0.260	0.258	0.275	0.272	0.259	5.45
40) Methylcyclohexane	0.267	0.295	0.345	0.333	0.372	0.363	0.329	12.31
41) C 1,2-Dichloropropane	0.248	0.298	0.305	0.300	0.314	0.318	0.297	8.56
42) Dibromomethane	0.162	0.177	0.172	0.171	0.172	0.176	0.172	3.19
43) Bromodichloromethane	0.338	0.372	0.368	0.368	0.381	0.378	0.368	4.17
44) 2-Nitropropane	0.056	0.065	0.069	0.072	0.075	0.078	0.069	11.22
45) 2-Chloroethyl vinyl ether		0.093	0.105	0.113	0.118	0.123	0.110	10.75
46) 4-Methyl-2-pentanone	0.204	0.256	0.272	0.277	0.284	0.293	0.264	12.10

Initial Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC547-ICC547
 Lab FileID: C0012345.D

47)	ci s-1, 3-Di chl oropro	0.381	0.419	0.433	0.460	0.462	0.431	7.78	
48) I	Chl orobenzene-d5	-----I STD-----							
49) S	Tol uene-d8	1.229	1.215	1.194	1.194	1.193	1.186	1.202	1.37
50) C	Tol uene	1.337	1.428	1.414	1.371	1.471	1.436	1.410	3.41
51)	trans-1, 3-Di chl orop	0.413	0.441	0.466	0.483	0.511	0.509	0.470	8.16
52)	1, 1, 2-Tri chl oroetha	0.252	0.251	0.248	0.244	0.250	0.245	0.248	1.27
53)	Tetrchl oroethene	0.343	0.406	0.394	0.357	0.379	0.360	0.373	6.45
54)	2-hexanone	0.162	0.195	0.225	0.226	0.236	0.237	0.214	13.78
55)	1, 3-Di chl oropropane	0.469	0.519	0.521	0.516	0.541	0.539	0.517	5.03
56)	Di bromochl oromethan	0.309	0.338	0.345	0.341	0.357	0.355	0.341	5.10
57)	1, 2-Di bromoethane	0.284	0.286	0.292	0.291	0.301	0.301	0.293	2.41
58)	1-Chl orohexane	0.302	0.387	0.380	0.423	0.407	0.380	12.22	
59) P	Chl orobenzene	0.973	1.029	0.991	0.955	1.004	0.987	0.990	2.59
60)	1, 1, 1, 2-Tetrchl oro	0.349	0.348	0.355	0.348	0.375	0.378	0.359	3.95
61) C	Ethyl benzene	1.301	1.527	1.584	1.549	1.737	1.734	1.572	10.24
62)	m, p-Xyl ene	0.927	1.171	1.245	1.233	1.391	1.401	1.228	14.13
63)	o-Xyl ene	1.161	1.298	1.312	1.485	1.500	1.351	10.50	
64)	Styrene	0.870	1.015	1.042	1.191	1.227	1.069	13.50	
65) P	Bromoform	0.221	0.225	0.235	0.239	0.253	0.254	0.238	5.75
66) I	1, 4-Di chl orobenzene-d	-----I STD-----							
67)	l sopropyl benzene	2.036	2.285	2.310	2.550	2.557	2.348	9.21	
68) S	4-Bromofl uorobenzen	0.851	0.856	0.833	0.846	0.853	0.879	0.853	1.79
69)	Bromobenzene	0.793	0.806	0.795	0.779	0.830	0.842	0.807	2.99
70) P	1, 1, 2, 2-Tetrchl oro	0.778	0.700	0.658	0.636	0.653	0.660	0.681	7.66
71)	trans-1, 4-Di chl oro-	0.026	0.064	0.107	0.130	0.149	0.160	0.106	49.05
72)	1, 2, 3-Tri chl oroprop	0.195	0.198	0.186	0.183	0.186	0.187	0.189	3.12
73)	n-Propyl benzene	2.408	3.025	3.158	3.104	3.447	3.519	3.110	12.73
74)	2-Chl orotol uene	1.851	2.220	2.189	2.202	2.458	2.553	2.246	10.93
75)	4-Chl orotol uene	1.453	1.881	1.945	1.964	2.108	2.127	1.913	12.82
76)	1, 3, 5-Tri methyl benz	1.611	1.964	2.145	2.143	2.398	2.491	2.125	14.87
77)	Benzyl chl ori de	0.969	0.974	1.185	1.220	1.279	1.314	1.157	12.99
78)	sec-Butyl benzene	1.940	2.166	2.473	2.381	2.614	2.589	2.361	11.12
79)	1, 3-Di chl orobenzene	1.358	1.480	1.425	1.362	1.440	1.423	1.415	3.33
80)	4-l sopropyl tol uene	1.471	1.877	2.126	2.053	2.233	2.267	2.005	14.79
81)	1, 4-Di chl orobenzene	1.711	1.557	1.487	1.431	1.485	1.479	1.525	6.53
82)	tert-Butyl benzene	0.919	1.058	1.214	1.199	1.280	1.290	1.160	12.46
83)	n-Butyl benzene	1.752	1.726	1.984	1.933	2.048	2.077	1.920	7.77
84)	1, 2-Di chl orobenzene	1.296	1.404	1.392	1.329	1.389	1.374	1.364	3.09
85)	1, 2, 4-Tri methyl benz	2.194	2.303	2.226	2.440	2.474	2.328	5.39	
86)	1, 2-Di bromo-3-Chl or	0.107	0.107	0.107	0.111	0.110	0.113	0.109	2.29
87)	1, 2, 4-Tri chl orobenz	0.957	0.789	0.872	0.907	0.938	0.939	0.900	6.89
88)	Hexachl orobutadi ene	0.366	0.367	0.343	0.349	0.349	0.355	3.08	
89)	Naphthal ene	1.405	1.788	1.905	1.958	2.008	1.813	13.35	
90)	1, 2, 3-Tri chl orobenz	1.030	0.717	0.796	0.822	0.832	0.830	0.838	12.37
91) I	Tert Butyl alcohol -d1	-----I STD-----							
92)	Acrolei n	0.692	0.850	0.972	0.971	0.985	0.995	0.911	13.14
93)	Tert-Butyl Alcohol	1.980	1.812	1.896	1.903	1.909	1.941	1.907	2.93
94)	1, 4-Di oxane	0.201	0.156	0.200	0.208	0.207	0.209	0.197	10.36
95)	Cycl ohexanone	0.420	0.590	0.588	0.606	0.637	0.568	15.03	

Average % RSD = 8.3

(#) = Out of Range

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC555-CC547
 Lab FileID: C0012529.D

Evaluate Continuing Calibration Report

Data File : C:\MSDCHEM\2\DATA\101402\C0012529.D Vial : 1
 Acq On : 14 Oct 2002 12:54 pm Operator: JuanG
 Sample : CC547-40ppb Inst : MSVOA5
 Misc : ms1809,vc555,,,,, Multiplr: 1.00
 MS Integration Params: Rteint.p

Method : C:\MSDCHEM\2\METHODS\8260.M (RTE Integrator)
 Title : EPA 624 & SWA 5030B/8260B
 Last Update : Wed Oct 09 12:57:33 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)
1 I	Fluorobenzene	1.000	1.000	0.0	124	0.00
2	Dichlorodifluoromethane	0.260	0.201	22.7#	99	0.00
3 P	Chloromethane	0.422	0.405	4.0	122	0.00
4 C	Vinyl Chloride	0.388	0.386	0.5	127	0.00
5	Bromomethane	0.260	0.266	-2.3	131	0.00
6	Chloroethane	0.208	0.223	-7.2	133	0.00
7	Trichlorofluoromethane	0.381	0.488	-28.1#	159	0.00
8	Ethyl ether	0.207	0.207	0.0	119	0.00
9 C	1,1-Dichloroethene	0.449	0.431	4.0	118	0.00
10	Freon 113	0.246	0.237	3.7	121	0.00
11	Acetone	0.074	0.087	-17.6	150	0.00
12	Iodomethane	0.414	0.373	9.9	109	0.00
13	Methyl Acetate	0.206	0.184	10.7	112	0.00
14	Carbon Disulfide	0.860	0.849	1.3	127	0.00
15	Hexane	0.289	0.284	1.7	120	0.00
16	Methylene Chloride	0.474	0.424	10.5	119	0.00
17	trans-1,2-Dichloroethene	0.416	0.398	4.3	120	0.00
18	Acrylonitrile	0.067	0.053	20.9#	96	0.00
19	Methyl Tert Butyl Ether	0.627	0.574	8.5	109	0.00
20 P	1,1-Dichloroethane	0.525	0.493	6.1	118	0.00
21	Vinyl acetate	0.653	0.632	3.2	116	0.00
22	Diisopropyl ether	0.928	0.912	1.7	115	0.00
23	ETBE	0.767	0.692	9.8	111	0.00
24	2,2-Dichloropropane	0.252	0.244	3.2	121	0.00
25	cis-1,2-Dichloroethene	0.280	0.281	-0.4	122	0.00
26	2-Butanone	0.114	0.114	0.0	122	0.00
27	Bromochloromethane	0.139	0.128	7.9	113	0.00
28 C	Chloroform	0.490	0.463	5.5	119	0.00
29	Tetrahydrofuran	0.066	0.058	12.1	106	0.00
30	1,1,1-Trichloroethane	0.381	0.364	4.5	121	0.00
31	Cyclohexane	0.395	0.824	-108.6#	246#	0.00
32 S	Dibromofluoromethane	0.261	0.250	4.2	119	0.00
33	1,1-Dichloropropene	0.325	0.325	0.0	122	0.00
34	Carbon Tetrachloride	0.356	0.331	7.0	118	0.00
35 S	1,2-Dichloroethane-d4	0.294	0.295	-0.3	125	0.00
36	Benzene	1.118	1.076	3.8	122	0.00
37	TAME	0.665	0.615	7.5	110	0.00
38	1,2-Dichloroethane	0.424	0.381	10.1	120	0.00
39	Trichloroethene	0.259	0.254	1.9	122	0.00
40	Methylcyclohexane	0.329	0.334	-1.5	124	0.00
41 C	1,2-Dichloropropane	0.297	0.290	2.4	120	0.00
42	Dibromomethane	0.172	0.164	4.7	119	0.00

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: VC555-CC547
 Lab FileID: C0012529.D

43	Bromodi chl oromethane	0.368	0.355	3.5	119	0.00
44	2-Ni tropropane	0.069	0.066	4.3	112	0.00
45	2-Chl oroethyl vinyl ether	0.110	0.127	-15.5	139	0.00
46	4-Methyl -2-pentanone	0.264	0.250	5.3	112	0.00
47	ci s-1, 3-Di chl oropropene	0.431	0.402	6.7	115	0.00
48 I	Chl orobenzene-d5	1.000	1.000	0.0	115	0.00
49 S	Tol uene-d8	1.202	1.258	-4.7	121	0.00
50 C	Tol uene	1.410	1.467	-4.0	123	0.00
51	trans-1, 3-Di chl oropropene	0.470	0.483	-2.8	115	0.00
52	1, 1, 2-Tri chl oroethane	0.248	0.251	-1.2	118	0.00
53	Tetrachl oroethene	0.373	0.389	-4.3	125	0.00
54	2-hexanone	0.214	0.232	-8.4	118	0.00
55	1, 3-Di chl oropropane	0.517	0.529	-2.3	118	0.00
56	Di bromochl oromethane	0.341	0.335	1.8	113	0.00
57	1, 2-Di bromoethane	0.293	0.281	4.1	111	0.00
58	1-Chl orohexane	0.380	0.399	-5.0	120	0.00
59 P	Chl orobenzene	0.990	0.957	3.3	115	0.00
60	1, 1, 1, 2-Tetrachl oroethane	0.359	0.354	1.4	117	0.00
61 C	Ethyl benzene	1.572	1.657	-5.4	123	0.00
62	m, p-Xyl ene	1.228	1.319	-7.4	123	0.00
63	o-Xyl ene	1.351	1.376	-1.9	120	0.00
64	Styrene	1.069	1.062	0.7	117	0.00
65 P	Bromoform	0.238	0.225	5.5	108	0.00
66 I	1, 4-Di chl orobenzene-d4	1.000	1.000	0.0	113	0.00
67	Isopropyl benzene	2.348	2.347	0.0	115	0.00
68 S	4-Bromofl uorobenzene	0.853	0.887	-4.0	119	0.00
69	Bromobenzene	0.807	0.774	4.1	113	0.00
70 P	1, 1, 2, 2-Tetrachl oroethane	0.681	0.670	1.6	119	0.00
71	trans-1, 4-Di chl oro-2-butene	0.106	0.111	-4.7	97	0.00
72	1, 2, 3-Tri chl oropropane	0.189	0.180	4.8	112	0.00
73	n-Propyl benzene	3.110	3.378	-8.6	123	0.00
74	2-Chl orotol uene	2.246	2.350	-4.6	121	0.00
75	4-Chl orotol uene	1.913	2.060	-7.7	119	0.00
76	1, 3, 5-Tri methyl benzene	2.125	2.195	-3.3	116	0.00
77	Benzyl chl ori de	1.157	1.220	-5.4	113	0.00
78	sec-Butyl benzene	2.361	2.423	-2.6	115	0.00
79	1, 3-Di chl orobenzene	1.415	1.417	-0.1	118	0.00
80	4-Isopropyl tol uene	2.005	2.047	-2.1	113	0.00
81	1, 4-Di chl orobenzene	1.525	1.465	3.9	116	0.00
82	tert-Butyl benzene	1.160	1.226	-5.7	116	0.00
83	n-Butyl benzene	1.920	2.032	-5.8	119	0.00
84	1, 2-Di chl orobenzene	1.364	1.364	0.0	116	0.00
85	1, 2, 4-Tri methyl benzene	2.328	2.259	3.0	115	0.00
86	1, 2-Di bromo-3-Chl oropropane	0.109	0.105	3.7	107	0.00
87	1, 2, 4-Tri chl orobenzene	0.900	0.844	6.2	106	0.00
88	Hexachl orobutadi ene	0.355	0.339	4.5	112	0.00
89	Naphthal ene	1.813	1.804	0.5	107	0.00
90	1, 2, 3-Tri chl orobenzene	0.838	0.754	10.0	104	0.00
91 I	Tert Butyl al cohol -d10	1.000	1.000	0.0	106	0.00
92	Acrolei n	0.911	0.814	10.6	89	0.00
93	Tert-Butyl Al cohol	1.907	1.812	5.0	101	0.00
94	1, 4-Di oxane	0.197	0.222	-12.7	113	0.00
95	Cycl ohexanone	0.568	0.579	-1.9	104	0.00

Average % D = 6.5

Continuing Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: VC555-CC547
Lab FileID: C0012529.D

(#) = Out of Range
C0012345.D 8260.M

SPCC's out = 0 CCC's out = 0
Tue Oct 15 12:02:29 2002 RPT1

GC/MS Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- Instrument Performance Checks (DFTPP)
- Internal Standard Area Summaries
- Surrogate Recovery Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6086-LBS	W012507.D	1	10/14/02	ME	10/11/02	OP6086	SW675

The QC reported here applies to the following samples:

Method: SW846 8270C

F14972-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
95-48-7	2-Methylphenol	500	390	78	51-102
	3&4-Methylphenol	1000	727	73	44-99
87-86-5	Pentachlorophenol	500	437	87	36-141
95-95-4	2,4,5-Trichlorophenol	500	456	91	46-132
88-06-2	2,4,6-Trichlorophenol	500	452	90	39-130
106-46-7	1,4-Dichlorobenzene	500	432	86	48-111
121-14-2	2,4-Dinitrotoluene	500	464	93	75-126
118-74-1	Hexachlorobenzene	500	477	95	74-115
87-68-3	Hexachlorobutadiene	500	398	80	41-105
67-72-1	Hexachloroethane	500	432	86	42-115
98-95-3	Nitrobenzene	500	469	94	66-115
110-86-1	Pyridine	500	263	53	19-78

CAS No.	Surrogate Recoveries	BSP	Limits
367-12-4	2-Fluorophenol	59%	19-90%
4165-62-2	Phenol-d5	40%	10-68%
118-79-6	2,4,6-Tribromophenol	97%	36-137%
4165-60-0	Nitrobenzene-d5	98%	49-119%
321-60-8	2-Fluorobiphenyl	95%	45-118%
1718-51-0	Terphenyl-d14	111%	46-135%

Leachate Blank Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6086-LB	W012508.D	1	10/14/02	ME	10/11/02	OP6086	SW675

The QC reported here applies to the following samples:

Method: SW846 8270C

F14972-1

CAS No.	Compound	Result	RL	Units	Q
95-48-7	2-Methylphenol	ND	50	ug/l	
	3&4-Methylphenol	ND	50	ug/l	
87-86-5	Pentachlorophenol	ND	250	ug/l	
95-95-4	2,4,5-Trichlorophenol	ND	50	ug/l	
88-06-2	2,4,6-Trichlorophenol	ND	50	ug/l	
106-46-7	1,4-Dichlorobenzene	ND	50	ug/l	
121-14-2	2,4-Dinitrotoluene	ND	50	ug/l	
118-74-1	Hexachlorobenzene	ND	50	ug/l	
87-68-3	Hexachlorobutadiene	ND	50	ug/l	
67-72-1	Hexachloroethane	ND	50	ug/l	
98-95-3	Nitrobenzene	ND	50	ug/l	
110-86-1	Pyridine	ND	50	ug/l	

CAS No.	Surrogate Recoveries		Limits
367-12-4	2-Fluorophenol	65%	19-90%
4165-62-2	Phenol-d5	46%	10-68%
118-79-6	2,4,6-Tribromophenol	99%	36-137%
4165-60-0	Nitrobenzene-d5	100%	49-119%
321-60-8	2-Fluorobiphenyl	90%	45-118%
1718-51-0	Terphenyl-d14	109%	46-135%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6086-MS	W012510.D	1	10/14/02	ME	10/11/02	OP6086	SW675
OP6086-MSD	W012511.D	1	10/14/02	ME	10/11/02	OP6086	SW675
F14955-1	W012509.D	1	10/14/02	ME	10/11/02	OP6086	SW675

The QC reported here applies to the following samples:

Method: SW846 8270C

F14972-1

CAS No.	Compound	F14955-1 ug/l	Spike Q ug/l	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
95-48-7	2-Methylphenol	ND	500	354	71	436	87	21	51-110/21
	3&4-Methylphenol	ND	1000	684	68	816	82	18	51-108/21
87-86-5	Pentachlorophenol	ND	500	416	83	446	89	7	33-147/29
95-95-4	2,4,5-Trichlorophenol	ND	500	438	88	448	90	2	57-122/26
88-06-2	2,4,6-Trichlorophenol	ND	500	426	85	447	89	5	49-122/24
106-46-7	1,4-Dichlorobenzene	ND	500	382	76	413	83	8	46-112/23
121-14-2	2,4-Dinitrotoluene	ND	500	432	86	480	96	11	67-131/20
118-74-1	Hexachlorobenzene	ND	500	451	90	464	93	3	65-123/18
87-68-3	Hexachlorobutadiene	ND	500	352	70	363	73	3	41-106/24
67-72-1	Hexachloroethane	ND	500	379	76	421	84	11	42-115/25
98-95-3	Nitrobenzene	ND	500	429	86	466	93	8	55-122/22
110-86-1	Pyridine	ND	500	210	42	244	49	15	17-100/38

CAS No.	Surrogate Recoveries	MS	MSD	F14955-1	Limits
367-12-4	2-Fluorophenol	54%	60%	66%	19-90%
4165-62-2	Phenol-d5	37%	45%	47%	10-68%
118-79-6	2,4,6-Tribromophenol	94%	99%	99%	36-137%
4165-60-0	Nitrobenzene-d5	88%	98%	96%	49-119%
321-60-8	2-Fluorobiphenyl	86%	87%	92%	45-118%
1718-51-0	Terphenyl-d14	100%	126%	116%	46-135%

Instrument Performance Check (DFTPP)

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SW675-DFTPP	Injection Date:	10/14/02
Lab File ID:	W012488.D	Injection Time:	10:25
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	104293	46.1	Pass
68	Less than 2.0% of mass 69	0	0.0 (0.0) ^a	Pass
69	Mass 69 relative abundance	98072	43.3	Pass
70	Less than 2.0% of mass 69	527	0.23 (0.54) ^a	Pass
127	40.0 - 60.0% of mass 198	116707	51.6	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	226291	100.0	Pass
199	5.0 - 9.0% of mass 198	14949	6.6	Pass
275	10.0 - 30.0% of mass 198	43117	19.1	Pass
365	1.0 - 100.0% of mass 198	3574	1.6	Pass
441	Present, but less than mass 443	18888	8.3 (80.5) ^b	Pass
442	40.0 - 100.0% of mass 198	122069	53.9	Pass
443	17.0 - 23.0% of mass 442	23456	10.4 (19.2) ^c	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SW675-CC672	W012489.D	10/14/02	10:45	00:20	Continuing cal 50
OP6088-BS	W012490.D	10/14/02	11:15	00:50	Blank Spike
OP6088-MB	W012491.D	10/14/02	11:45	01:20	Method Blank
ZZZZZZ	W012492.D	10/14/02	12:16	01:51	(unrelated sample)
ZZZZZZ	W012493.D	10/14/02	12:46	02:21	(unrelated sample)
F14991-3	W012494.D	10/14/02	13:16	02:51	(used for QC only; not part of job F14972)
OP6088-MS	W012495.D	10/14/02	13:46	03:21	Matrix Spike
OP6088-MSD	W012496.D	10/14/02	14:16	03:51	Matrix Spike Duplicate
OP6072-MB	W012497.D	10/14/02	14:47	04:22	Method Blank
ZZZZZZ	W012498.D	10/14/02	15:17	04:52	(unrelated sample)
ZZZZZZ	W012499.D	10/14/02	15:48	05:23	(unrelated sample)
ZZZZZZ	W012500.D	10/14/02	16:18	05:53	(unrelated sample)
OP6075-BS	W012501.D	10/14/02	16:48	06:23	Blank Spike
OP6075-MB	W012502.D	10/14/02	17:19	06:54	Method Blank
ZZZZZZ	W012503.D	10/14/02	17:49	07:24	(unrelated sample)
F14981-2	W012504.D	10/14/02	18:19	07:54	(used for QC only; not part of job F14972)
OP6075-MS	W012505.D	10/14/02	18:49	08:24	Matrix Spike
OP6075-MSD	W012506.D	10/14/02	19:19	08:54	Matrix Spike Duplicate
OP6086-LBS	W012507.D	10/14/02	19:49	09:24	Blank Spike

Instrument Performance Check (DFTPP)

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	SW675-DFTPP	Injection Date:	10/14/02
Lab File ID:	W012488.D	Injection Time:	10:25
Instrument ID:	GCMSW		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
OP6086-LB	W012508.D	10/14/02	20:20	09:55	Leachate Blank
F14955-1	W012509.D	10/14/02	20:49	10:24	(used for QC only; not part of job F14972)
OP6086-MS	W012510.D	10/14/02	21:19	10:54	Matrix Spike
OP6086-MSD	W012511.D	10/14/02	21:50	11:25	Matrix Spike Duplicate
F14972-1	W012512.D	10/14/02	22:20	11:55	IH-WD-005

Instrument Performance Check (DFTPP)

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	SW672-DFTPP	Injection Date:	10/11/02
Lab File ID:	W012416.D	Injection Time:	10:29
Instrument ID:	GCMSW		

m/e	Ion Abundance Criteria	Raw Abundance	% Relative Abundance	Pass/Fail
51	30.0 - 60.0% of mass 198	108722	48.1	Pass
68	Less than 2.0% of mass 69	279	0.12 (0.28) ^a	Pass
69	Mass 69 relative abundance	98246	43.4	Pass
70	Less than 2.0% of mass 69	447	0.2 (0.45) ^a	Pass
127	40.0 - 60.0% of mass 198	115336	51.0	Pass
197	Less than 1.0% of mass 198	0	0.0	Pass
198	Base peak, 100% relative abundance	226240	100.0	Pass
199	5.0 - 9.0% of mass 198	14703	6.5	Pass
275	10.0 - 30.0% of mass 198	43275	19.1	Pass
365	1.0 - 100.0% of mass 198	3717	1.6	Pass
441	Present, but less than mass 443	19019	8.4 (78.5) ^b	Pass
442	40.0 - 100.0% of mass 198	126587	56.0	Pass
443	17.0 - 23.0% of mass 442	24242	10.7 (19.2) ^c	Pass

- (a) Value is % of mass 69
- (b) Value is % of mass 443
- (c) Value is % of mass 442

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
SW672-IC672	W012417.D	10/11/02	10:48	00:19	Initial cal 5
SW672-IC672	W012418.D	10/11/02	11:18	00:49	Initial cal 25
SW672-ICC672	W012419.D	10/11/02	11:49	01:20	Initial cal 50
SW672-IC672	W012420.D	10/11/02	12:19	01:50	Initial cal 75
SW672-IC672	W012421.D	10/11/02	12:49	02:20	Initial cal 100
SW672-IC672	W012422.D	10/11/02	13:20	02:51	Initial cal 125
OP6072-BS	W012426.D	10/11/02	15:22	04:53	Blank Spike
OP6072-MB	W012427.D	10/11/02	15:53	05:24	Method Blank
F14913-1	W012428.D	10/11/02	16:23	05:54	(used for QC only; not part of job F14972)
F14913-2	W012429.D	10/11/02	16:54	06:25	(used for QC only; not part of job F14972)
OP6072-MS	W012430.D	10/11/02	17:25	06:56	Matrix Spike
OP6072-MSD	W012431.D	10/11/02	17:55	07:26	Matrix Spike Duplicate
F14913-1	W012432.D	10/11/02	18:25	07:56	(used for QC only; not part of job F14972)
OP6072-DUP	W012433.D	10/11/02	18:55	08:26	Duplicate
ZZZZZZ	W012434.D	10/11/02	19:25	08:56	(unrelated sample)
ZZZZZZ	W012435.D	10/11/02	19:55	09:26	(unrelated sample)
ZZZZZZ	W012436.D	10/11/02	20:25	09:56	(unrelated sample)
ZZZZZZ	W012437.D	10/11/02	20:56	10:27	(unrelated sample)
ZZZZZZ	W012438.D	10/11/02	21:26	10:57	(unrelated sample)

Instrument Performance Check (DFTPP)

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample:	SW672-DFTPP	Injection Date:	10/11/02
Lab File ID:	W012416.D	Injection Time:	10:29
Instrument ID:	GCMSW		

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	W012439.D	10/11/02	21:55	11:26	(unrelated sample)

Semivolatile Internal Standard Area Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std:	SW675-CC672	Injection Date:	10/14/02
Lab File ID:	W012489.D	Injection Time:	10:45
Instrument ID:	GCMSW	Method:	SW846 8270C

	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
Check Std	174255	5.27	638872	6.52	306591	8.90	410709	11.39	227676	16.32	133872	18.83
Upper Limit ^a	348510	5.77	1277744	7.02	613182	9.40	821418	11.89	455352	16.82	267744	19.33
Lower Limit ^b	87128	4.77	319436	6.02	153296	8.40	205355	10.89	113838	15.82	66936	18.33

Lab Sample ID	IS 1		IS 2		IS 3		IS 4		IS 5		IS 6	
	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT	AREA	RT
OP6088-BS	221171	5.27	797777	6.52	384023	8.90	529462	11.39	311516	16.32	176677	18.83
OP6088-MB	173131	5.27	627080	6.51	308719	8.89	434616	11.38	264260	16.31	150370	18.83
ZZZZZZ	160255	5.26	566217	6.51	268841	8.89	378005	11.38	221840	16.31	128451	18.83
ZZZZZZ	193484	5.26	682652	6.51	325676	8.90	489773	11.39	299936	16.32	151022	18.83
F14991-3	248938	5.27	867776	6.52	406236	8.90	577956	11.39	336880	16.32	191184	18.83
OP6088-MS	186034	5.26	677922	6.51	333006	8.90	460795	11.39	246962	16.32	143573	18.84
OP6088-MSD	244832	5.26	837273	6.51	398479	8.90	578965	11.38	315888	16.32	159245	18.83
OP6072-MB	255886	5.26	917599	6.51	449195	8.89	649063	11.38	352616	16.31	172900	18.82
ZZZZZZ	222298	5.26	745986	6.50	360700	8.89	521201	11.38	316689	16.30	163239	18.82
ZZZZZZ	285793	5.26	1022421	6.50	482061	8.89	658693	11.38	337021	16.30	179768	18.82
ZZZZZZ	309937	5.26	1131175	6.50	561582	8.89	696300	11.38	266944	16.30	134874	18.82
OP6075-BS	208501	5.26	740738	6.50	354237	8.89	514451	11.38	295580	16.31	148757	18.82
OP6075-MB	173301	5.25	600250	6.50	295013	8.89	438865	11.37	258952	16.30	140250	18.82
ZZZZZZ	187424	5.25	637273	6.50	290852	8.89	338879	11.38	178303	16.30	121942	18.82
F14981-2	232073	5.26	791901	6.51	405056	8.89	582203	11.37	308239	16.31	176992	18.82
OP6075-MS	263442	5.26	922275	6.51	465486	8.89	646234	11.38	322847	16.31	191195	18.82
OP6075-MSD	222986	5.26	753012	6.51	378881	8.89	559958	11.38	327767	16.31	187402	18.82
OP6086-LBS	199785	5.26	709655	6.51	340833	8.89	464249	11.38	234320	16.30	129031	18.81
OP6086-LB	223892	5.26	795270	6.50	394762	8.89	590993	11.38	325305	16.30	173681	18.81
F14955-1	213679	5.25	737818	6.50	347197	8.89	479216	11.38	227165	16.30	132433	18.81
OP6086-MS	193212	5.26	687025	6.50	330775	8.89	433080	11.38	214378	16.31	120710	18.81
OP6086-MSD	392503*	5.26	1551715*6.51	785334*	8.90	976498*	11.38	361212	16.31	165427	18.81	
F14972-1	212601	5.25	732807	6.50	362861	8.89	506944	11.38	271289	16.30	159875	18.81

- IS 1 = 1,4-Dichlorobenzene-d4
- IS 2 = Naphthalene-d8
- IS 3 = Acenaphthene-D10
- IS 4 = Phenanthrene-d10
- IS 5 = Chrysene-d12
- IS 6 = Perylene-d12

(a) Upper Limit = + 100% of check standard area; Retention time + 0.5 minutes.
 (b) Lower Limit = -50% of check standard area; Retention time -0.5 minutes.

Semivolatile Surrogate Recovery Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8270C	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1	S2	S3	S4	S5	S6
F14972-1	W012512.D	58.0	39.0	100.0	99.0	89.0	107.0
OP6086-LB	W012508.D	65.0	46.0	99.0	100.0	90.0	109.0
OP6086-LBS	W012507.D	59.0	40.0	97.0	98.0	95.0	111.0
OP6086-MS	W012510.D	54.0	37.0	94.0	88.0	86.0	100.0
OP6086-MSD	W012511.D	60.0	45.0	99.0	98.0	87.0	126.0

Surrogate Compounds	Recovery Limits
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S1 = 2-Fluorophenol	19-90%
S2 = Phenol-d5	10-68%
S3 = 2,4,6-Tribromophenol	36-137%
S4 = Nitrobenzene-d5	49-119%
S5 = 2-Fluorobiphenyl	45-118%
S6 = Terphenyl-d14	46-135%

Initial Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SW672-ICC672
 Lab FileID: W012419.D

Response Factor Report MSBNA01

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Fri Oct 11 13:46:24 2002
 Response via : Initial Calibration

Calibration Files

5 =W012417.D 25 =W012418.D 50 =W012419.D
 75 =W012420.D 100 =W012421.D 125 =W012422.D

Compound	5	25	50	75	100	125	Avg	%RSD
-----I STD-----								
1) I 1,4-Dichlorobenzene-d								
2) 1,4-Dioxane	0.636	0.557	0.536	0.525	0.529	0.500	0.547	8.65
3) N-nitrosodimethyl am	0.782	0.763	0.742	0.770	0.751	0.717	0.754	3.01
4) Pyridine	1.386	1.311	1.346	1.285	1.336	1.254	1.320	3.55
5) Benzaldehyde		0.725	0.546	0.496	0.458	0.370	0.519	25.45
6) Aniline	2.190	2.112	1.925	1.852	1.804	1.655	1.923	10.35
7) S 2-Fluorophenol	1.446	1.355	1.269	1.217	1.218	1.135	1.273	8.73
8) bis(2-Chloroethyl)e	1.480	1.393	1.330	1.312	1.325	1.248	1.348	5.89
9) S Phenol-d5	1.689	1.572	1.451	1.421	1.390	1.293	1.469	9.55
10) C Phenol	2.010	1.845	1.675	1.615	1.581	1.479	1.701	11.41
11) 2-Chlorophenol	1.545	1.509	1.471	1.451	1.457	1.354	1.464	4.43
12) 1,3-Dichlorobenzene	1.723	1.608	1.547	1.492	1.508	1.407	1.547	7.01
13) C 1,4-Dichlorobenzene	1.735	1.621	1.548	1.476	1.493	1.402	1.546	7.64
14) 1,2-Dichlorobenzene	1.593	1.509	1.446	1.419	1.408	1.329	1.450	6.28
15) Benzyl alcohol	0.904	0.911	0.887	0.894	0.907	0.852	0.892	2.42
16) bis(2-chloroisoprop	3.002	2.756	2.619	2.539	2.520	2.314	2.625	8.92
17) 2-Methylphenol	1.343	1.275	1.239	1.230	1.217	1.114	1.236	6.07
18) Acetophenone	1.900	1.847	1.741	1.784	1.765	1.652	1.782	4.82
19) Hexachloroethane	0.651	0.626	0.606	0.586	0.591	0.559	0.603	5.38
20) P N-Nitroso-di-n-prop	0.972	0.951	0.915	0.936	0.926	0.867	0.928	3.86
21) 3&4-Methylphenol	1.354	1.318	1.245	1.235	1.226	1.141	1.253	5.97
-----I STD-----								
22) I Naphthalene-d8								
23) S Nitrobenzene-d5	0.306	0.346	0.366	0.372	0.374	0.362	0.355	7.22
24) Nitrobenzene	0.335	0.366	0.372	0.370	0.369	0.357	0.362	3.86
25) Isophorone	0.715	0.706	0.685	0.700	0.673	0.656	0.689	3.24
26) C 2-Nitrophenol	0.126	0.167	0.181	0.191	0.190	0.185	0.173	14.25
27) 2,4-Dimethylphenol	0.388	0.393	0.376	0.378	0.367	0.355	0.376	3.68
28) bis(2-Chloroethoxy)	0.487	0.447	0.431	0.417	0.406	0.394	0.430	7.71
29) Benzoic Acid		0.217	0.262	0.303	0.292	0.288	0.272	12.72
30) C 2,4-Dichlorophenol	0.334	0.318	0.314	0.315	0.305	0.294	0.313	4.18
31) 1,2,4-Tri chlorobenz	0.349	0.339	0.319	0.313	0.302	0.291	0.319	6.87
32) Naphthalene	1.235	1.127	1.071	1.049	1.035	0.987	1.084	8.01
33) 4-Chloroaniline	0.448	0.454	0.434	0.425	0.420	0.389	0.428	5.42
34) 2,6-Dichlorophenol	0.322	0.317	0.304	0.294	0.289	0.277	0.301	5.67
35) C Hexachlorobutadiene	0.213	0.198	0.191	0.185	0.182	0.173	0.190	7.35
36) Caprolactam	0.082	0.102	0.097	0.113	0.102	0.096	0.099	10.25
37) C 4-Chloro-3-methyl ph	0.308	0.310	0.298	0.306	0.298	0.281	0.300	3.53
38) 2-Methylnaphthalene	0.705	0.681	0.651	0.635	0.620	0.600	0.649	6.00
39) 1-Methylnaphthalene	0.702	0.663	0.628	0.621	0.617	0.587	0.636	6.38
40) 1,2,4,5-Tetrachloro	0.328	0.304	0.287	0.285	0.283	0.266	0.292	7.28
-----I STD-----								
41) I Acenaphthene-d10								
42) P Hexachlorocyclopent	0.334	0.359	0.387	0.376	0.377	0.384	0.369	5.44
43) C 2,4,6-Tri chlorophen	0.421	0.438	0.436	0.431	0.419	0.422	0.428	1.92
44) 2,4,5-Tri chlorophen	0.438	0.472	0.467	0.458	0.453	0.447	0.456	2.78

Initial Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SW672-ICC672
 Lab FileID: W012419.D

45)	S	2-Fluorobiphenyl	1.613	1.545	1.468	1.412	1.403	1.413	1.476	5.84
46)		1,1'-Bi phenyl	1.749	1.643	1.590	1.526	1.496	1.493	1.583	6.32
47)		2-Chloronaphthalene	1.476	1.376	1.323	1.254	1.256	1.240	1.321	6.96
48)		2-Nitroaniline		0.340	0.361	0.398	0.378	0.377	0.371	5.85
49)		Acenaphthylene	1.947	1.883	1.829	1.725	1.733	1.687	1.801	5.68
50)		Dimethyl phthalate	1.474	1.450	1.368	1.393	1.332	1.322	1.390	4.46
51)		2,6-Dinitrotoluene		0.248	0.264	0.279	0.269	0.269	0.266	4.33
52)	C	Acenaphthene	1.269	1.214	1.163	1.132	1.111	1.101	1.165	5.61
53)		3-Nitroaniline		0.301	0.307	0.342	0.314	0.311	0.315	5.05
54)	P	2,4-Dinitrophenol		0.082	0.109	0.145	0.133	0.142	0.122	21.72
			----- Linear regression ----- Coefficient = 0.9903							
			Response Ratio = -0.09318 + 0.15657 *A							
55)		Dibenzofuran	1.816	1.740	1.668	1.656	1.590	1.569	1.673	5.54
56)		2,4-Dinitrotoluene		0.327	0.353	0.401	0.375	0.376	0.367	7.57
57)	P	4-Nitrophenol	0.142	0.188	0.186	0.203	0.188	0.184	0.182	11.32
58)		2,3,4,6-Tetrachloro	0.233	0.298	0.288	0.301	0.290	0.288	0.283	8.81
59)		Fluorene	1.465	1.402	1.317	1.336	1.274	1.245	1.340	6.09
60)		4-Chlorophenyl-phen	0.724	0.678	0.623	0.618	0.598	0.585	0.638	8.33
61)		Diethyl phthalate	1.352	1.373	1.290	1.344	1.248	1.221	1.305	4.70
62)		4-Nitroaniline		0.302	0.291	0.331	0.294	0.289	0.301	5.71
63)	I	Phenanthrene-d10	-----I STD-----							
64)		4,6-Dinitro-2-methy	0.099	0.120	0.148	0.144	0.149	0.132		16.66
			----- Linear regression ----- Coefficient = 0.9965							
			Response Ratio = -0.08463 + 0.16271 *A							
65)	C	n-Nitrosodiphenyl am	0.647	0.638	0.634	0.618	0.628	0.638	0.634	1.55
66)		1,2-Diphenylhydrazine	0.981	0.968	0.954	0.916	0.951	0.948	0.953	2.30
67)	S	2,4,6-Tribromopheno	0.080	0.092	0.091	0.088	0.092	0.092	0.089	5.13
68)		4-Bromophenyl-pheny	0.222	0.220	0.212	0.207	0.213	0.210	0.214	2.82
69)		Hexachlorobenzene	0.223	0.207	0.200	0.197	0.201	0.197	0.204	4.77
70)		Atrazine	0.217	0.222	0.206	0.211	0.203	0.193	0.209	4.93
71)	C	Pentachlorophenol		0.137	0.137	0.146	0.143	0.142	0.141	2.77
72)		Phenanthrene	1.299	1.213	1.165	1.167	1.173	1.112	1.188	5.32
73)		Anthracene	1.258	1.257	1.200	1.211	1.198	1.162	1.214	3.07
74)		Carbazole	1.131	1.148	1.076	1.087	1.048	1.018	1.085	4.53
75)		Di-n-butyl phthalate	1.306	1.445	1.359	1.393	1.339	1.321	1.361	3.77
76)	C	Fluoranthene	1.171	1.211	1.114	1.145	1.099	1.047	1.131	5.08
77)	I	Chrysene-d12	-----I STD-----							
78)		Benzo[a]fluoranthene	0.495	0.595	0.497	0.524	0.471	0.410	0.499	12.20
79)		Pyrene	1.843	1.811	1.839	1.848	1.841	1.897	1.846	1.52
80)	S	Terphenyl-d14	1.092	1.047	1.050	1.063	1.077	1.092	1.070	1.85
81)		Butyl benzyl phthalate	0.697	0.792	0.823	0.830	0.810	0.829	0.797	6.37
82)		3,3'-Dichlorobenzid	0.344	0.400	0.395	0.391	0.384	0.372	0.381	5.36
83)		Benzo[a]anthracene	1.287	1.300	1.299	1.298	1.267	1.271	1.287	1.15
84)		Chrysene	1.339	1.279	1.273	1.234	1.228	1.237	1.265	3.32
85)		bis(2-Ethylhexyl)ph	0.830	1.049	1.063	1.079	1.086	1.114	1.037	10.02
86)	I	Perylene-d12	-----I STD-----							
87)	C	Di-n-octyl phthalate	2.263	2.933	3.021	3.275	3.254	3.318	3.011	13.19
88)		Benzo[b]fluoranthene	1.614	1.739	1.704	1.718	1.754	1.686	1.703	2.92
89)		Benzo[k]fluoranthene	1.738	1.745	1.675	1.749	1.740	1.724	1.728	1.59
90)	C	Benzo[a]pyrene	1.370	1.469	1.440	1.474	1.501	1.484	1.456	3.22
91)		Indeno[1,2,3-cd]pyr	0.948	1.046	1.108	1.091	1.178	1.166	1.089	7.75
92)		Di-benz[a,h]anthracene	1.020	1.146	1.155	1.133	1.227	1.215	1.149	6.45
93)		Benzo[g,h,i]perylene	1.125	1.117	1.148	1.103	1.236	1.198	1.155	4.49

(#) = Out of Range

Initial Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: SW672-ICC672
Lab FileID: W012419.D

8270C.M

Mon Oct 14 15:00:37 2002

MSBNA01

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SW675-CC672
 Lab FileID: W012489.D

Evaluate Continuing Calibration Report

Data File : C:\HPCHEM\1\DATA\101402\W012489.D Vial : 2
 Acq On : 14 Oct 2002 10:45 am Operator: marke
 Sample : cc672-50 Inst : MSBNA01
 Misc : op6086, sw675, 100, , , 1, 1, water Multiplr: 1.00
 MS Integration Params: RTEINT.P

Method : C:\HPCHEM\1\METHODS\8270C.M (RTE Integrator)
 Title : SW846 8270C OR EPA 625
 Last Update : Fri Oct 11 13:46:24 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.001 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
 Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(mi n)	R. T.
1 I	1,4-Di chl orobenzene-d4	1.000	1.000	0.0	75	-0.02	5.27
2	1,4-Di oxane	0.547	0.489	10.6	68	-0.04	1.94
3	N-ni trosodi methyl ami ne	0.754	0.686	9.0	69	-0.04	2.57
4	Pyri di ne	1.320	1.287	2.5	71	-0.03	2.59
5	Benzal dehyde	0.519	0.536	-3.3	73	-0.02	4.89
6	Ani li ne	1.923	1.964	-2.1	76	-0.02	5.01
7 S	2-Fl uorophenol	1.273	1.247	2.0	73	-0.02	4.18
8	bi s(2-Chl oroethyl)ether	1.348	1.358	-0.7	76	-0.02	5.06
9 S	Phenol -d5	1.469	1.524	-3.7	78	-0.02	4.99
10 C	Phenol	1.701	1.737	-2.1	77	-0.02	5.00
11	2-Chl orophenol	1.464	1.456	0.5	74	-0.02	5.11
12	1,3-Di chl orobenzene	1.547	1.530	1.1	74	-0.02	5.23
13 C	1,4-Di chl orobenzene	1.546	1.535	0.7	74	-0.02	5.28
14	1,2-Di chl orobenzene	1.450	1.453	-0.2	75	-0.02	5.45
15	Benzyl al cohoh	0.892	0.906	-1.6	76	-0.02	5.40
16	bi s(2-chl oroi sopropyl)eth	2.625	2.636	-0.4	75	-0.02	5.54
17	2-Methyl phenol	1.236	1.255	-1.5	75	-0.02	5.52
18	Acetophenone	1.782	1.817	-2.0	78	-0.02	5.65
19	Hexachl oroethane	0.603	0.589	2.3	73	-0.02	5.74
20 P	N-Ni trosodi -n-propyl ami n	0.928	0.948	-2.2	77	-0.02	5.67
21	3&4-Methyl phenol	1.253	1.297	-3.5	78	-0.02	5.64
22 I	Naphthal ene-d8	1.000	1.000	0.0	79	-0.02	6.52
23 S	Ni trobenzene-d5	0.355	0.340	4.2	73	-0.02	5.80
24	Ni trobenzene	0.362	0.354	2.2	75	-0.02	5.81
25	I sophorone	0.689	0.683	0.9	79	-0.03	6.04
26 C	2-Ni trophenol	0.173	0.159	8.1	69	-0.02	6.13
27	2,4-Di methyl phenol	0.376	0.368	2.1	77	-0.02	6.15
28	bi s(2-Chl oroethoxy)methan	0.430	0.424	1.4	78	-0.02	6.25
29	Benzoi c Aci d	0.272	0.231	15.1	70	-0.06	6.29
30 C	2,4-Di chl orophenol	0.313	0.310	1.0	78	-0.03	6.37
31	1,2,4-Tri chl orobenzene	0.319	0.320	-0.3	79	-0.02	6.47
32	Naphthal ene	1.084	1.075	0.8	79	-0.02	6.54
33	4-Chl oroani li ne	0.428	0.444	-3.7	81	-0.02	6.61
34	2,6-Di chl orophenol	0.301	0.305	-1.3	79	-0.02	6.62
35 C	Hexachl orobutadi ene	0.190	0.188	1.1	77	-0.02	6.75
36	Caprol actam	0.099	0.096	3.0	78	-0.07	7.02
37 C	4-Chl oro-3-methyl phenol	0.300	0.309	-3.0	82	-0.03	7.17
38	2-Methyl naphthal ene	0.649	0.661	-1.8	80	-0.03	7.37
39	1-Methyl naphthal ene	0.636	0.645	-1.4	81	-0.03	7.51
40	1,2,4,5-Tetrachl orobenzen	0.292	0.304	-4.1	84	-0.02	7.65

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: SW675-CC672
 Lab FileID: W012489.D

41	I	Acenaphthene-d10	1.000	1.000	0.0	83	-0.03	8.90
42	P	Hexachlorocyclopentadiene	0.369	0.369	0.0	79	-0.03	7.68
43	C	2,4,6-Trichlorophenol	0.428	0.430	-0.5	82	-0.02	7.78
44		2,4,5-Trichlorophenol	0.456	0.460	-0.9	81	-0.03	7.83
45	S	2-Fluorobiphenyl	1.476	1.453	1.6	82	-0.02	7.89
46		1,1'-Biphenyl	1.583	1.584	-0.1	82	-0.03	8.02
47		2-Chloronaphthalene	1.321	1.327	-0.5	83	-0.03	8.03
48		2-Nitroaniline	0.371	0.347	6.5	79	-0.03	8.22
49		Acenaphthylene	1.801	1.834	-1.8	83	-0.03	8.66
50		Dimethyl phthalate	1.390	1.370	1.4	83	-0.03	8.55
51		2,6-Dinitrotoluene	0.266	0.244	8.3	76	-0.03	8.65
52	C	Acenaphthene	1.165	1.183	-1.5	84	-0.03	8.95
53		3-Nitroaniline	0.315	0.303	3.8	82	-0.03	8.86
			----- True	Cal c.	% Dri ft	-----		
54	P	2,4-Dinitrophenol	100.000	86.581	13.4	74	-0.04	9.02
			----- AvgRF	CCRF	% Dev	-----		
55		Di benzofuran	1.673	1.653	1.2	82	-0.03	9.20
56		2,4-Dinitrotoluene	0.367	0.319	13.1	75	-0.03	9.27
57	P	4-Nitrophenol	0.182	0.167	8.2	74	-0.04	9.14
58		2,3,4,6-Tetrachlorophenol	0.283	0.285	-0.7	82	-0.03	9.48
59		Fluorene	1.340	1.351	-0.8	85	-0.03	9.78
60		4-Chlorobiphenyl-phenylether	0.638	0.644	-0.9	85	-0.03	9.79
61		Diethyl phthalate	1.305	1.249	4.3	80	-0.03	9.72
62		4-Nitroaniline	0.301	0.283	6.0	81	-0.04	9.87
63	I	Phenanthrene-d10	1.000	1.000	0.0	80	-0.04	11.39
			----- True	Cal c.	% Dri ft	-----		
64		4,6-Dinitro-2-methylpheno	100.000	88.018	12.0	73	-0.04	9.96
			----- AvgRF	CCRF	% Dev	-----		
65	C	n-Nitrosodiphenylamine	0.634	0.635	-0.2	80	-0.04	10.00
66		1,2-Diphenylhydrazine	0.953	0.963	-1.0	81	-0.04	10.06
67	S	2,4,6-Tribromophenol	0.089	0.093	-4.5	82	-0.03	10.22
68		4-Bromobiphenyl-phenylether	0.214	0.222	-3.7	84	-0.03	10.63
69		Hexachlorobenzene	0.204	0.209	-2.5	83	-0.03	10.87
70		Atrazine	0.209	0.201	3.8	78	-0.04	11.03
71	C	Pentachlorophenol	0.141	0.139	1.4	81	-0.04	11.19
72		Phenanthrene	1.188	1.192	-0.3	82	-0.04	11.43
73		Anthracene	1.214	1.224	-0.8	81	-0.04	11.51
74		Carbazole	1.085	1.063	2.0	79	-0.04	11.83
75		Di-n-butyl phthalate	1.361	1.317	3.2	77	-0.04	12.67
76	C	Fluoranthene	1.131	1.097	3.0	79	-0.05	13.61
77	I	Chrysene-d12	1.000	1.000	0.0	70	-0.05	16.32
78		Benzo[a]pyrene	0.499	0.513	-2.8	73	-0.04	13.92
79		Pyrene	1.846	1.979	-7.2	76	-0.05	14.02
80	S	Terphenyl-d14	1.070	1.124	-5.0	75	-0.05	14.41
81		Butyl benzyl phthalate	0.797	0.803	-0.8	69	-0.05	15.46
82		3,3'-Dichlorobenzidine	0.381	0.398	-4.5	71	-0.05	16.33
83		Benzo[a]anthracene	1.287	1.318	-2.4	71	-0.06	16.29
84		Chrysene	1.265	1.314	-3.9	73	-0.06	16.36
85		bis(2-Ethylhexyl)phthalate	1.037	1.030	0.7	68	-0.05	16.66
86	I	Perylene-d12	1.000	1.000	0.0	73	-0.06	18.83
87	C	Di-n-octyl phthalate	3.011	2.674	11.2	65	-0.06	17.77
88		Benzo[b]fluoranthene	1.703	1.653	2.9	71	-0.06	18.22
89		Benzo[k]fluoranthene	1.728	1.661	3.9	73	-0.06	18.26

Continuing Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: SW675-CC672
Lab FileID: W012489.D

90 C	Benzo[a]pyrene	1.456	1.418	2.6	72	-0.06	18.73
91	Indeno[1,2,3-cd]pyrene	1.089	1.157	-6.2	76	-0.07	20.42
92	Di benz[a,h]anthracene	1.149	1.252	-9.0	79	-0.07	20.46
93	Benzo[g,h,i]perylene	1.155	1.271	-10.0	81	-0.08	20.79

(0.0 %) 0 of 87 compounds' %D > 20

(#) = Out of Range
W012419.D 8270C.M

SPCC's out = 0 CCC's out = 0
Mon Oct 14 15:36:17 2002 MSBNA01

GC Semi-volatiles

QC Data Summaries

Includes the following where applicable:

- Method Blank Summaries
- Blank Spike Summaries
- Matrix Spike and Duplicate Summaries
- DDT/Endrin Breakdown Checks
- Surrogate Recovery Summaries
- GC Surrogate Retention Time Summaries
- Initial and Continuing Calibration Summaries

Blank Spike Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6062-BS	MN16256.D	1	10/10/02	NJ	10/09/02	OP6062	GMN623

The QC reported here applies to the following samples:

Method: SW846 8082

F14972-1

CAS No.	Compound	Spike ug/kg	BSP ug/kg	BSP %	Limits
12674-11-2	Aroclor 1016	133	134	101	73-121
11096-82-5	Aroclor 1260	133	140	105	79-130

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	99%	50-134%
2051-24-3	Decachlorobiphenyl	106%	48-147%

Blank Spike Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6087-LBS	DD07465.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279

The QC reported here applies to the following samples:

Method: SW846 8081A

F14972-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
58-89-9	gamma-BHC (Lindane)	5	4.9	98	71-132
72-20-8	Endrin	5	4.5	90	44-156
76-44-8	Heptachlor	5	4.4	88	64-132
1024-57-3	Heptachlor epoxide	5	5.4	108	73-134
72-43-5	Methoxychlor	5	5.4	108	71-135

CAS No.	Surrogate Recoveries	BSP	Limits
877-09-8	Tetrachloro-m-xylene	100%	52-131%
2051-24-3	Decachlorobiphenyl	106%	16-153%

Leachate Blank Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6087-LB	DD07464.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279

The QC reported here applies to the following samples:

Method: SW846 8081A

F14972-1

CAS No.	Compound	Result	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	0.50	ug/l	
12789-03-6	Chlordane	ND	5.0	ug/l	
72-20-8	Endrin	ND	1.0	ug/l	
76-44-8	Heptachlor	ND	0.50	ug/l	
1024-57-3	Heptachlor epoxide	ND	0.50	ug/l	
72-43-5	Methoxychlor	ND	1.0	ug/l	
8001-35-2	Toxaphene	ND	25	ug/l	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	98%	52-131%
2051-24-3	Decachlorobiphenyl	101%	16-153%

Method Blank Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6062-MB	MN16257.D	1	10/10/02	NJ	10/09/02	OP6062	GMN623

The QC reported here applies to the following samples:

Method: SW846 8082

F14972-1

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	33	ug/kg	
11104-28-2	Aroclor 1221	ND	33	ug/kg	
11141-16-5	Aroclor 1232	ND	33	ug/kg	
53469-21-9	Aroclor 1242	ND	33	ug/kg	
12672-29-6	Aroclor 1248	ND	33	ug/kg	
11097-69-1	Aroclor 1254	ND	33	ug/kg	
11096-82-5	Aroclor 1260	ND	33	ug/kg	
	Total PCBs	ND	67	ug/kg	

CAS No.	Surrogate Recoveries		Limits
877-09-8	Tetrachloro-m-xylene	88%	50-134%
2051-24-3	Decachlorobiphenyl	103%	48-147%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP6087-MS	DD07467.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279
OP6087-MSD	DD07468.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279
F14972-1	DD07466.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279

The QC reported here applies to the following samples:

Method: SW846 8081A

F14972-1

CAS No.	Compound	F14972-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
58-89-9	gamma-BHC (Lindane)	ND	5	4.1	82	4.4	88	7	59-139/23
72-20-8	Endrin	ND	5	5.4	108	5.8	116	7	61-152/25
76-44-8	Heptachlor	ND	5	3.5	70	3.7	74	6	60-132/23
1024-57-3	Heptachlor epoxide	ND	5	4.2	84	4.4	88	5	68-136/21
72-43-5	Methoxychlor	ND	5	5.2	104	5.6	112	7	56-145/27

CAS No.	Surrogate Recoveries	MS	MSD	F14972-1	Limits
877-09-8	Tetrachloro-m-xylene	95%	103%	91%	52-131%
2051-24-3	Decachlorobiphenyl	91%	102%	97%	16-153%

DDT/Endrin Breakdown Check

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	GDD279-DDT	Injection Date:	10/14/02
Lab File ID:	DD07448.D	Injection Time:	23:41
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	14693	25792
4,4'-DDE	495	806
4,4'-DDT	352481	573220

DDT Breakdown ^a	4.1 %	4.4 %
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Endrin aldehyde	1608	3560
Endrin ketone	7977	11692
Endrin	389794	791093

Endrin Breakdown ^b	2.4 %	1.9 %
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(a) Calculated as: $(DDD + DDE) / (DDD + DDE + DDT) \times 100$

(b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
ZZZZZZ	DD07449.D	10/15/02	00:08	00:27	(unrelated sample)
ZZZZZZ	DD07450.D	10/15/02	00:35	00:54	(unrelated sample)
ZZZZZZ	DD07451.D	10/15/02	01:02	01:21	(unrelated sample)
ZZZZZZ	DD07452.D	10/15/02	01:28	01:47	(unrelated sample)
ZZZZZZ	DD07453.D	10/15/02	01:55	02:14	(unrelated sample)
ZZZZZZ	DD07454.D	10/15/02	02:22	02:41	(unrelated sample)
ZZZZZZ	DD07455.D	10/15/02	02:49	03:08	(unrelated sample)
ZZZZZZ	DD07456.D	10/15/02	03:16	03:35	(unrelated sample)
ZZZZZZ	DD07457.D	10/15/02	03:42	04:01	(unrelated sample)
GDD279-CC279	DD07458.D	10/15/02	04:09	04:28	Continuing cal 40
ZZZZZZ	DD07459.D	10/15/02	04:36	04:55	(unrelated sample)
ZZZZZZ	DD07460.D	10/15/02	05:03	05:22	(unrelated sample)
ZZZZZZ	DD07461.D	10/15/02	05:30	05:49	(unrelated sample)
ZZZZZZ	DD07462.D	10/15/02	05:57	06:16	(unrelated sample)
OP6087-LB	DD07464.D	10/15/02	06:51	07:10	Leachate Blank
OP6087-LBS	DD07465.D	10/15/02	07:17	07:36	Blank Spike
F14972-1	DD07466.D	10/15/02	07:44	08:03	IH-WD-005
OP6087-MS	DD07467.D	10/15/02	08:11	08:30	Matrix Spike
OP6087-MSD	DD07468.D	10/15/02	08:38	08:57	Matrix Spike Duplicate
GDD279-CC279	DD07469.D	10/15/02	09:05	09:24	Continuing cal 40
ZZZZZZ	DD07470.D	10/15/02	09:32	09:51	(unrelated sample)
ZZZZZZ	DD07471.D	10/15/02	09:59	10:18	(unrelated sample)
GDD279-ECC279	DD07472.D	10/15/02	10:26	10:45	Ending cal 40

DDT/Endrin Breakdown Check

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample:	GDD279-DDT	Injection Date:	10/13/02
Lab File ID:	DD07370.D	Injection Time:	12:50
Instrument ID:	GCDD		

Compound	Response Signal 1	Response Signal 2
4,4'-DDD	19927	32468
4,4'-DDE	417	962
4,4'-DDT	355920	550249

DDT Breakdown ^a	5.4 %	5.7 %
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Endrin aldehyde	4356	5646
Endrin ketone	11625	16314
Endrin	431970	817317

Endrin Breakdown ^b	3.6 %	2.6 %
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(a) Calculated as: $(\text{DDD} + \text{DDE}) / (\text{DDD} + \text{DDE} + \text{DDT}) \times 100$

(b) Calculated as: $(\text{Endrin Aldehyde} + \text{Endrin Ketone}) / (\text{Endrin Aldehyde} + \text{Endrin Ketone} + \text{Endrin}) \times 100$

This check applies to the following Samples, MS, MSD, Blanks, and Standards:

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	Hours Lapsed	Client Sample ID
GDD279-IC279	DD07371.D	10/13/02	13:17	00:27	Initial cal 5
GDD279-IC279	DD07372.D	10/13/02	13:44	00:54	Initial cal 10
GDD279-IC279	DD07373.D	10/13/02	14:11	01:21	Initial cal 20
GDD279-ICC279	DD07374.D	10/13/02	14:38	01:48	Initial cal 40
GDD279-IC279	DD07375.D	10/13/02	15:04	02:14	Initial cal 60
GDD279-IC279	DD07376.D	10/13/02	15:31	02:41	Initial cal 80
OP6061-BS	DD07380.D	10/13/02	17:18	04:28	Blank Spike
OP6061-MB	DD07381.D	10/13/02	17:45	04:55	Method Blank
ZZZZZZ	DD07382.D	10/13/02	18:12	05:22	(unrelated sample)
ZZZZZZ	DD07383.D	10/13/02	18:39	05:49	(unrelated sample)
ZZZZZZ	DD07384.D	10/13/02	19:06	06:16	(unrelated sample)
F14897-44	DD07385.D	10/13/02	19:32	06:42	(used for QC only; not part of job F14972)
GDD279-CC279	DD07386.D	10/13/02	19:59	07:09	Continuing cal 40
OP6061-MS	DD07387.D	10/13/02	20:26	07:36	Matrix Spike
OP6061-MSD	DD07388.D	10/13/02	20:53	08:03	Matrix Spike Duplicate
ZZZZZZ	DD07389.D	10/13/02	21:19	08:29	(unrelated sample)
ZZZZZZ	DD07390.D	10/13/02	21:46	08:56	(unrelated sample)
ZZZZZZ	DD07391.D	10/13/02	22:13	09:23	(unrelated sample)
GDD279-CC279	DD07392.D	10/13/02	22:40	09:50	Continuing cal 40

Semivolatile Surrogate Recovery Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8081A	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F14972-1	DD07466.D	91.0	97.0
OP6087-LB	DD07464.D	98.0	101.0
OP6087-LBS	DD07465.D	100.0	106.0
OP6087-MS	DD07467.D	95.0	91.0
OP6087-MSD	DD07468.D	103.0	102.0

Surrogate Compounds Recovery Limits

S1 = Tetrachloro-m-xylene 52-131%
S2 = Decachlorobiphenyl 16-153%

(a) Recovery from GC signal #1

Semivolatile Surrogate Recovery Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Method: SW846 8082	Matrix: SO
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a	S2 ^a
F14972-1	MN16259.D	0.0* ^b	0.0* ^b
OP6062-BS	MN16256.D	99.0	106.0
OP6062-MB	MN16257.D	88.0	103.0

Surrogate Compounds	Recovery Limits
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S1 = Tetrachloro-m-xylene	50-134%
S2 = Decachlorobiphenyl	48-147%

- (a) Recovery from GC signal #1
- (b) Outside control limits due to dilution.

GC Surrogate Retention Time Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Check Std: GMN623-CC615	Injection Date: 10/10/02
Lab File ID: MN16251.D	Injection Time: 09:41
Instrument ID: GCMN	Method: SW846 8082

	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
Check Std	5.91	6.14	16.44	15.78

Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S1 ^b RT	S2 ^a RT	S2 ^b RT
OP6062-BS	MN16256.D	10/10/02	11:40	5.91		16.44	
OP6062-MB	MN16257.D	10/10/02	12:03	5.91		16.44	
F14972-1	MN16259.D	10/10/02	12:53	0.00		0.00	
GMN623-ECC615	MN16261.D	10/10/02	13:55	5.91	6.14	16.44	15.78

Surrogate Compounds

S1 = Tetrachloro-m-xylene
 S2 = Decachlorobiphenyl

- (a) Retention time from GC signal #1
- (b) Retention time from GC signal #2

GC Surrogate Retention Time Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Check Std:	GDD279-CC279	Injection Date:	10/15/02
Lab File ID:	DD07458.D	Injection Time:	04:09
Instrument ID:	GCDD	Method:	SW846 8081A

S1 ^a	S2 ^a
RT	RT

Check Std	6.33	16.03
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT	S2 ^a RT
ZZZZZZ	DD07459.D	10/15/02	04:36	6.33	16.03
ZZZZZZ	DD07460.D	10/15/02	05:03	6.33	16.03
ZZZZZZ	DD07461.D	10/15/02	05:30	6.33	16.03
ZZZZZZ	DD07462.D	10/15/02	05:57	6.33	16.03
OP6087-LB	DD07464.D	10/15/02	06:51	6.33	16.03
OP6087-LBS	DD07465.D	10/15/02	07:17	6.33	16.03
F14972-1	DD07466.D	10/15/02	07:44	6.33	16.03
OP6087-MS	DD07467.D	10/15/02	08:11	6.33	16.03
OP6087-MSD	DD07468.D	10/15/02	08:38	6.33	16.03

Surrogate Compounds

S1 = Tetrachloro-m-xylene
S2 = Decachlorobiphenyl

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN615-ICC615
Lab FileID: MN16046.D

Response Factor Report ECD 2

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
Title : PCB's by EPA-608 / SW846-8082
Last Update : Mon Sep 30 08:28:59 2002

Calibration Files

50 =MN16044.D 200 =MN16045.D 400 =MN16046.D
600 =MN16047.D 800 =MN16048.D 1000 =MN16049.D

Compound	50	200	400	600	800	1000	Avg		%RSD
1) S Tetrachloro-m-xylene	4.909	4.803	4.676	4.384	4.227	4.126	4.521	E3	7.10
2) L1 AR1016-A	1.008	0.937	0.854	0.795	0.747	0.720	0.843	E2	13.29
3) L1 AR1016-B	1.509	1.356	1.220	1.123	1.052	1.010	1.211	E2	15.80
4) L1 AR1016-C	3.290	3.019	2.784	2.600	2.478	2.403	2.762	E2	12.34
5) L1 AR1016-D	1.683	1.550	1.440	1.341	1.277	1.226	1.420	E2	12.23
6) L1 AR1016-E	1.169	1.157	1.111	1.060	1.025	1.000	1.087	E2	6.41
7) L1 AR1016-F	1.409	1.341	1.266	1.191	1.139	1.107	1.242	E2	9.50
8) L2 AR1221-A							1.929	E1	0.00
9) L2 AR1221-B							1.363	E1	0.00
10) L2 AR1221-C							5.835	E1	0.00
11) L2 AR1221-D							4.047	E1	0.00
12) L2 AR1221-E							1.229	E2	0.00
13) L3 AR1232-A							1.084	E2	0.00
14) L3 AR1232-B							6.478	E1	0.00
15) L3 AR1232-C							1.360	E2	0.00
16) L3 AR1232-D							7.096	E1	0.00
17) L3 AR1232-E							6.073	E1	0.00
18) L3 AR1232-F							6.654	E1	0.00
19) L4 AR1242-A							8.050	E1	0.00
20) L4 AR1242-B							1.190	E2	0.00
21) L4 AR1242-C							2.622	E2	0.00
22) L4 AR1242-D							1.367	E2	0.00
23) L4 AR1242-E							1.248	E2	0.00
24) L4 AR1242-F							1.564	E2	0.00
25) L5 AR1248-A							1.711	E2	0.00
26) L5 AR1248-B							1.952	E2	0.00
27) L5 AR1248-C							1.838	E2	0.00
28) L5 AR1248-D							2.719	E2	0.00
29) L5 AR1248-E							2.316	E2	0.00
30) L5 AR1248-F							1.264	E2	0.00
31) L6 AR1254-A							2.303	E2	0.00
32) L6 AR1254-B							2.615	E2	0.00
33) L6 AR1254-C							3.193	E2	0.00
34) L6 AR1254-D							3.317	E2	0.00
35) L6 AR1254-E							2.156	E2	0.00
36) L6 AR1254-F							3.146	E2	0.00
37) L7 AR1260-A	2.792	2.468	2.298	2.140	2.094	2.034	2.304	E2	12.41
38) L7 AR1260-B	3.878	3.662	3.456	3.259	3.184	3.126	3.427	E2	8.63
39) L7 AR1260-C	3.000	2.952	2.899	2.827	2.748	2.708	2.856	E2	4.03
40) L7 AR1260-D	3.251	3.110	2.839	2.828	2.750	2.606	2.897	E2	8.24
41) L7 AR1260-E	2.655	2.463	2.387	2.341	2.224	2.152	2.370	E2	7.54
42) L7 AR1260-F	6.029	5.899	5.619	5.544	5.432	5.305	5.638	E2	4.91
43) L8 AR1268-A							2.909	E2	0.00
44) L8 AR1268-B							9.052	E2	0.00
45) L8 AR1268-C							7.423	E2	0.00
46) L8 AR1268-D							6.272	E2	0.00
47) L8 AR1268-E							2.171	E2	0.00
48) L8 AR1268-F							1.399	E3	0.00

Initial Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN615-ICC615
 Lab FileID: MN16046.D

49) SC Decachl orobi phenyl 4.155 4.007 3.843 3.654 3.513 3.447 3.770 E3 7.44

Signal #2 Calibration Files

50 =MN16044.D 200 =MN16045.D 400 =MN16046.D
 600 =MN16047.D 800 =MN16048.D 1000 =MN16049.D

Compound	50	200	400	600	800	1000	Avg		%RSD
1) S Tetrachl oro-m-xyl en	8.079	7.797	7.563	7.027	6.697	6.544	7.284	E3	8.53
2) L1 AR1016-A	1.887	1.645	1.494	1.375	1.291	1.242	1.489	E2	16.35
3) L1 AR1016-B	2.746	2.361	2.136	1.967	1.834	1.768	2.135	E2	17.24
4) L1 AR1016-C	4.439	4.206	3.982	3.720	3.546	3.428	3.887	E2	10.10
5) L1 AR1016-D	2.520	2.338	2.214	2.064	1.975	1.914	2.171	E2	10.65
6) L1 AR1016-E	1.794	1.757	1.752	1.673	1.619	1.595	1.698	E2	4.80
7) L1 AR1016-F	2.123	1.958	1.885	1.782	1.722	1.680	1.858	E2	8.91
8) L2 AR1221-A							5.967	E1	0.00
9) L2 AR1221-B							1.845	E1	0.00
10) L2 AR1221-C							1.065	E2	0.00
11) L2 AR1221-D							7.525	E1	0.00
12) L2 AR1221-E							2.347	E2	0.00
13) L3 AR1232-A							2.029	E2	0.00
14) L3 AR1232-B							1.133	E2	0.00
15) L3 AR1232-C							1.905	E2	0.00
16) L3 AR1232-D							1.104	E2	0.00
17) L3 AR1232-E							9.199	E1	0.00
18) L3 AR1232-F							8.878	E1	0.00
19) L4 AR1242-A							1.464	E2	0.00
20) L4 AR1242-B							2.121	E2	0.00
21) L4 AR1242-C							3.742	E2	0.00
22) L4 AR1242-D							2.114	E2	0.00
23) L4 AR1242-E							1.871	E2	0.00
24) L4 AR1242-F							1.943	E2	0.00
25) L5 AR1248-A							2.363	E2	0.00
26) L5 AR1248-B							2.918	E2	0.00
27) L5 AR1248-C							2.071	E2	0.00
28) L5 AR1248-D							3.257	E2	0.00
29) L5 AR1248-E							2.291	E2	0.00
30) L5 AR1248-F							1.474	E2	0.00
31) L6 AR1254-A							2.754	E2	0.00
32) L6 AR1254-B							3.716	E2	0.00
33) L6 AR1254-C							4.335	E2	0.00
34) L6 AR1254-D							2.756	E2	0.00
35) L6 AR1254-E							2.346	E2	0.00
36) L6 AR1254-F							3.272	E2	0.00
37) L7 AR1260-A	3.028	2.906	2.827	2.702	2.626	2.600	2.781	E2	6.05
38) L7 AR1260-B	3.625	3.485	3.390	2.953	3.166	3.141	3.293	E2	7.57
39) L7 AR1260-C	3.031	3.101	3.168	3.070	3.027	3.029	3.071	E2	1.83
40) L7 AR1260-D	2.552	2.456	2.445	2.349	2.307	2.301	2.402	E2	4.13
41) L7 AR1260-E	2.601	2.559	2.547	2.465	2.409	2.410	2.499	E2	3.27
42) L7 AR1260-F	5.100	5.235	5.298	5.156	5.036	5.053	5.146	E2	2.02
43) L8 AR1268-A							2.294	E2	0.00
44) L8 AR1268-B							7.795	E2	0.00
45) L8 AR1268-C							7.557	E2	0.00
46) L8 AR1268-D							6.434	E2	0.00
47) L8 AR1268-E							2.443	E2	0.00
48) L8 AR1268-F							1.626	E3	0.00
49) SC Decachl orobi phenyl	5.428	4.955	4.795	4.458	4.185	4.220	4.673	E3	10.28

(#) = Out of Range ### Number of calibration levels exceeded format ###

Initial Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN615-ICC615
Lab FileID: MN16046.D

8082.M

Tue Oct 01 10:02:26 2002 RPT1

Continuing Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN623-CC615
Lab FileID: MN16251.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1010PCB\MN16251.D\ECD1A.CH Vial : 2
Signal #2 : C:\HPCHEM\2\DATA\1010PCB\MN16251.D\ECD2B.CH
Acq On : 10 Oct 2002 9:41 am Operator: nareshj
Sample : CC615-400 Inst : ECD 2
Misc : op6062, gmn623, 30.0, , , 10, , soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
Title : PCB's by EPA-608 / SW846-8082
Last Update : Thu Oct 10 15:36:13 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	41.422	-3.6	100	0.00
2 L1	AR1016-A	400.000	410.668	-2.7	101	0.00
3 L1	AR1016-B	400.000	413.926	-3.5	103	0.00
4 L1	AR1016-C	400.000	406.641	-1.7	101	0.00
5 L1	AR1016-D	400.000	400.977	-0.2	99	0.00
6 L1	AR1016-E	400.000	410.479	-2.6	100	0.00
7 L1	AR1016-F	400.000	410.979	-2.7	101	0.00
37 L7	AR1260-A	400.000	399.494	0.1	100	0.00
38 L7	AR1260-B	400.000	403.610	-0.9	100	0.00
39 L7	AR1260-C	400.000	413.049	-3.3	102	0.00
40 L7	AR1260-D	400.000	410.605	-2.7	105	0.00
41 L7	AR1260-E	400.000	404.484	-1.1	100	0.00
42 L7	AR1260-F	400.000	410.407	-2.6	103	0.00
49 SC	Decachlorobiphenyl	40.000	38.986	2.5	96	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	41.194	-3.0	99	0.00
2 L1	AR1016-A	400.000	402.537	-0.6	100	0.00
3 L1	AR1016-B	400.000	406.244	-1.6	102	0.00
4 L1	AR1016-C	400.000	409.645	-2.4	100	0.00
5 L1	AR1016-D	400.000	405.604	-1.4	99	0.00
6 L1	AR1016-E	400.000	411.752	-2.9	100	0.00
7 L1	AR1016-F	400.000	411.355	-2.8	101	0.00
37 L7	AR1260-A	400.000	408.953	-2.2	101	0.00
38 L7	AR1260-B	400.000	346.476	13.4	84	0.00
39 L7	AR1260-C	400.000	409.908	-2.5	99	0.00
40 L7	AR1260-D	400.000	409.644	-2.4	101	0.00
41 L7	AR1260-E	400.000	406.636	-1.7	100	0.00
42 L7	AR1260-F	400.000	401.440	-0.4	97	0.00
49 SC	Decachlorobiphenyl	40.000	39.402	1.5	96	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1010PCB\MN16251.D\ECD1A.CH Vial : 2
Signal #2 : C:\HPCHEM\2\DATA\1010PCB\MN16251.D\ECD2B.CH
Acq On : 10 Oct 2002 9:41 am Operator: nareshj
Sample : CC615-400 Inst : ECD 2
Misc : op6062, gmn623, 30.0, , , 10, , soil Multiplr: 1.00
IntFile Signal #1: events.e IntFile Signal #2: events2.e

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN623-CC615
 Lab FileID: MN16251.D

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
 Title : PCB' s by EPA-608 / SW846-8082
 Last Update : Thu Oct 10 15:36:13 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.09#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.16#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.47#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.72#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.82#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.83#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.54#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.29#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.51#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.27#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-10.30#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-6.83#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-7.54#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-8.29#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-8.51#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-9.26#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-9.93#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-8.28#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-9.26#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-9.46#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-9.93#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-10.30#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-10.94#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-9.93#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-10.22#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-10.94#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-11.27#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-11.52#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-12.03#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-12.60#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-13.61#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-13.70#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-14.22#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-14.83#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-15.67#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.12#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.03#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.47#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.75#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.82#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.83#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.47#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.27#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.50#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.17#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-9.90#

Continuing Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN623-CC615
Lab FileID: MN16251.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-6.82#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-7.47#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-8.27#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-8.49#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-9.17#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-9.90#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-8.27#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-9.17#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-9.31#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-9.89#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-10.21#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-10.83#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-9.78#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-10.19#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-10.83#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-11.26#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-11.53#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-11.92#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-12.43#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-13.46#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-13.53#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-13.90#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-14.62#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-15.29#

(#) = Out of Range
MN16046.D 8082.M

SPCC's out = 0 CCC's out = 0
Thu Oct 10 15:40:25 2002 RPT1

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN623-ECC615
 Lab FileID: MN16261.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1010PCB\MN16261.D\ECD1A.CH Vial : 12
 Signal #2 : C:\HPCHEM\2\DATA\1010PCB\MN16261.D\ECD2B.CH
 Acq On : 10 Oct 2002 1:55 pm Operator: nareshj
 Sample : ECC615-400 Inst : ECD 2
 Misc : op6062,gmn623,30.0,,,10,,soil Multiplr: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
 Title : PCB's by EPA-608 / SW846-8082
 Last Update : Thu Oct 10 15:36:13 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S Tetrachloro-m-xylene	40.000	41.011	-2.5	99	0.00
2 L1 AR1016-A	400.000	407.158	-1.8	101	0.00
3 L1 AR1016-B	400.000	405.034	-1.3	101	0.00
4 L1 AR1016-C	400.000	392.453	1.9	97	0.00
5 L1 AR1016-D	400.000	391.822	2.0	97	0.00
6 L1 AR1016-E	400.000	392.503	1.9	96	0.00
7 L1 AR1016-F	400.000	396.446	0.9	97	0.00
37 L7 AR1260-A	400.000	380.266	4.9	95	0.00
38 L7 AR1260-B	400.000	382.535	4.4	95	0.00
39 L7 AR1260-C	400.000	399.011	0.2	98	0.00
40 L7 AR1260-D	400.000	402.694	-0.7	103	0.00
41 L7 AR1260-E	400.000	400.381	-0.1	99	0.00
42 L7 AR1260-F	400.000	407.311	-1.8	102	0.00
49 SC Decachlorobiphenyl	40.000	39.068	2.3	96	0.00

Signal #2

1 S Tetrachloro-m-xylene	40.000	41.709	-4.3	100	0.00
2 L1 AR1016-A	400.000	408.057	-2.0	102	0.00
3 L1 AR1016-B	400.000	407.621	-1.9	102	0.00
4 L1 AR1016-C	400.000	410.978	-2.7	100	0.00
5 L1 AR1016-D	400.000	405.625	-1.4	99	0.00
6 L1 AR1016-E	400.000	410.309	-2.6	99	0.00
7 L1 AR1016-F	400.000	400.995	-0.2	99	0.00
37 L7 AR1260-A	400.000	392.282	1.9	97	0.00
38 L7 AR1260-B	400.000	399.648	0.1	97	0.00
39 L7 AR1260-C	400.000	397.398	0.7	96	0.00
40 L7 AR1260-D	400.000	383.088	4.2	94	0.00
41 L7 AR1260-E	400.000	388.442	2.9	95	0.00
42 L7 AR1260-F	400.000	401.436	-0.4	97	0.00
49 SC Decachlorobiphenyl	40.000	39.079	2.3	95	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1010PCB\MN16261.D\ECD1A.CH Vial : 12
 Signal #2 : C:\HPCHEM\2\DATA\1010PCB\MN16261.D\ECD2B.CH
 Acq On : 10 Oct 2002 1:55 pm Operator: nareshj
 Sample : ECC615-400 Inst : ECD 2
 Misc : op6062,gmn623,30.0,,,10,,soil Multiplr: 1.00
 IntFile Signal #1: events.e IntFile Signal #2: events2.e

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GMN623-ECC615
 Lab FileID: MN16261.D

Method : C:\HPCHEM\2\METHODS\8082.M (Chemstation Integrator)
 Title : PCB' s by EPA-608 / SW846-8082
 Last Update : Thu Oct 10 15:36:13 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Cal c.	%Dev	Area%	Dev(Mi n)
8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.09#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.16#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.47#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.72#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.82#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.83#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.54#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.29#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.51#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.27#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-10.30#
19 L4 AR1242-A	-1.000	0.000	0.0	0	-6.83#
20 L4 AR1242-B	-1.000	0.000	0.0	0	-7.54#
21 L4 AR1242-C	-1.000	0.000	0.0	0	-8.29#
22 L4 AR1242-D	-1.000	0.000	0.0	0	-8.51#
23 L4 AR1242-E	-1.000	0.000	0.0	0	-9.26#
24 L4 AR1242-F	-1.000	0.000	0.0	0	-9.93#
25 L5 AR1248-A	-1.000	0.000	0.0	0	-8.28#
26 L5 AR1248-B	-1.000	0.000	0.0	0	-9.26#
27 L5 AR1248-C	-1.000	0.000	0.0	0	-9.46#
28 L5 AR1248-D	-1.000	0.000	0.0	0	-9.93#
29 L5 AR1248-E	-1.000	0.000	0.0	0	-10.30#
30 L5 AR1248-F	-1.000	0.000	0.0	0	-10.94#
31 L6 AR1254-A	-1.000	0.000	0.0	0	-9.93#
32 L6 AR1254-B	-1.000	0.000	0.0	0	-10.22#
33 L6 AR1254-C	-1.000	0.000	0.0	0	-10.94#
34 L6 AR1254-D	-1.000	0.000	0.0	0	-11.27#
35 L6 AR1254-E	-1.000	0.000	0.0	0	-11.52#
36 L6 AR1254-F	-1.000	0.000	0.0	0	-12.03#
43 L8 AR1268-A	-1.000	0.000	0.0	0	-12.60#
44 L8 AR1268-B	-1.000	0.000	0.0	0	-13.61#
45 L8 AR1268-C	-1.000	0.000	0.0	0	-13.70#
46 L8 AR1268-D	-1.000	0.000	0.0	0	-14.22#
47 L8 AR1268-E	-1.000	0.000	0.0	0	-14.83#
48 L8 AR1268-F	-1.000	0.000	0.0	0	-15.67#

Signal #2

8 L2 AR1221-A	-1.000	0.000	0.0	0	-5.12#
9 L2 AR1221-B	-1.000	0.000	0.0	0	-6.03#
10 L2 AR1221-C	-1.000	0.000	0.0	0	-6.47#
11 L2 AR1221-D	-1.000	0.000	0.0	0	-6.75#
12 L2 AR1221-E	-1.000	0.000	0.0	0	-6.82#
13 L3 AR1232-A	-1.000	0.000	0.0	0	-6.83#
14 L3 AR1232-B	-1.000	0.000	0.0	0	-7.47#
15 L3 AR1232-C	-1.000	0.000	0.0	0	-8.27#
16 L3 AR1232-D	-1.000	0.000	0.0	0	-8.50#
17 L3 AR1232-E	-1.000	0.000	0.0	0	-9.17#
18 L3 AR1232-F	-1.000	0.000	0.0	0	-9.90#

Continuing Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GMN623-ECC615
Lab FileID: MN16261.D

19	L4	AR1242-A	-1.000	0.000	0.0	0	-6.82#
20	L4	AR1242-B	-1.000	0.000	0.0	0	-7.47#
21	L4	AR1242-C	-1.000	0.000	0.0	0	-8.27#
22	L4	AR1242-D	-1.000	0.000	0.0	0	-8.49#
23	L4	AR1242-E	-1.000	0.000	0.0	0	-9.17#
24	L4	AR1242-F	-1.000	0.000	0.0	0	-9.90#
25	L5	AR1248-A	-1.000	0.000	0.0	0	-8.27#
26	L5	AR1248-B	-1.000	0.000	0.0	0	-9.17#
27	L5	AR1248-C	-1.000	0.000	0.0	0	-9.31#
28	L5	AR1248-D	-1.000	0.000	0.0	0	-9.89#
29	L5	AR1248-E	-1.000	0.000	0.0	0	-10.21#
30	L5	AR1248-F	-1.000	0.000	0.0	0	-10.83#
31	L6	AR1254-A	-1.000	0.000	0.0	0	-9.78#
32	L6	AR1254-B	-1.000	0.000	0.0	0	-10.19#
33	L6	AR1254-C	-1.000	0.000	0.0	0	-10.83#
34	L6	AR1254-D	-1.000	0.000	0.0	0	-11.26#
35	L6	AR1254-E	-1.000	0.000	0.0	0	-11.53#
36	L6	AR1254-F	-1.000	0.000	0.0	0	-11.92#
43	L8	AR1268-A	-1.000	0.000	0.0	0	-12.43#
44	L8	AR1268-B	-1.000	0.000	0.0	0	-13.46#
45	L8	AR1268-C	-1.000	0.000	0.0	0	-13.53#
46	L8	AR1268-D	-1.000	0.000	0.0	0	-13.90#
47	L8	AR1268-E	-1.000	0.000	0.0	0	-14.62#
48	L8	AR1268-F	-1.000	0.000	0.0	0	-15.29#

(#) = Out of Range
MN16046.D 8082.M

SPCC's out = 0 CCC's out = 0
Thu Oct 10 15:40:28 2002 RPT1

Initial Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD279-ICC279
 Lab FileID: DD07374.D

Response Factor Report ECD 4

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Mon Oct 14 08:57:17 2002
 Response via : Initial Calibration

Calibration Files

5 =DD07371.D 10 =DD07372.D 20 =DD07373.D
 40 =DD07374.D 60 =DD07375.D 80 =DD07376.D c200 =DD07378.D

Compound	5	10	20	40	60	80	c200	Avg	%RSD
1)S Tetrachloro-m-xyl	5.853	7.326	7.067	6.940	7.274	7.773		7.039 E3	9.19
2) alpha-BHC	0.875	1.172	1.182	1.232	1.324	1.375		1.193 E4	14.69
3) gamma-BHC (Lindan)	0.798	1.083	1.024	1.086	1.127	1.199		1.053 E4	13.06
4) beta-BHC	3.120	4.168	3.780	3.554	3.675	3.897		3.699 E3	9.54
5) Heptachlor	0.771	0.988	0.955	0.967	1.015	1.038		0.956 E4	10.00
6) delta-BHC	6.078	8.760	8.503	9.011	9.453	9.956		8.627 E3	15.66
7) Aldrin	0.717	0.939	0.921	0.896	0.968	1.016		0.910 E4	11.31
8) Heptachlor Epoxid	6.663	8.554	7.983	8.087	8.347	8.999		8.105 E3	9.80
9) gamma-Chlordane	6.618	8.437	7.466	7.921	8.564	8.592		7.933 E3	9.82
10) alpha-Chlordane	6.675	8.596	7.858	7.961	8.129	8.615		7.972 E3	8.91
11) Endosulfan I	6.432	7.965	7.703	7.531	7.871	8.105		7.601 E3	7.98
12) 4,4'-DDE	5.797	7.566	7.307	7.405	7.669	8.267		7.335 E3	11.25
13) Dieldrin	6.465	8.433	8.078	8.000	8.671	8.876		8.087 E3	10.67
14) Endrin	6.183	7.779	7.498	7.777	7.977	8.329		7.591 E3	9.78
15) 4,4'-DDD	5.496	6.959	6.492	6.304	6.764	7.035		6.508 E3	8.73
16) Endosulfan II	6.117	7.814	7.263	7.425	7.870	7.590		7.346 E3	8.77
17) 4,4'-DDT	5.202	6.766	6.526	6.689	6.903	7.465		6.592 E3	11.43
18) Endrin Aldehyde	4.150	5.472	5.004	4.767	5.155	5.383		4.989 E3	9.69
19) Endosulfan Sulfat	5.506	6.904	6.368	6.419	6.539	6.915		6.442 E3	8.00
20) Methoxychlor	2.484	3.167	2.816	2.760	2.904	2.977		2.851 E3	8.05
21) Endrin Ketone	5.550	6.600	6.138	6.350	6.280	6.698		6.269 E3	6.52
22)L1Chlordane-A							2.986	2.986 E2	0.00
23)L1Chlordane-B							4.305	4.305 E2	0.00
24)L1Chlordane-C							1.145	1.145 E3	0.00
25)L1Chlordane-D							7.588	7.588 E2	0.00
26)L1Chlordane-E							1.566	1.566 E2	0.00
27)L1Chlordane-F							3.240	3.240 E2	0.00
28)H Toxaphene								1.081 E5	0.00
29)SCDecachlorobiphenyl	4.372	3.960	3.294	2.927	2.762	2.846		3.360 E3	19.73

----- Quadratic regression ----- Coefficient = 0.9986

Response Ratio = 12590.55341 + 2496.67950 *A + 2.10729 *A^2

Signal #2

1)S Tetrachloro-m-xyl	1.061	1.368	1.332	1.344	1.403	1.440		1.325 E4	10.20
2) alpha-BHC	1.731	2.368	2.375	2.510	2.643	2.733		2.393 E4	14.84
3) gamma-BHC (Lindan)	1.656	2.247	2.195	2.242	2.398	2.471		2.201 E4	13.05
4) beta-BHC	6.502	8.326	7.813	7.556	7.787	8.112		7.683 E3	8.31
5) Heptachlor	1.807	2.432	2.292	2.349	2.440	2.457		2.296 E4	10.79
6) delta-BHC	1.249	1.830	1.811	1.822	1.941	2.065		1.786 E4	15.71
7) Aldrin	1.621	2.142	2.060	2.069	2.189	2.220		2.050 E4	10.70
8) Heptachlor Epoxid	1.374	1.788	1.671	1.689	1.759	1.862		1.691 E4	10.05
9) gamma-Chlordane	1.336	1.744	1.637	1.658	1.752	1.831		1.660 E4	10.45
10) alpha-Chlordane	1.279	1.665	1.558	1.575	1.624	1.743		1.574 E4	10.12
11) Endosulfan I	1.224	1.583	1.497	1.482	1.533	1.612		1.488 E4	9.32
12) 4,4'-DDE	1.103	1.445	1.401	1.430	1.506	1.590		1.413 E4	11.73
13) Dieldrin	1.262	1.649	1.582	1.627	1.691	1.776		1.598 E4	11.08

Initial Calibration Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: GDD279-ICC279
Lab FileID: DD07374.D

14)	Endrin	1.170	1.525	1.440	1.470	1.560	1.625	1.465	E4	10.83	
15)	4,4'-DDD	0.907	1.165	1.101	1.114	1.178	1.261	1.121	E4	10.63	
16)	Endosulfan II	0.992	1.269	1.230	1.231	1.274	1.347	1.224	E4	9.93	
17)	4,4'-DDT	0.755	1.003	0.979	0.999	1.083	1.168	0.998	E4	13.86	
18)	Endrin Aldehyde	4.825	6.301	5.963	5.877	6.138	6.371	5.913	E3	9.56	
19)	Endosulfan Sulfate	0.763	1.000	0.922	0.900	0.951	1.005	0.924	E4	9.65	
20)	Methoxychlor	4.035	5.067	4.834	4.650	4.688	5.040	4.719	E3	7.99	
21)	Endrin Ketone	7.427	9.294	8.769	8.566	8.877	9.349	8.714	E3	8.03	
22)	L1Chlordane-A							6.754	6.754	E2	0.00
23)	L1Chlordane-B							9.555	9.555	E2	0.00
24)	L1Chlordane-C							1.713	1.713	E3	0.00
25)	L1Chlordane-D							1.511	1.511	E3	0.00
26)	L1Chlordane-E							1.225	1.225	E3	0.00
27)	L1Chlordane-F							5.439	5.439	E2	0.00
28)	H Toxaphene							1.538	E5	0.00	
29)	SCDecachlorobiphenyl	7.659	7.154	6.012	5.612	5.486	5.530	6.242	E3	14.97	

(#) = Out of Range ### Number of calibration levels exceeded format ###

8081A.M

Mon Oct 14 13:02:50 2002 GCECD2

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD279-CC279
 Lab FileID: DD07458.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1013PEST\DD07458.D\ECD1B.CH Vial : 90
 Signal #2 : C:\HPCHEM\2\DATA\1013PEST\DD07458.D\ECD2A.CH
 Acq On : 15 Oct 2002 4:09 am Operator: stephw
 Sample : CC279-40 Inst : ECD 4
 Misc : op6045,gdd279,29.8,,,10,1,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Mon Oct 14 08:57:17 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	38.518	3.7	98	0.00
2	alpha-BHC	40.000	39.402	1.5	95	0.00
3	gamma-BHC (Lindane)	40.000	39.460	1.3	96	0.00
4	beta-BHC	40.000	38.334	4.2	100	0.00
5	Heptachlor	40.000	39.184	2.0	97	0.00
6	delta-BHC	40.000	41.525	-3.8	99	0.00
7	Aldrin	40.000	38.326	4.2	97	0.00
8	Heptachlor Epoxide	40.000	38.723	3.2	97	0.00
9	gamma-Chlordane	40.000	39.372	1.6	99	0.00
10	alpha-Chlordane	40.000	36.750	8.1	92	0.00
11	Endosulfan I	40.000	37.664	5.8	95	0.00
12	4,4'-DDE	40.000	39.838	0.4	99	0.00
13	Dieldrin	40.000	38.516	3.7	97	0.00
14	Endrin	40.000	40.464	-1.2	99	0.00
15	4,4'-DDD	40.000	38.677	3.3	100	0.00
16	Endosulfan II	40.000	39.872	0.3	99	0.00
17	4,4'-DDT	40.000	42.687	-6.7	105	0.00
18	Endrin Aldehyde	40.000	37.612	6.0	98	0.00
19	Endosulfan Sulfate	40.000	38.075	4.8	96	0.00
20	Methoxychlor	40.000	40.706	-1.8	105	0.00
21	Endrin Ketone	40.000	39.796	0.5	98	0.00
29 SC	Decachlorobiphenyl	40.000	34.657	13.4	87	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	40.434	-1.1	100	0.00
2	alpha-BHC	40.000	41.926	-4.8	100	0.00
3	gamma-BHC (Lindane)	40.000	41.955	-4.9	103	0.00
4	beta-BHC	40.000	41.505	-3.8	106	0.00
5	Heptachlor	40.000	39.565	1.1	97	0.00
6	delta-BHC	40.000	43.754	-9.4	107	0.00
7	Aldrin	40.000	39.878	0.3	99	0.00
8	Heptachlor Epoxide	40.000	40.295	-0.7	101	0.00
9	gamma-Chlordane	40.000	41.821	-4.6	105	0.00
10	alpha-Chlordane	40.000	41.040	-2.6	103	0.00
11	Endosulfan I	40.000	40.293	-0.7	101	0.00
12	4,4'-DDE	40.000	42.515	-6.3	105	0.00
13	Dieldrin	40.000	41.552	-3.9	102	0.00
14	Endrin	40.000	40.444	-1.1	101	0.00
15	4,4'-DDD	40.000	41.682	-4.2	105	0.00
16	Endosulfan II	40.000	41.147	-2.9	102	0.00

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD279-CC279
 Lab FileID: DD07458.D

17	4, 4' -DDT	40.000	45.361	-13.4	113	0.00
18	Endrin Aldehyde	40.000	41.488	-3.7	104	0.00
19	Endosulfan Sulfate	40.000	41.475	-3.7	106	0.00
20	Methoxychlor	40.000	42.624	-6.6	108	0.00
21	Endrin Ketone	40.000	41.450	-3.6	105	0.00
29 SC	Decachlorobiphenyl	40.000	31.106	22.2	87	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1013PEST\DD07458.D\ECD1B.CH Vial : 90
 Signal #2 : C:\HPCHEM\2\DATA\1013PEST\DD07458.D\ECD2A.CH
 Acq On : 15 Oct 2002 4:09 am Operator: stephw
 Sample : CC279-40 Inst : ECD 4
 Misc : op6045,gdd279, 29.8, , , 10, 1, soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Mon Oct 14 08:57:17 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.33#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.58#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.26#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.48#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.56#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.93#
28 H Toxaphene	-1.000	0.000	0.0	0	-13.10#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.83#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-9.06#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.98#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-11.09#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.11#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-12.12#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.90#

(#) = Out of Range
 DD07374.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Tue Oct 15 08:36:35 2002 GCECD2

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD279-CC279
 Lab FileID: DD07469.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\1013PEST\DD07469.D\ECD1B.CH Vial : 1
 Signal #2 : C:\HPCHEM\2\DATA\1013PEST\DD07469.D\ECD2A.CH
 Acq On : 15 Oct 2002 9:05 am Operator: stephw
 Sample : CC279-40 Inst : ECD 4
 Misc : op6087,gdd279,100,,10,1,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Mon Oct 14 08:57:17 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1 S	Tetrachloro-m-xylene	40.000	37.995	5.0	96	0.00
2	alpha-BHC	40.000	36.918	7.7	89	0.00
3	gamma-BHC (Lindane)	40.000	32.928	17.7#	80	0.00
4	beta-BHC	40.000	31.342	21.6#	82	0.00
5	Heptachlor	40.000	29.188	27.0#	72	0.00
6	delta-BHC	40.000	32.364	19.1#	77	0.00
7	Aldrin	40.000	27.715	30.7#	70	0.00
8	Heptachlor Epoxide	40.000	33.843	15.4#	85	0.00
9	gamma-Chlordane	40.000	35.552	11.1	89	0.00
10	alpha-Chlordane	40.000	35.993	10.0	90	0.00
11	Endosulfan I	40.000	37.484	6.3	95	0.00
12	4,4'-DDE	40.000	38.520	3.7	95	0.00
13	Dieldrin	40.000	39.638	0.9	100	0.00
14	Endrin	40.000	40.836	-2.1	100	0.00
15	4,4'-DDD	40.000	40.249	-0.6	104	0.00
16	Endosulfan II	40.000	39.294	1.8	97	0.00
17	4,4'-DDT	40.000	40.477	-1.2	100	0.00
18	Endrin Aldehyde	40.000	37.695	5.8	99	0.00
19	Endosulfan Sulfate	40.000	40.625	-1.6	102	0.00
20	Methoxychlor	40.000	39.169	2.1	101	0.00
21	Endrin Ketone	40.000	38.857	2.9	96	0.00
29 SC	Decachlorobiphenyl	40.000	37.632	5.9	94	0.00

Signal #2

1 S	Tetrachloro-m-xylene	40.000	41.522	-3.8	102	0.00
2	alpha-BHC	40.000	42.207	-5.5	101	0.00
3	gamma-BHC (Lindane)	40.000	42.817	-7.0	105	0.00
4	beta-BHC	40.000	41.911	-4.8	107	0.00
5	Heptachlor	40.000	40.804	-2.0	100	0.00
6	delta-BHC	40.000	44.246	-10.6	108	0.00
7	Aldrin	40.000	41.585	-4.0	103	0.00
8	Heptachlor Epoxide	40.000	41.655	-4.1	104	0.00
9	gamma-Chlordane	40.000	42.946	-7.4	107	0.00
10	alpha-Chlordane	40.000	41.852	-4.6	105	0.00
11	Endosulfan I	40.000	41.305	-3.3	104	0.00
12	4,4'-DDE	40.000	43.741	-9.4	108	0.00
13	Dieldrin	40.000	42.433	-6.1	104	0.00
14	Endrin	40.000	42.131	-5.3	105	0.00
15	4,4'-DDD	40.000	42.901	-7.3	108	0.00
16	Endosulfan II	40.000	42.129	-5.3	105	0.00

Continuing Calibration Summary

Job Number: F14972
 Account: ITVAVAB Shaw E & I, Inc.
 Project: Indian Head

Sample: GDD279-CC279
 Lab FileID: DD07469.D

17	4, 4' -DDT	40.000	46.225	-15.6#	115	0.00
18	Endrin Aldehyde	40.000	41.272	-3.2	104	0.00
19	Endosulfan Sulfate	40.000	41.275	-3.2	106	0.00
20	Methoxychlor	40.000	43.168	-7.9	110	0.00
21	Endrin Ketone	40.000	41.321	-3.3	105	0.00
29 SC	Decachlorobiphenyl	40.000	31.571	21.1	88	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\1013PEST\DD07469.D\ECD1B.CH Vial : 1
 Signal #2 : C:\HPCHEM\2\DATA\1013PEST\DD07469.D\ECD2A.CH
 Acq On : 15 Oct 2002 9:05 am Operator: stephw
 Sample : CC279-40 Inst : ECD 4
 Misc : op6087,gdd279,100,,,10,1,soil Multiplr: 1.00
 IntFile Signal #1: EVENTS.E IntFile Signal #2: EVENTS2.E

Method : C:\HPCHEM\2\METHODS\8081A.M (Chemstation Integrator)
 Title : Pesticides by 608 or 8081
 Last Update : Mon Oct 14 08:57:17 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.33#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-8.58#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.26#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-10.48#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.56#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-11.93#
28 H Toxaphene	-1.000	0.000	0.0	0	-13.10#

Signal #2

22 L1 Chlordane-A	-1.000	0.000	0.0	0	-8.83#
23 L1 Chlordane-B	-1.000	0.000	0.0	0	-9.06#
24 L1 Chlordane-C	-1.000	0.000	0.0	0	-10.98#
25 L1 Chlordane-D	-1.000	0.000	0.0	0	-11.09#
26 L1 Chlordane-E	-1.000	0.000	0.0	0	-11.11#
27 L1 Chlordane-F	-1.000	0.000	0.0	0	-12.12#
28 H Toxaphene	-1.000	0.000	0.0	0	-12.90#

(#) = Out of Range
 DD07374.D 8081A.M

SPCC's out = 0 CCC's out = 0
 Tue Oct 15 09:26:31 2002 GCECD2

Metals Analysis

QC Data Summaries

Includes the following where applicable:

- Instrument Runlogs
- Initial and Continuing Calibration Blanks
- Initial and Continuing Calibration Checks
- High and Low Check Standards
- Interfering Element Check Standards
- Method Blank Summaries
- Matrix Spike and Duplicate Summaries
- Blank Spike and Lab Control Sample Summaries
- Serial Dilution Summaries

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1015M5.ASC Date Analyzed: 10/15/02 Methods: SW846 6010B
Analyst: DM Run ID: MA3020
Parameters: As, Ba, Cd, Cr, Pb, Se, Ag

Time	Sample Description	Dilution Factor	PS Recov	Comments
10:18	MA3020-ICV1	1		
10:20	MA3020-ICB1	1		
10:26	MA3020-CRI 1	1		
10:30	MA3020-ICSA1	1		
10:33	MA3020-IC SAB1	1		
10:38	MA3020-CCV1	1		
10:45	MA3020-CCB1	1		
10:48	MP4811-MB1	1		
10:52	MP4811-B1	1		
10:56	MP4811-B2	1		
11:03	F14972-1	1		
11:06	MP4811-D1	1		
11:10	MP4811-SD1	5		
11:14	MP4811-S1	1		
11:21	MP4811-MB2	1		
----->	Last reportable sample/prep for job F14972			
11:49	MA3020-CCV2	1		
11:54	MA3020-CCB2	1		
----->	Last reportable CCB for job F14972			
	Refer to raw data for calibration curve and standards.			

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1015M5.ASC
QC Limits: result < RL

Date Analyzed: 10/15/02
Run ID: MA3020

Methods: SW846 6010B
Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final
Aluminum	200	6.6						
Antimony	5.0	1.5						
Arsenic	10	2.8	-1.4	<10	-0.080	<10	2.2	<10
Barium	1000	.49	-1.1	<1000	-0.29	<1000	-0.15	<1000
Beryllium	5.0	.26						
Cadmium	5.0	.26	-1.1	<5.0	-0.41	<5.0	-1.4	<5.0
Calcium	5000	3.8						
Chromium	10	.43	-0.99	<10	0.060	<10	-0.47	<10
Cobalt	50	.5						
Copper	25	.44						
Iron	300	7.1						
Lead	5.0	1.2	-0.11	<5.0	0.71	<5.0	0.27	<5.0
Magnesium	5000	9.9						
Manganese	15	.16						
Molybdenum	50	.75						
Nickel	40	1.1						
Potassium	5000	14						
Selenium	10	2	3.1	<10	3.9	<10	2.7	<10
Silver	10	.55	-0.090	<10	-0.15	<10	-0.52	<10
Sodium	5000	150						
Thallium	10	1.5						
Tin	50	2.2						
Vanadium	50	.47						
Zinc	100	.59						

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1015M5.ASC
QC Limits: 90 to 110 % Recovery

Date Analyzed: 10/15/02
Run ID: MA3020

Methods: SW846 6010B
Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Aluminum									
Antimony									
Arsenic	2000	2010	100.5	2000	2020	101.0	2000	2080	104.0
Barium	2000	1980	99.0	2000	1950	97.5	2000	1820	91.0
Beryllium									
Cadmium	2000	2110	105.5	2000	2110	105.5	2000	2100	105.0
Calcium									
Chromium	2000	1960	98.0	2000	1970	98.5	2000	2000	100.0
Cobalt									
Copper									
Iron									
Lead	2000	2020	101.0	2000	2030	101.5	2000	2070	103.5
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	2000	2050	102.5	2000	2070	103.5	2000	2160	108.0
Silver	250	261	104.4	250	261	104.4	250	258	103.2
Sodium									
Thallium									
Tin									
Vanadium									
Zinc									

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F14972
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

File ID: IR1015M5.ASC
 QC Limits: 70 to 130 % Recovery

Date Analyzed: 10/15/02
 Run ID: MA3020

Methods: SW846 6010B
 Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Aluminum	400			
Antimony	10			
Arsenic	20		22.2	111.0
Barium	400		413	103.3
Beryllium	10			
Cadmium	10		10.8	108.0
Calcium	2000			
Chromium	20		21.8	109.0
Cobalt	100			
Copper	50			
Iron	600			
Lead	10		12.2	122.0
Magnesium	10000			
Manganese	30			
Molybdenum	100			
Nickel	80			
Potassium	10000			
Selenium	10		12.5	125.0
Silver	20		19.6	98.0
Sodium	10000			
Thallium	20			
Tin	100			
Vanadium	100			
Zinc	40			

(*) Outside of QC Limits
 (anr) Analyte not requested

INTERFERING ELEMENT CHECK STANDARDS SUMMARY
Part 1 - ICSA and ICSAB Standards

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: IR1015M5.ASC Date Analyzed: 10/15/02 Methods: SW846 6010B
QC Limits: 80 to 120 % Recovery Run ID: MA3020 Units: ug/l

Metal	ICSA True	ICSAB True	ICSA Results	% Rec	ICSAB Results	% Rec
Aluminum	500000	500000	506000	101.2	494000	98.8
Antimony		1000	3.4		1020	102.0
Arsenic		1000	3.6		1010	101.0
Barium		500	2.0		512	102.4
Beryllium		500	-2.1		513	102.6
Cadmium		1000	5.8		990	99.0
Calcium	500000	500000	471000H	94.2	461000H	92.2
Chromium		500	3.4		474	94.8
Cobalt		500	0.88		474	94.8
Copper		500	0.95		528	105.6
Iron	200000	200000	202000	101.0	197000	98.5
Lead		1000	4.3		972	97.2
Magnesium	500000	500000	531000	106.2	515000	103.0
Manganese		500	-0.25		500	100.0
Molybdenum		1000	-2.1		981	98.1
Nickel		1000	3.1		967	96.7
Potassium			676		317	
Selenium		1000	-2.2		959	95.9
Silver		1000	-0.17		1090H	109.0
Sodium			41.1		197	
Thallium		1000	-1.1		974	97.4
Tin		1000	0.35		1000	100.0
Vanadium		500	-1.1		504	100.8
Zinc		1000	-4.8		945	94.5

(*) Outside of QC limits
(anr) Analyte not requested

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21015W1.PRN
Analyst: DM
Parameters: Hg

Date Analyzed: 10/15/02 Methods: SW846 7470A
Run ID: MA3021

Time	Sample Description	Dilution Factor	PS Recov	Comments
11: 20	MA3021-ICV1	1		
11: 22	MA3021-ICB1	1		
11: 24	MA3021-CRI 1	1		
11: 26	MA3021-CCV1	1		
11: 28	MA3021-CCB1	1		
11: 30	MP4818-MB1	1		
11: 32	MP4818-B1	1		
11: 33	F14972-1	1		
11: 35	MP4818-D1	1		
11: 37	MP4818-S1	1		
11: 39	MP4818-MB2	1		
----->	Last reportable sample/prep for job F14972			
11: 41	MP4819-MB1	1		
11: 43	MP4819-B1	1		
11: 45	F14974-1	1		(sample used for QC only; not part of login F14972)
11: 47	MP4819-D1	1		
11: 49	MA3021-CCV2	1		
11: 51	MA3021-CCB2	1		
----->	Last reportable CCB for job F14972			
11: 53	MP4819-S1	1		
11: 55	MP4819-S2	1		
11: 57	ZZZZZZ	1		
11: 59	ZZZZZZ	1		
12: 01	ZZZZZZ	1		
12: 03	ZZZZZZ	1		
12: 04	ZZZZZZ	1		
12: 06	ZZZZZZ	1		
12: 08	ZZZZZZ	1		
12: 10	ZZZZZZ	1		
12: 11	MA3021-CCV3	1		
12: 13	MA3021-CCB3	1		
12: 15	ZZZZZZ	1		
12: 17	ZZZZZZ	1		
12: 19	ZZZZZZ	1		
12: 21	ZZZZZZ	1		

Accutest Laboratories Instrument Runlog
Inorganics Analyses

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21015W1.PRN
Analyst: DM
Parameters: Hg

Date Analyzed: 10/15/02 Methods: SW846 7470A
Run ID: MA3021

Time	Sample Description	Dilution Factor	PS Recov	Comments
12:23	ZZZZZ	1		
12:24	MA3021-CCV4	1		
12:26	MA3021-CCB4	1		

Refer to raw data for calibration curve and standards.

BLANK RESULTS SUMMARY
Part 1 - Initial and Continuing Calibration Blanks

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21015W1.PRN Date Analyzed: 10/15/02 Methods: SW846 7470A
QC Limits: result < RL Run ID: MA3021 Units: ug/l

Metal	RL	IDL	ICB raw	final	CCB raw	final	CCB raw	final
Mercury	1.0	.022	0.040	<1.0	0.082	<1.0	0.079	<1.0

(*) Outside of QC limits
(anr) Analyte not requested

CALIBRATION CHECK STANDARDS SUMMARY
Initial and Continuing Calibration Checks

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21015W1.PRN Date Analyzed: 10/15/02 Methods: SW846 7470A
QC Limits: 80 to 120 % Recovery Run ID: MA3021 Units: ug/l

Metal	ICV True	ICV Results	% Rec	CCV True	CCV Results	% Rec	CCV True	CCV Results	% Rec
Mercury	3.0	3.0	100.0	3.0	3.1	103.3	3.0	3.2	106.7

(*) Outside of QC limits
(anr) Analyte not requested

LOW CALIBRATION CHECK STANDARDS SUMMARY

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

File ID: H21015W1.PRN
QC Limits: to % Recovery

Date Analyzed: 10/15/02
Run ID: MA3021

Methods: SW846 7470A
Units: ug/l

Metal	CRI True	CRIA True	CRI Results	% Rec
Mercury	0.20		0.18	90.0

(*) Outside of QC limits
(anr) Analyte not requested

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4811
Matrix Type: LEACHATE

Methods: SW846 6010B
Units: mg/l

Prep Date: 10/11/02 10/11/02

Metal	RL	IDL	MB raw	fi nal	MB raw	fi nal
Aluminum	0.20	.0066				
Antimony	0.0050	.0015				
Arsenic	0.010	.0028	0.00048	<0.010	0.0016	<0.010
Barium	1.0	.00049	-0.00033	<1.0	0.0067	<1.0
Beryllium	0.0050	.00026				
Cadmium	0.0050	.00026	-0.00056	<0.0050	-0.00082	<0.010
Calcium	5.0	.0038				
Chromium	0.010	.00043	0.0018	<0.010	0.0021	<0.010
Cobalt	0.050	.0005				
Copper	0.025	.00044				
Iron	0.30	.0071				
Lead	0.0050	.0012	0.0024	<0.0050	0.0033	<0.0050
Magnesium	5.0	.0099				
Manganese	0.015	.00016				
Molybdenum	0.050	.00075				
Nickel	0.040	.0011				
Potassium	5.0	.014				
Selenium	0.010	.002	0.00052	<0.010	0.0068	<0.010
Silver	0.010	.00055	-0.00015	<0.010	-0.0011	<0.010
Sodium	5.0	.15				
Thallium	0.010	.0015				
Tin	0.050	.0022				
Vanadium	0.050	.00047				
Zinc	0.10	.00059				

Associated samples MP4811: F14972-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F14972
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4811
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/11/02 10/11/02

Metal	F14972-1 Original	DUP	RPD	QC Limits	F14972-1 Original	MS	Spike lot MPFLICP	% Rec	QC Limits
Aluminum									
Antimony									
Arsenic	0.023	0.021	9.1	0-29	0.023	4.5	4.0	111.9	75-120
Barium	0.27	0.26	3.8	0-20	0.27	4.0	4.0	93.3	72-120
Beryllium									
Cadmium	0.0022	0.0023	4.4	0-20	0.0022	0.12	0.10	117.8	72-120
Calcium									
Chromium	0.024	0.026	8.0	0-47	0.024	0.46	0.40	109.0	69-122
Cobalt									
Copper									
Iron									
Lead	0.057	0.060	5.1	0-44	0.057	1.2	1.0	114.3	70-126
Magnesium									
Manganese									
Molybdenum									
Nickel									
Potassium									
Selenium	0.0077	0.0043	56.7 (a)	0-36	0.0077	4.6	4.0	114.8	74-120
Silver	0.0	0.0	NC	0-20	0.0	0.11	0.10	110.0	52-126
Sodium									
Thallium									
Tin									
Vanadium									
Zinc									

Associated samples MP4811: F14972-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(N) Matrix Spike Rec. outside of QC limits

(anr) Analyte not requested

(a) RPD acceptable due to low duplicate and sample concentrations.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F14972
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4811
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: mg/l

Prep Date: 10/11/02 10/11/02

Metal	BSP Result	Spielot MPFLICP	% Rec	QC Limits	BSP Result	Spielot MPFLICP	% Rec	QC Limits
Aluminum								
Antimony								
Arsenic	4.0	4.0	100.0	80-120				
Barium	3.9	4.0	97.5	80-120				
Beryllium								
Cadmium	0.11	0.10	110.0	80-120				
Calcium								
Chromium	0.42	0.40	105.0	80-120				
Cobalt								
Copper								
Iron								
Lead	1.0	1.0	100.0	80-120				
Magnesium								
Manganese								
Molybdenum								
Nickel								
Potassium								
Selenium	4.0	4.0	100.0	80-120				
Silver	0.10	0.10	100.0	80-120				
Sodium								
Thallium								
Tin								
Vanadium								
Zinc								

Associated samples MP4811: F14972-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (anr) Analyte not requested

SERIAL DILUTION RESULTS SUMMARY

Login Number: F14972
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4811
 Matrix Type: LEACHATE

Methods: SW846 6010B
 Units: ug/l

Prep Date: 10/11/02

Metal	F14972-1 Original	SDL 1:5	RPD	QC Limits
Aluminum				
Antimony				
Arsenic	23.1	27.9	20.8 (a)	0-10
Barium	265	260	2.1	0-10
Beryllium				
Cadmium	2.17	0.00	100.0(a)	0-10
Calcium				
Chromium	23.9	26.3	10.0	0-10
Cobalt				
Copper				
Iron				
Lead	57.3	64.6	12.8 (a)	0-10
Magnesium				
Manganese				
Molybdenum				
Nickel				
Potassium				
Selenium	7.66	0.00	100.0(a)	0-10
Silver	0.00	0.00	NC	0-10
Sodium				
Thallium				
Tin				
Vanadium				
Zinc				

Associated samples MP4811: F14972-1

Results < IDL are shown as zero for calculation purposes

(*) Outside of QC limits

(anr) Analyte not requested

(a) Percent difference acceptable due to low initial sample concentration (< 50 times IDL).

BLANK RESULTS SUMMARY
Part 2 - Method Blanks

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4818
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 10/15/02 10/15/02

Metal	RL	IDL	MB raw	final	MB raw	final
Mercury	0.0010	.000022	0.000060	<0.0010	-0.0000010	<0.0010

Associated samples MP4818: F14972-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(anr) Analyte not requested

MATRIX SPIKE AND DUPLICATE RESULTS SUMMARY

Login Number: F14972
 Account: ITVAVAB - Shaw E & I, Inc.
 Project: Indian Head

QC Batch ID: MP4818
 Matrix Type: LEACHATE

Methods: SW846 7470A
 Units: mg/l

Prep Date: 10/15/02 10/15/02

Metal	F14972-1 Original	DUP	RPD	QC Limits	F14972-1 Original	MS	Spike lot HGFLWS	% Rec	QC Limits
Mercury	0.0	0.0	NC	0-20	0.0	0.020	0.030	66.0N(a)	62-131

Associated samples MP4818: F14972-1

Results < IDL are shown as zero for calculation purposes
 (*) Outside of QC limits
 (N) Matrix Spike Rec. outside of QC limits
 (anr) Analyte not requested
 (a) Spike recovery indicates possible matrix interference.

SPIKE BLANK AND LAB CONTROL SAMPLE SUMMARY

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

QC Batch ID: MP4818
Matrix Type: LEACHATE

Methods: SW846 7470A
Units: mg/l

Prep Date: 10/15/02

Metal	BSP Result	Spike lot HGFLWS	% Rec	QC Limits
Mercury	0.0031	0.0030	103.0	80-120

Associated samples MP4818: F14972-1

Results < IDL are shown as zero for calculation purposes
(*) Outside of QC limits
(nr) Analyte not requested

General Chemistry

QC Data Summaries

Includes the following where applicable:

- Method Blank and Blank Spike Summaries
- Duplicate Summaries
- Matrix Spike Summaries
- Percent Solids Raw Data Summary

METHOD BLANK AND SPIKE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	RL	MB Result	Units	BSP %Recov	QC Limits
Cyanide Reactivity	GP3577/GN10433	1.5	<1.5	mg/kg		
Sulfide Reactivity	GP3555/GN10394	50	<50	mg/kg		

Associated Samples:
Batch GP3555: F14972-1
Batch GP3577: F14972-1

DUPLICATE RESULTS SUMMARY
GENERAL CHEMISTRY

Login Number: F14972
Account: ITVAVAB - Shaw E & I, Inc.
Project: Indian Head

Analyte	Batch ID	QC Sample	Units	Original Result	DUP Result	RPD	QC Limits
Corrosivity as pH	GN10441	F14972-1		5.2	5.2		0-%
Cyanide Reactivity	GP3577/GN10433	F14972-1	mg/kg	<1.6	<1.6	0.0	0-20%
Ignitability (Flashpoint)	GN10440	F14972-1	Deg. F	200	200	0.0	0-2%
Solids, Percent	GN10401	F14938-3	%	16.2	16.4	1.2	0-5%
Sulfide Reactivity	GP3555/GN10394	F14972-1	mg/kg	<54	<54	0.0	0-15.1%

Associated Samples:
Batch GN10401: F14972-1
Batch GN10440: F14972-1
Batch GN10441: F14972-1
Batch GP3555: F14972-1
Batch GP3577: F14972-1

Percent Solids Raw Data Summary

Job Number: F14972
Account: ITVAVAB Shaw E & I, Inc.
Project: Indian Head

Sample: F14972-1 Analyzed: 10-OCT-02 by SJL Method: EPA 160.3 M
ClientID: IH-WD-005

Wet Weight (Total)	6.21	g
Tare Weight	.96	g
Dry Weight (Total)	5.79	g
Solids, Percent	92	%

GC Semi-volatiles

QC Data Summaries

(Accutest Laboratories Gulf Coast, Inc.)

Includes the following where applicable:

- **Method Blank Summaries**
- **Blank Spike Summaries**
- **Matrix Spike and Duplicate Summaries**
- **Surrogate Recovery Summaries**
- **GC Surrogate Retention Time Summaries**
- **Initial and Continuing Calibration Summaries**

Blank Spike Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1451-BS	GG06707.D	1	10/13/02	JH	10/11/02	OP1451	GGG244

The QC reported here applies to the following samples:

Method: SW846 8151

F14972-1

CAS No.	Compound	Spike ug/l	BSP ug/l	BSP %	Limits
94-75-7	2,4-D	20	17.0	85	50-150 ^a
93-72-1	2,4,5-TP (Silvex)	4	3.6	90	50-150 ^a

CAS No.	Surrogate Recoveries	BSP	Limits
19719-28-9	2,4-DCAA	86%	10-150%

(a) Advisory control limits.

Leachate Blank Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1451-LB	GG06708.D	1	10/13/02	JH	10/11/02	OP1451	GGG244

The QC reported here applies to the following samples:

Method: SW846 8151

F14972-1

CAS No.	Compound	Result	RL	Units	Q
94-75-7	2,4-D	ND	10	ug/l	
93-72-1	2,4,5-TP (Silvex)	ND	2.0	ug/l	

CAS No.	Surrogate Recoveries	Results	Limits
19719-28-9	2,4-DCAA	95%	10-150%

Matrix Spike/Matrix Spike Duplicate Summary

Job Number: F14972
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
OP1451-MS	GG06710.D	1	10/13/02	JH	10/11/02	OP1451	GGG244
OP1451-MSD	GG06711.D	1	10/13/02	JH	10/11/02	OP1451	GGG244
F14972-1	GG06709.D	1	10/13/02	JH	10/11/02	OP1451	GGG244

The QC reported here applies to the following samples:

Method: SW846 8151

F14972-1

CAS No.	Compound	F14972-1 ug/l	Spike Q	MS ug/l	MS %	MSD ug/l	MSD %	RPD	Limits Rec/RPD
94-75-7	2,4-D	ND	20	17.0	85	14.4	72	17	50-150/30 ^a
93-72-1	2,4,5-TP (Silvex)	ND	4	4.0	100	4.6	115	14	50-150/30 ^a

CAS No.	Surrogate Recoveries	MS	MSD	F14972-1	Limits
19719-28-9	2,4-DCAA	122%	120%	130%	10-150%

(a) Advisory control limits.

Semivolatile Surrogate Recovery Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Method: SW846 8151	Matrix: LEACHATE
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Samples and QC shown here apply to the above method

Lab Sample ID	Lab File ID	S1 ^a
F14972-1	GG06709.D	130.0
OP1451-BS	GG06707.D	86.0
OP1451-LB	GG06708.D	95.0
OP1451-MS	GG06710.D	122.0
OP1451-MSD	GG06711.D	120.0

Surrogate Compounds	Recovery Limits
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S1 = 2,4-DCAA	10-150%
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(a) Recovery from GC signal #1

GC Surrogate Retention Time Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Check Std: GGG244-CC239	Injection Date: 10/13/02
Lab File ID: GG06706.D	Injection Time: 15:40
Instrument ID: GCGG	Method: SW846 8151

S1^a
RT

Check Std	10.35
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Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed	S1 ^a RT
OP1451-BS	GG06707.D	10/13/02	16:07	10.34
OP1451-LB	GG06708.D	10/13/02	16:33	10.35
F14972-1	GG06709.D	10/13/02	16:59	10.33
OP1451-MS	GG06710.D	10/13/02	17:26	10.32
OP1451-MSD	GG06711.D	10/13/02	17:52	10.33
OP1397-BS	GG06712.D	10/13/02	18:18	10.34
OP1397-MB	GG06713.D	10/13/02	18:45	10.34
F14717-5	GG06714.D	10/13/02	19:11	10.33
OP1397-MS	GG06715.D	10/13/02	19:37	10.33
OP1397-MSD	GG06716.D	10/13/02	20:04	10.33

Surrogate Compounds

S1 = 2,4-DCAA

(a) Retention time from GC signal #1

Initial Calibration Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG239-ICC239
Lab FileID: GG06528.D

Response Factor Report GC GG

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Sep 26 15:13:12 2002

Calibration Files

1 =GG06526.D 2 =GG06527.D 3 =GG06528.D
4 =GG06529.D 5 =GG06530.D 6 =GG06531.D

Compound	1	2	3	4	5	6	Avg		%RSD
1) Dalapon	9.621	9.415	8.301	7.943	7.606	7.717	8.434	E3	10.38
2) 4-Nitrophenol	8.804	8.347	7.153	6.957	6.599	6.477	7.389	E3	13.01
3) S DCAA	5.572	5.088	4.302	4.143	3.887	3.800	4.465	E3	15.90
4) Dicamba	2.172	2.182	1.885	1.870	1.792	1.774	1.946	E4	9.46
5) MCPP	6.501						6.501	E3	0.00
6) MCPA	9.632						9.632	E3	0.00
7) Dichlorprop	5.730	5.340	4.510	4.402	4.160	4.054	4.699	E3	14.45
8) 2,4-D	3.312	3.930	3.550	3.708	3.637	3.645	3.630	E3	5.56
9) Pentachlorophenol	1.457	1.398	1.193	1.176	1.111	1.090	1.238	E5	12.38
10) 2,4,5-TP (SILVEX)	2.914	3.267	2.934	3.023	2.901	2.889	2.988	E4	4.84
11) 2,4,5-T	3.063	3.431	3.043	3.133	2.995	2.969	3.105	E4	5.45
12) 2,4-DB	2.942	3.040	2.654	2.699	2.584	2.563	2.747	E3	7.19
13) Dinoseb	2.318	2.403	2.079	2.093	2.007	1.975	2.146	E4	8.11
14) Picloram	2.031	2.658	2.453	2.832	2.581	2.634	2.532	E4	10.84

Signal #2 Calibration Files

1 =GG06526.D 2 =GG06527.D 3 =GG06528.D
4 =GG06529.D 5 =GG06530.D 6 =GG06531.D

Compound	1	2	3	4	5	6	Avg		%RSD
1) Dalapon	2.046	1.921	1.664	1.574	1.499	1.508	1.702	E4	13.47
2) 4-Nitrophenol	1.422	1.363	1.143	1.087	1.021	0.990	1.171	E4	15.42
3) S DCAA	8.822	8.303	6.733	6.587	6.252	6.042	7.123	E3	16.19
4) Dicamba	4.388	4.226	3.665	3.618	3.452	3.377	3.788	E4	11.06
5) MCPP	8.944						8.944	E3	0.00
6) MCPA	1.446						1.446	E4	0.00
7) Dichlorprop	1.102	0.994	0.839	0.813	0.767	0.746	0.877	E4	16.07
8) 2,4-D	1.412	1.246	1.045	1.015	0.953	0.921	1.098	E4	17.40
9) Pentachlorophenol	2.109	2.218	1.968	1.995	1.921	1.888	2.016	E5	6.17
10) 2,4,5-TP (SILVEX)	7.118	7.138	6.160	6.156	5.828	5.661	6.344	E4	10.05
11) 2,4,5-T	6.984	6.862	5.903	5.864	5.527	5.353	6.082	E4	11.25
12) 2,4-DB	6.501	6.261	5.325	5.343	5.026	4.906	5.560	E3	11.91
13) Dinoseb	6.223	5.881	5.001	4.859	4.644	4.479	5.181	E4	13.63
14) Picloram	4.822	5.918	5.348	6.123	5.599	5.643	5.575	E4	8.18

(#) = Out of Range

OC092H.M

Wed Oct 09 16:38:52 2002

RPT1

Continuing Calibration Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG244-CC239
Lab FileID: GG06706.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG244\GG06706.D\ECD1A.CH Vial : 2
Signal #2 : C:\HPCHEM\2\DATA\GGG244\GG06706.D\ECD2B.CH
Acq On : 13 Oct 2002 3:40 pm Operator: jennifer
Sample : cc239-3 Inst : GC GG
Misc : op1451, ggg244 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Sep 26 15:13:12 2002
Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	Dalapon	300.000	317.594	-5.9	108	0.00
2	4-Nitrophenol	300.000	323.287	-7.8	111	0.01
3 S	DCAA	300.000	320.432	-6.8	111	0.00
4	Dicamba	60.000	70.974	-18.3#	122	0.00
7	Dichloroprop	300.000	319.709	-6.6	111	0.00
8	2,4-D	300.000	298.548	0.5	102	0.00
9	Pentachlorophenol	15.000	16.381	-9.2	113	0.00
10	2,4,5-TP (SILVEX)	60.000	62.528	-4.2	106	0.00
11	2,4,5-T	60.000	60.036	-0.1	102	0.00
12	2,4-DB	600.000	619.370	-3.2	107	0.00
13	Dinoseb	60.000	62.004	-3.3	107	0.00
14	Picloram	60.000	42.045	29.9#	72	0.00

Signal #2

1	Dalapon	300.000	297.013	1.0	101	0.00
2	4-Nitrophenol	300.000	313.165	-4.4	107	0.00
3 S	DCAA	300.000	318.296	-6.1	112	0.00
4	Dicamba	60.000	63.211	-5.4	109	0.00
7	Dichloroprop	300.000	302.917	-1.0	106	0.00
8	2,4-D	300.000	295.996	1.3	104	0.00
9	Pentachlorophenol	15.000	15.567	-3.8	106	0.00
10	2,4,5-TP (SILVEX)	60.000	59.960	0.1	103	0.00
11	2,4,5-T	60.000	55.784	7.0	96	0.00
12	2,4-DB	600.000	560.904	6.5	98	0.00
13	Dinoseb	60.000	64.576	-7.6	112	0.00
14	Picloram	60.000	42.300	29.5#	73	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\GGG244\GG06706.D\ECD1A.CH Vial : 2
Signal #2 : C:\HPCHEM\2\DATA\GGG244\GG06706.D\ECD2B.CH
Acq On : 13 Oct 2002 3:40 pm Operator: jennifer
Sample : cc239-3 Inst : GC GG
Misc : op1451, ggg244 Multiplr: 1.00
IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
Title : Herbicides by SW846 Method 8151
Last Update : Thu Sep 26 15:13:12 2002

Continuing Calibration Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG244-CC239
Lab FileID: GG06706.D

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
5	MCP	-1.000	0.000	0.0	0	-10.67#
6	MCPA	-1.000	0.000	0.0	0	-11.04#

Signal #2

5	MCP	-1.000	0.000	0.0	0	-10.56#
6	MCPA	-1.000	0.000	0.0	0	-10.99#

(#) = Out of Range
GG06528.D 0C092H.M

SPCC's out = 0 CCC's out = 0
Mon Oct 14 11:10:35 2002 RPT1

Continuing Calibration Summary

Job Number: F14972
 Account: ALSE Accutest Labs S. E.
 Project: ITVAVAB: Indian Head

Sample: GGG244-CC239
 Lab FileID: GG06717.D

Evaluate Continuing Calibration Report

Signal #1 : C:\HPCHEM\2\DATA\GGG244\GG06717.D\ECD1A.CH Vial : 13
 Signal #2 : C:\HPCHEM\2\DATA\GGG244\GG06717.D\ECD2B.CH
 Acq On : 13 Oct 2002 8:56 pm Operator: jennifer
 Sample : cc239-4 Inst : GC GG
 Misc : op1397, ggg244, Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
 Title : Herbicides by SW846 Method 8151
 Last Update : Thu Sep 26 15:13:12 2002
 Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
 Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
1	Dalapon	400.000	399.211	0.2	106	0.00
2	4-Nitrophenol	400.000	396.997	0.8	105	0.00
3 S	DCAA	400.000	357.498	10.6	96	0.00
4	Dicamba	80.000	76.013	5.0	99	0.00
7	Dichloroprop	400.000	364.422	8.9	97	0.00
8	2,4-D	400.000	419.263	-4.8	103	0.00
9	Pentachlorophenol	20.000	17.890	10.6	94	0.00
10	2,4,5-TP (SILVEX)	80.000	76.764	4.0	95	0.00
11	2,4,5-T	80.000	74.302	7.1	92	0.00
12	2,4-DB	800.000	725.351	9.3	92	0.00
13	Dinoseb	80.000	68.908	13.9	88	0.00
14	Picloram	80.000	56.412	29.5#	63	0.00

Signal #2

1	Dalapon	400.000	373.796	6.6	101	0.00
2	4-Nitrophenol	400.000	360.935	9.8	97	0.00
3 S	DCAA	400.000	349.482	12.6	94	0.00
4	Dicamba	80.000	72.652	9.2	95	0.00
7	Dichloroprop	400.000	350.590	12.4	95	0.00
8	2,4-D	400.000	342.623	14.3	93	0.00
9	Pentachlorophenol	20.000	18.290	8.6	92	0.00
10	2,4,5-TP (SILVEX)	80.000	71.684	10.4	92	0.00
11	2,4,5-T	80.000	71.078	11.2	92	0.00
12	2,4-DB	800.000	666.481	16.7#	87	0.00
13	Dinoseb	80.000	67.788	15.3#	90	0.00
14	Picloram	80.000	50.937	36.3#	58	0.00

Evaluate Continuing Calibration Report - Not Found

Signal #1 : C:\HPCHEM\2\DATA\GGG244\GG06717.D\ECD1A.CH Vial : 13
 Signal #2 : C:\HPCHEM\2\DATA\GGG244\GG06717.D\ECD2B.CH
 Acq On : 13 Oct 2002 8:56 pm Operator: jennifer
 Sample : cc239-4 Inst : GC GG
 Misc : op1397, ggg244, Multiplr: 1.00
 IntFile Signal #1: autoint1.e IntFile Signal #2: autoint2.e

Method : C:\HPCHEM\2\METHODS\OC092H.M (Chemstation Integrator)
 Title : Herbicides by SW846 Method 8151
 Last Update : Thu Sep 26 15:13:12 2002

Continuing Calibration Summary

Job Number: F14972
Account: ALSE Accutest Labs S. E.
Project: ITVAVAB: Indian Head

Sample: GGG244-CC239
Lab FileID: GG06717.D

Response via : Multiple Level Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.10min
Max. RRF Dev : 15% Max. Rel. Area : 150%

	Compound	Amount	Calc.	%Dev	Area%	Dev(Min)
5	MCP	-1.000	0.000	0.0	0	-10.67#
6	MCP	-1.000	0.000	0.0	0	-11.04#

Signal #2

5	MCP	-1.000	0.000	0.0	0	-10.56#
6	MCP	-1.000	0.000	0.0	0	-10.99#

(#) = Out of Range
GG06717.D 0C092H.M

SPCC's out = 0 CCC's out = 0
Mon Oct 14 11:09:51 2002 RPT1

Sample Summary

Shaw E & I, Inc.

Job No: F14972

Indian Head
Project No: 809401

Sample Number	Collected Date	Time By	Received	Matrix Code	Type	Client Sample ID
F14972-1	10/07/02	14:00	ED	10/08/02	SO Soil	IH-WD-005

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Method: SW846 8260B Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
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Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	C0012535.D	10	10/14/02	JG	10/11/02	MS1808	VC556
Run #2							

Run #	Purge Volume
Run #1	5.0 ml
Run #2	

VOA TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
71-43-2	Benzene	ND	D018	0.50	0.010	mg/l	
108-90-7	Chlorobenzene	ND	D021	100	0.020	mg/l	
67-66-3	Chloroform	ND	D022	6.0	0.020	mg/l	
56-23-5	Carbon tetrachloride	ND	D019	0.50	0.020	mg/l	
75-35-4	1,1-Dichloroethylene	ND	D029	0.70	0.020	mg/l	
107-06-2	1,2-Dichloroethane	ND	D028	0.50	0.020	mg/l	
106-46-7	p-Dichlorobenzene	ND	D027	7.5	0.020	mg/l	
78-93-3	Methyl ethyl ketone	ND	D035	200	0.10	mg/l	
127-18-4	Tetrachloroethylene	ND	D039	0.70	0.020	mg/l	
79-01-6	Trichloroethylene	ND	D040	0.50	0.020	mg/l	
75-01-4	Vinyl chloride	ND	D043	0.20	0.010	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
1868-53-7	Dibromofluoromethane	96%		86-115%
2037-26-5	Toluene-D8	105%		87-113%
460-00-4	4-Bromofluorobenzene	103%		84-117%
17060-07-0	1,2-Dichloroethane-D4	101%		78-125%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-WD-005		Date Sampled:	10/07/02
Lab Sample ID:	F14972-1		Date Received:	10/08/02
Matrix:	SO - Soil		Percent Solids:	92.0
Method:	SW846 8270C SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	W012512.D	1	10/14/02	ME	10/11/02	OP6086	SW675
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	1.0 ml
Run #2		

ABN TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
95-48-7	2-Methylphenol	ND	D023	200	0.050	mg/l	
	3&4-Methylphenol	ND	D024	200	0.050	mg/l	
87-86-5	Pentachlorophenol	ND	D037	100	0.25	mg/l	
95-95-4	2,4,5-Trichlorophenol	ND	D041	400	0.050	mg/l	
88-06-2	2,4,6-Trichlorophenol	ND	D042	2.0	0.050	mg/l	
106-46-7	1,4-Dichlorobenzene	ND	D027	7.5	0.050	mg/l	
121-14-2	2,4-Dinitrotoluene	ND	D030	0.13	0.050	mg/l	
118-74-1	Hexachlorobenzene	ND	D032	0.13	0.050	mg/l	
87-68-3	Hexachlorobutadiene	ND	D033	0.50	0.050	mg/l	
67-72-1	Hexachloroethane	ND	D034	3.0	0.050	mg/l	
98-95-3	Nitrobenzene	ND	D036	2.0	0.050	mg/l	
110-86-1	Pyridine	ND	D038	5.0	0.050	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
367-12-4	2-Fluorophenol	58%		19-90%
4165-62-2	Phenol-d5	39%		10-68%
118-79-6	2,4,6-Tribromophenol	100%		36-137%
4165-60-0	Nitrobenzene-d5	99%		49-119%
321-60-8	2-Fluorobiphenyl	89%		45-118%
1718-51-0	Terphenyl-d14	107%		46-135%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-WD-005		Date Sampled:	10/07/02
Lab Sample ID:	F14972-1		Date Received:	10/08/02
Matrix:	SO - Soil		Percent Solids:	92.0
Method:	SW846 8081A SW846 1311			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	DD07466.D	1	10/15/02	SKW	10/11/02	OP6087	GDD279
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Pesticide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
58-89-9	gamma-BHC (Lindane)	ND	D013	0.40	0.00050	mg/l	
12789-03-6	Chlordane	ND	D020	0.030	0.0050	mg/l	
72-20-8	Endrin	ND	D012	0.020	0.0010	mg/l	
76-44-8	Heptachlor	ND	D031	0.0080	0.00050	mg/l	
1024-57-3	Heptachlor epoxide	ND	D031	0.0080	0.00050	mg/l	
72-43-5	Methoxychlor	ND	D014	10	0.0010	mg/l	
8001-35-2	Toxaphene	ND	D015	0.50	0.025	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	91%		52-131%
2051-24-3	Decachlorobiphenyl	97%		16-153%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID:	IH-WD-005		Date Sampled:	10/07/02
Lab Sample ID:	F14972-1		Date Received:	10/08/02
Matrix:	SO - Soil		Percent Solids:	92.0
Method:	SW846 8082 SW846 3550B			
Project:	Indian Head			

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1 ^a	MN16259.D	100	10/10/02	NJ	10/09/02	OP6062	GMN623
Run #2							

Run #	Initial Weight	Final Volume
Run #1	29.0 g	10.0 ml
Run #2		

PCB List

CAS No.	Compound	Result	RL	Units	Q
12674-11-2	Aroclor 1016	ND	3700	ug/kg	
11104-28-2	Aroclor 1221	ND	3700	ug/kg	
11141-16-5	Aroclor 1232	ND	3700	ug/kg	
53469-21-9	Aroclor 1242	ND	3700	ug/kg	
12672-29-6	Aroclor 1248	ND	3700	ug/kg	
11097-69-1	Aroclor 1254	ND	3700	ug/kg	
11096-82-5	Aroclor 1260	ND	3700	ug/kg	
	Total PCBs	ND	7500	ug/kg	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
877-09-8	Tetrachloro-m-xylene	0% ^b		50-134%
2051-24-3	Decachlorobiphenyl	0% ^b		48-147%

(a) Dilution required due to matrix interference.

(b) Outside control limits due to dilution.

ND = Not detected

RL = Reporting Limit

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Method: SW846 8151 SW846 1311 Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
---	--

Run #	File ID	DF	Analyzed	By	Prep Date	Prep Batch	Analytical Batch
Run #1	GG06709.D	1	10/13/02	ATX	10/11/02	T:OP1451	T:GGG244
Run #2							

Run #	Initial Volume	Final Volume
Run #1	100 ml	10.0 ml
Run #2		

Herbicide TCLP Leachate

CAS No.	Compound	Result	HW#	MCL	RL	Units	Q
94-75-7	2,4-D	ND	D016	10	0.010	mg/l	
93-72-1	2,4,5-TP (Silvex)	ND	D017	1.0	0.0020	mg/l	

CAS No.	Surrogate Recoveries	Run# 1	Run# 2	Limits
19719-28-9	2,4-DCAA	130%		10-150%

ND = Not detected

MCL = Maximum Contamination Level (40 CFR 261 6/96)

E = Indicates value exceeds calibration range

J = Indicates an estimated value

B = Indicates analyte found in associated method blank

N = Indicates presumptive evidence of a compound

Report of Analysis

Client Sample ID: IH-WD-005 Lab Sample ID: F14972-1 Matrix: SO - Soil Project: Indian Head	Date Sampled: 10/07/02 Date Received: 10/08/02 Percent Solids: 92.0
---	--

Metals Analysis, TCLP Leachate SW846 1311

Analyte	Result	HW#	MCL	RL	IDL	Units	DF	Prep	Analyzed By	Method	Prep Meth
Arsenic	0.023	D004	5.0	0.010	0.0028	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Barium	0.27 B	D005	100	1.0	0.00049	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Cadmium	0.0022 B	D006	1.0	0.010	0.00026	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Chromium	0.024	D007	5.0	0.010	0.00043	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Lead	0.057	D008	5.0	0.0050	0.0012	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Mercury	0.00022 U	D009	0.20	0.010	0.00022	mg/l	1	10/11/02	10/15/02	DM	SW846 7470A
Selenium	0.0077 B	D010	1.0	0.010	0.0020	mg/l	1	10/11/02	10/15/02	DM	SW846 3010
Silver	0.00055 U	D011	5.0	0.010	0.00055	mg/l	1	10/11/02	10/15/02	DM	SW846 3010

RL = Reporting Limit **IDL = Instrument Detection Limit**
MCL = Maximum Contamination Level (40 CFR 261 6/96)

U = Indicates a result < IDL
B = Indicates a result > = IDL but < RL

Report of Analysis

Client Sample ID: IH-WD-005	
Lab Sample ID: F14972-1	Date Sampled: 10/07/02
Matrix: SO - Soil	Date Received: 10/08/02
	Percent Solids: 92.0
Project: Indian Head	

General Chemistry

Analyte	Result	RL	Units	DF	Analyzed By	Method
Corrosivity as pH	5.2			1	10/15/02 SJL	SW846 CHAP7
Cyanide Reactivity	< 1.6	1.6	mg/kg	1	10/14/02 SJL	SW846 CHAP7
Ignitability (Flashpoint)	> 200		Deg. F	1	10/15/02 SJL	SW846 1010
Solids, Percent	92		%	1	10/10/02 SJL	EPA 160.3 M
Sulfide Reactivity	< 54	54	mg/kg	1	10/09/02 LL	SW846 CHAP7

APPENDIX G

***GEOTECHNICAL TEST RESULTS AND
FIELD DATA***

APPENDIX G

GEOTECHNICAL TEST RESULTS AND FIELD DATA

- IH-TS-003, Topsoil: Composition, organic content, pH, soluble salts, and nutrient recommendation
- IH-SF-004, Select Fill: Gradation, standard proctor, classification, and Atterberg Limits
- IH-DM-008, RC-6 Aggregate: Modified Proctor
- 001 to 275: In-Place Density Tests



FERTILIZER RECOMMENDATIONS

County: CHARLES

Date: 10/ 02

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

FAXED OCT 15 2002

MONROEVILLE PA 15146

MONROEVILLE PA 15146

Lab #	Sample ID	Crop codes & name	Y. goal (bu/A or T/A)	Lime T/A (% oxides)	Past legume N credit (lbs/A)	Nutrient Recommendation											
						Method	N lbs/A	P2O5 lbs/A	K2O lbs/A	Mg lbs/A	Mn lbs/A	Zn lbs/A	SO4 lbs/A	B lbs/A	Cu lbs/A	Notes	
20012	IH-TS-003-LSG	65 Est. cool season perennial grasses		0.0 (50%)	0	Total	60	30	40	15							3,4,7,49
						broadcast & disk in	60	30	40	15							

Issued in furtherance of Cooperative Extension work, acts of May 8 and June 30, 1914, in cooperation with the U.S. Department of Agriculture, University of Maryland at College Park, and local governments. Thomas A. Fretz, Director of Cooperative Extension, University of Maryland at College Park.

The University of Maryland is equal opportunity. The University's policies, programs, and activities are in conformance with pertinent Federal and State laws and regulations on nondiscrimination regarding race, color, religion, age, national origin, sex, and disability. Inquiries regarding compliance with Title VI of the Civil Rights Act of 1964, as amended; Title IX of the Educational Amendments; Section 504 of the Rehabilitation Act of 1973; and the Americans With Disabilities Act of 1990; or related legal requirements should be directed to the Director of Personnel/Human Relations, Office of the Dean, College of Agriculture, Symons Hall, College Park, MD 20742.



SOIL TEST REPORT

County: CHARLES
 Date: 10/15/2002
 Receipt: 37.

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

SHAW E & I
 ATTN: DAN PRINGLE
 2790 MOSSIDE BLVD

FAXED OCT 15 2002

MONROEVILLE PA 15146

MONROEVILLE PA 15146

Lab #	Sample ID	*Texture	pH	Mg index	P index	K index	Ca index	O.M. %	Zn ppm	B ppm	Mn ppm	Cu ppm	SO4-S ppm	NO3-N ppm	Sol.Salt ppm	Sand %	Silt %	Clay %	CEC MEQ	Ash %	Moisture %
20012	IH-TS-003-LSG	SL	7.2	20 (L)	78 (O)	54 (O)	6 (L)	1.4							85.08	63	17	20			

* F - Fine; S - Sand or Sandy; L - Loam; Si - Silt or Silty; C - Clay

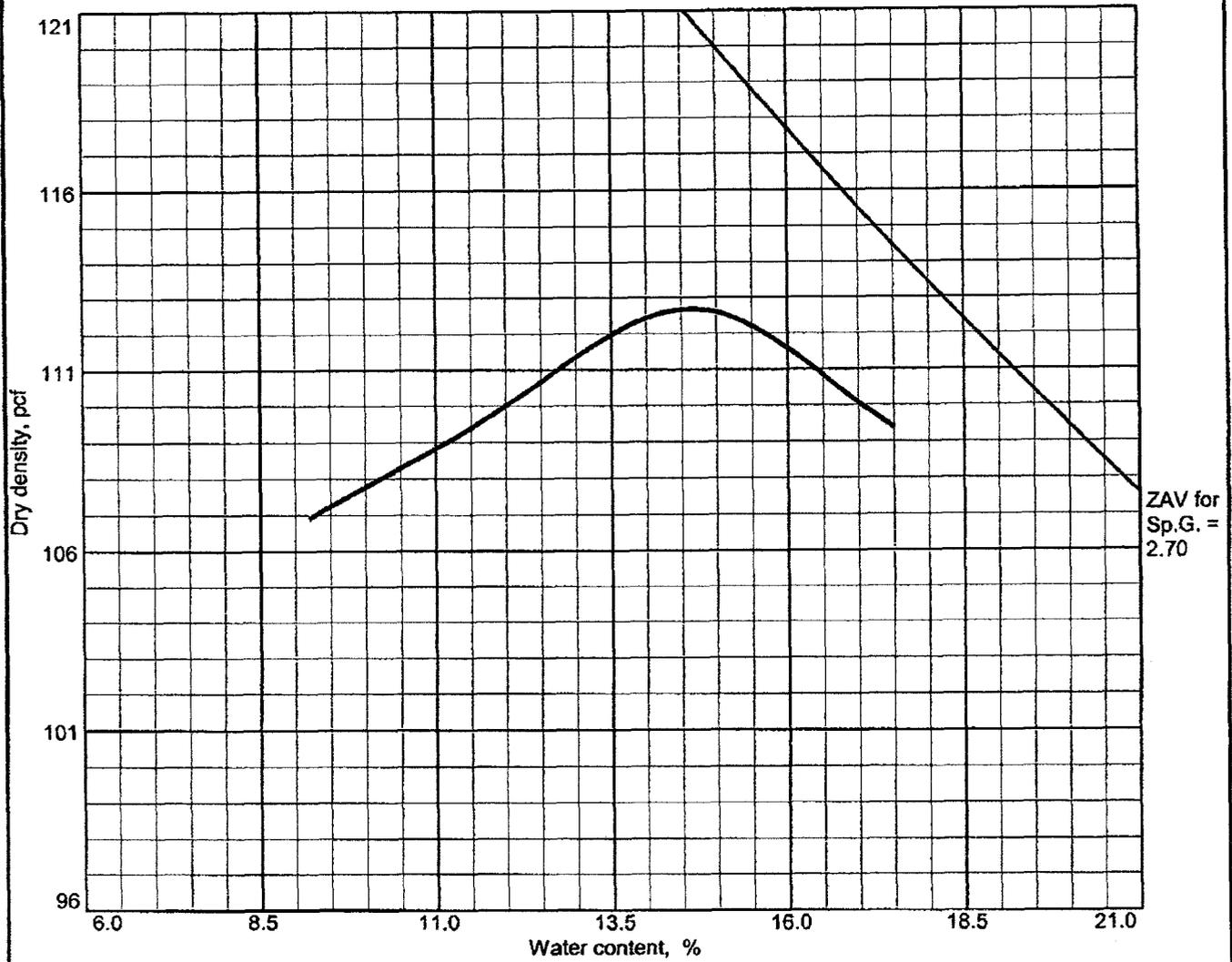
(L) - Low: 0-25
 (M) - Medium: 26-50
 (O) - Optimum: 51-100
 (E) - Excessive: 100+

To receive further recommendation, please contact your county agent at 301-934-5283

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COMPACTION TEST REPORT



Test specification: ASTM D 698-91 Procedure B Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SM	A-2-4(0)		2.70	NP	NP	0.0	25.8

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 112.7 pcf Optimum moisture = 14.6 %	Brown silty sand
Project No. 02530A Client: SHAW Environmental Project: Indian Head NSWC ● Location: LaPlata Sand & Gravel	Remarks: 10/09/2002
COMPACTON TEST REPORT HILLIS-CARNES ENGINEERING ASSOCIATES, INC.	

Figure

LANTDIV RAC FIELD FORM

Contract No. N62470-97-D-5000
 Task Order No. 0062
 Title/Location Site 12
INDIAN HEAD, MARLAND

VARIANCE REQUEST - 004
 ROAD BASE AGGREGATE

DISTRIBUTION:

____ CONTRACTING OFFICER/SPECIALIST (TD'S)
 ____ ROICC
 ____ RPM
 ____ COTR:
 OTHER: _____

 FILE: _____

Form No. VR-004		Date: 12-12-02	Respond *NLT:
Initiated By: <input type="checkbox"/> Navy <input checked="" type="checkbox"/> Contractor <input type="checkbox"/> Other			
<input type="checkbox"/> Technical Direction <input type="checkbox"/> RFI <input checked="" type="checkbox"/> Variance Request <input type="checkbox"/> Overtime Authorization			
Description (Include location & attachments if necessary): The Specifications require Crusher Run Aggregate CR-6 per Section 901 and Table 901A of the MD SHA Construction Manual			
Attachment: Section 901 and Table 901A and RC-6 Test Data			
Drawing Ref: C-9		Spec. Ref. 02742	
Explanation/Recommendation: As a cost savings to the project Shaw E & I recommends using RC-6, recycled concrete, instead of CR-6, crusher run, for subbase aggregate for the reconstruction of the Atkins Road Extension.			
<input type="checkbox"/> Scope Increase <input type="checkbox"/> Scope Decrease <input checked="" type="checkbox"/> No Change in Scope		Cost impact, fee excluded: <input type="checkbox"/> None <input type="checkbox"/> Cost Increase <input checked="" type="checkbox"/> Cost Decrease Rough Order of Magnitude: \$ 4.00 per ton	
WBS Codes Affected: New <input type="checkbox"/> Existing <input type="checkbox"/>		Schedule Impact (assume response by *NLT date) <input checked="" type="checkbox"/> None <input type="checkbox"/> Increase in Time <input type="checkbox"/> Decrease in Time Approximate Calendar Days:	
Contractor: _____		Signature _____ Date _____	
Site Representative: _____		12-12-02	
Project Manager: _____		12-12-02	
Reviewer Comments, Incl RFI Response: Forwarded as acceptable via email from C. Gardner & O. Morris			
Navy: _____		Signature _____ Date _____	
ROICC: _____			
RPM/EIC: _____			
<input type="checkbox"/> Task Order Modification to Follow (contract action) <input type="checkbox"/> No Task Order Modification Required			

Dec 11 02 09:25a

P. 4

Dec 11 02 09:44a

p. 1



**AGGREGATE INDUSTRY
ECO-ROK, BLADENSBURG TERMINAL**

November 19, 2002

ATT:Ms.Christina Baltzar
Corman Construction, Inc.
12001 Galford Road
Annapolis Junction, Md 20701

RE: Contract #Mo 8365170 ,RT 29 & Randolph Road Interchange

Dear Ms. Baltzar ,

This is to certify that our Crushed Recycled Concrete Aggregate, identified as RC-6 (CR-6), meets the requirements as specified by the Maryland State D.O.T.. These specifications are listed in Section #901 AND TABLE 901A of "Standard Specifications for Construction and Material, JANUARY 2001". A sample from our stockpile was recently tested with the following results:

RC-6			
Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	100 %
1 1/2"	37.5 mm	100 %	90 - 100 %
3/4"	19.0 mm	86 %	60 - 90 %
#4	4.75 mm	48 %	30 - 60 %
#200	0.075 mm	6 %	0 - 15 %

PHYSICAL PROPERTIES

BULK SPECIFIC GRAVITY
ABSORPTION
PLASTICITY INDEX
L.A.ABRASION

2.53
4.10%
NON-PLASTIC
38 % WEAR

PAGE 1

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
Suite 400
Greenbelt, Maryland 20770

Tel: 301 - 982 - 1400

Fax: 301 - 513 - 0014

An AGGREGATE INDUSTRIES PLC Company

www.aggregate-us.com

AGGREGATE INDUSTRY-BLADENSBURG TERMINAL

September 17, 2002

ATT: Mr. YUREK
 CHERRY HILL CONSTRUCTION, INC.
 8211 WASHINGTON BLVD
 JESSUP, MD 20794



RE: WASHINGTON CONVENTION CENTER: STREETScape, WASHINGTON D.C.

DEAR Mr. YUREK

This is to certify that our Crushed Stone Aggregates, identified as CR-6 (GASB) and G.A.B. meets the requirements for their designation as specified by the Maryland State D.O.T.. These specifications are listed in Section #901, Table # 901A of "Standard Specifications for Construction and Materials, January 2001". A sample from our stockpile was recently tested with the following results:

CR-6 (GASB) SIEVE ANALYSIS

Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	100 %
1 1/2"	37.5 mm	100 %	90 - 100 %
1"	19.0 mm	86 %	60 - 90 %
#4	4.75 mm	49 %	30 - 60 %
#200	.075 mm	7 %	0 - 15 %

S.H.A. (MD) MIX DESIGN NO. S-P-GA22-1-01

G.A.B. SIEVE ANALYSIS

Sieve Size		% Passing	Specifications
2"	50.0 mm	100 %	98 - 100 %
1 1/2"	37.5 mm	100 %	95 - 100 %
1"	19.0 mm	85 %	77 - 93 %
3/8"	9.5 mm	65 %	57 - 73 %
#4	4.75 mm	49 %	41 - 57 %
#30	600 micro	15 %	10 - 20 %
#200	75 micro	04 %	02 - 06 %

Maximum Dry Density 149.9 P.C.F. @ 4.3 % Moisture

AGGREGATE INDUSTRIES-MID ATLANTIC

6401 Golden Triangle Drive
 Suite 400
 Greenbelt, Maryland 20770

Tel: 301 - 982 - 1400
 Fax: 301 - 513 - 0014

An AGGREGATE INDUSTRIES PLC Company

www.aggregate-us.com

Crushed Stone - Sand & Gravel - Ready-Mixed Concrete - Asphalt

12 11 02

THE SHAW GP.

JOEY GUEZARDO

Phone #

Fax # 743 9139

Job Location : INDIAN HEAD

Terms : \$ Net 30 days (pending credit review)

Bidding :

Product Description

F.O.B.
(\$/ton)

Haul
(\$/ton)

Total
(\$/ton)

(Shipping Plant Name/Location)
LAPLATA SAND AND GRAVEL 301 870 3711

RC6
CR6

\$4.50
\$8.50

\$4.00
\$4.00

\$8.50
\$12.50

Notes : i) Above pricing applicable out of plant(s) denoted. Orders placed at other aggregate plants may result in higher pricing being invoiced.

ii) Minimum of 24 hours of advance notice required for delivery of double-washed products.

Additional Comments :

Pricing good through

Prices do not include applicable taxes.
Above prices based upon 20 ton/trk.
GCE

Quotation Considered Binding for 30 Days.

Quoted By : Tom Miller
Mgr. : LaPlata Plant

Thank You !

Phone # 301-870-3711
Fax # 301-870-2754

Terms, conditions and any additional charges to be sent upon acceptance.

AGGREGATE PHYSICAL

MATERIAL	TEST METHOD				
	SPECIFICATION	T 90	T 104	T 112	T 113
		PT	SODIUM SULFATE SOUNDNESS	CLAY LUMPS and FRIABLE PARTICLES	CHERT; LESS THAN 2.40 Sp Gr
		MAX	% MAX	% MAX	% MAX
GRADED AGGREGATE—SUBBASE	D 2940	6	12	—	—
BANK RUN GRAVEL—SUBBASE	D 2940	9	12	—	—
GRADED AGGREGATE—BASE	D 2940	6	12	—	—
BANK RUN GRAVEL—BASE	D 2940	9	12	—	—
COARSE AGGREGATE—PORTLAND CEMENT CONCRETE (b)	M 80 CLASS A	—	12	2.0	3.0
FINE AGGREGATE—PORTLAND CEMENT CONCRETE (b)(4)	M 6 CLASS B	—	10	3.0	—
COARSE AGGREGATE—LIGHTWEIGHT PORTLAND CEMENT CONCRETE	M 195	—	—	2.0	—
FINE AGGREGATE—LIGHTWEIGHT PORTLAND CEMENT CONCRETE (f)	M 195	—	—	2.0	—
FINE AGGREGATE—SAND MORTAR & EPOXIES	M 45	—	10	1.0	—
MINERAL FILLER (g)	M 17	NP	—	—	—
CRUSHED GLASS	M 80	—	12	—	—

- (a) Dimensional ratio of culps shall be 3:1.
- (b) Coarse and fine aggregates for FCC shall be tested for alkali-silica reactivity (ASR) as specified in MSMT 212.
- (c) 1.5 if material passing No. 200 sieve is that of fracture, free of clay or silt.
- (d) In areas exposed to traffic manufactured sand, natural sand, or a blend of both shall be used. The sand shall have a minimum minimum polish value of 2.5.
- (e) 3.0 for concrete not subject to surface abrasion.
- (f) Fine aggregates conforming to M 6 may be used if the lightweight concrete does not exceed the maximum unit weight specified in the Contract Documents.
- (g) Fly ash shall have a maximum of 12 percent loss on ignition.

PROPERTY REQUIREMENTS

TEST METHOD					
T 112 & T 113	T 11	T 113	D 4791 (a)	T 96	T 21
SUM OF CLAY LUMPS, FRIABLE PARTICLES and CHERT	MATERIAL FINER THAN No. 200 SIEVE	COAL and LIGNITE	FLAT and ELONGATED	LOS ANGELES ABRASION	ORGANIC IMPURITIES
% MAX	% MAX	% MAX	% MAX	% MAX	MAX
—	—	—	15	50	—
—	—	—	—	50	—
—	—	—	15	50	—
—	—	—	—	50	—
3.0	1.0 (e)	0.5	12	50	—
—	4.0 (d)	1.0	—	—	3
—	—	—	12	—	—
—	—	—	—	—	3
—	—	0.5	—	—	3
—	—	—	—	—	—
—	—	—	—	45	—

TABLE

901 A

TABLE

AGGREGATE GRADING REQUIREMENTS

MATERIAL	SIEVE SIZE						
	2-1/2"	2"	1-1/2"	1"	3/4"	1/2"	
GRADED AGGREGATE— SUBBASE DESIGN RANGE (a)	—	100	90-100	—	60-85	—	
TOLERANCE (b)	—	-3	±5	—	±10	—	
BANK RUN GRAVEL— SUBBASE	100	—	—	90-100	—	60-100	
GRADED AGGREGATE— BASE DESIGN RANGE (a)	—	100	95-100	—	70-92	—	
TOLERANCE (b)	—	-2	±5	—	±8	—	
BANK RUN GRAVEL—BASE	100	—	—	85-100	—	60-100	
COARSE AGGREGATE— PORTLAND CEMENT CONCRETE	57 and UNDERDRAIN	—	—	100	95-100	—	25-60
	67	—	—	—	100	90-100	—
	7	—	—	—	—	100	90-100
FINE AGGREGATE— PORTLAND CEMENT CONCRETE and UNDERDRAIN (d)	—	—	—	—	—	—	
COARSE AGGREGATE— LIGHTWEIGHT PORTLAND CEMENT CONCRETE	—	—	—	100	90-100	—	
FINE AGGREGATE— LIGHTWEIGHT PORTLAND CEMENT CONCRETE (d)	—	—	—	—	—	—	
FINE AGGREGATE/SAND MORTAR and EPOXIES (d)	—	—	—	—	—	—	
MINERAL FILLER	—	—	—	—	—	—	
CRUSHED GLASS (e)	—	—	—	—	100	—	

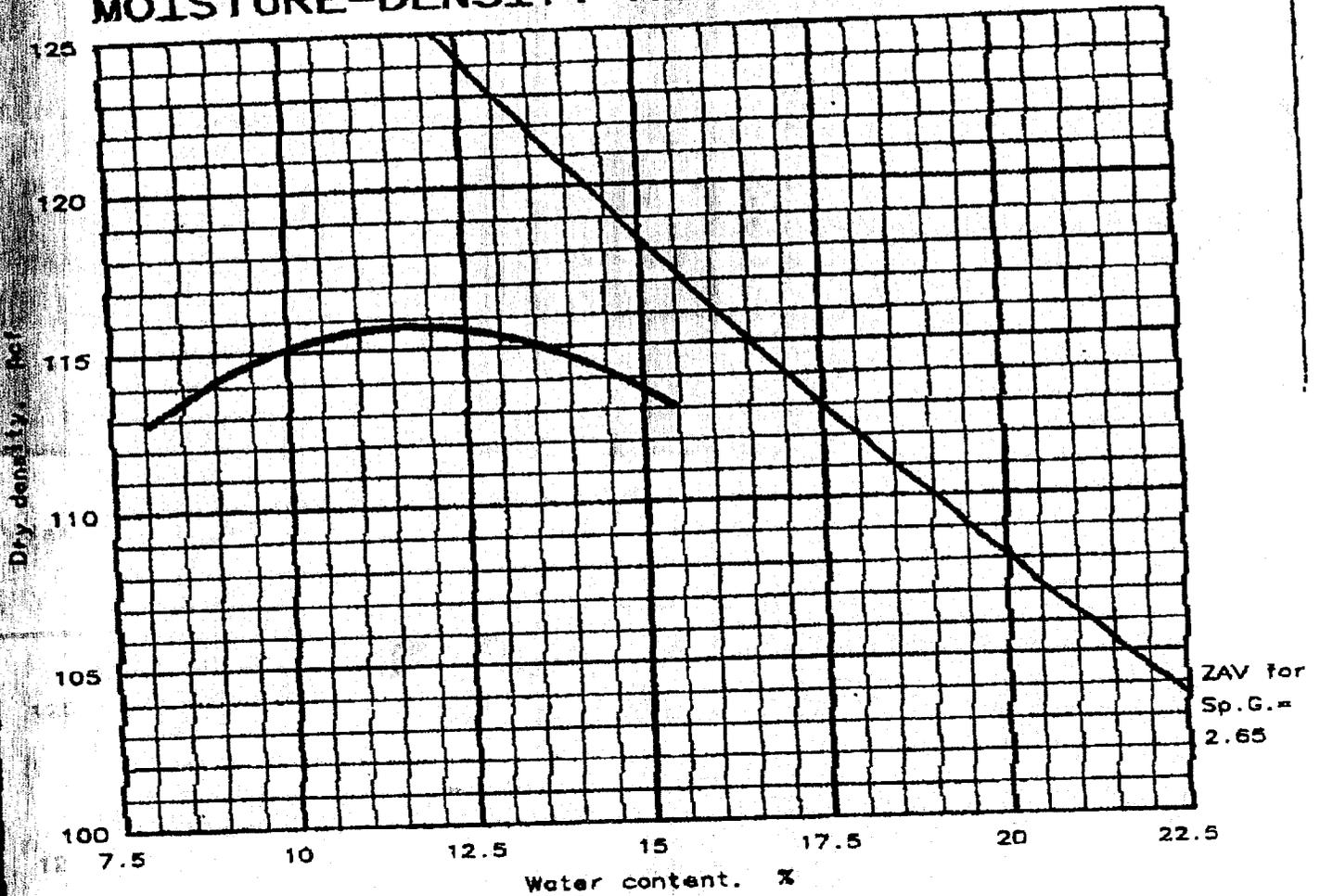
- (a) To establish target values for design.
- (b) Production tolerance.
- (c) ±2 for field grading. (omitting T 11)
- (d) Fine aggregate includes natural or manufactured sand.
- (e) Crushed glass shall not contain more than one percent contaminants by weight.

901 A

TEST METHOD T 27

	SIEVE SIZE									
	3/8"	No. 4	No. 8	No. 10	No. 16	No. 30	No. 40	No. 50	No. 100	No. 200
40-70	30-60	—	—	—	—	—	10-25	—	—	0-12
6 10	6 10	—	—	—	—	—	6 5	—	—	6 5
—	—	—	35-90	—	—	—	20-55	—	—	5-25
50-70	35-55	—	—	—	—	12-25	—	—	—	0-8
6 8	6 8	—	—	—	—	6 5	—	—	—	6 3 (c)
—	—	—	35-75	—	—	—	20-50	—	—	3-20
—	0-10	0-5	—	—	—	—	—	—	—	—
20-55	0-10	0-5	—	—	—	—	—	—	—	—
40-70	0-15	0-5	—	—	—	—	—	—	—	—
100	95-100	—	—	—	45-80	—	—	10-30	2-10	—
10-50	0-15	—	—	—	—	—	—	—	—	—
100	85-100	—	—	—	40-80	—	—	10-35	5-25	—
—	100	95-100	—	—	—	—	—	—	0-25	0-10
—	—	—	—	—	—	100	—	95-100	—	70-100
—	0-55	—	—	—	—	—	—	—	—	—

MOISTURE-DENSITY RELATIONSHIP TEST

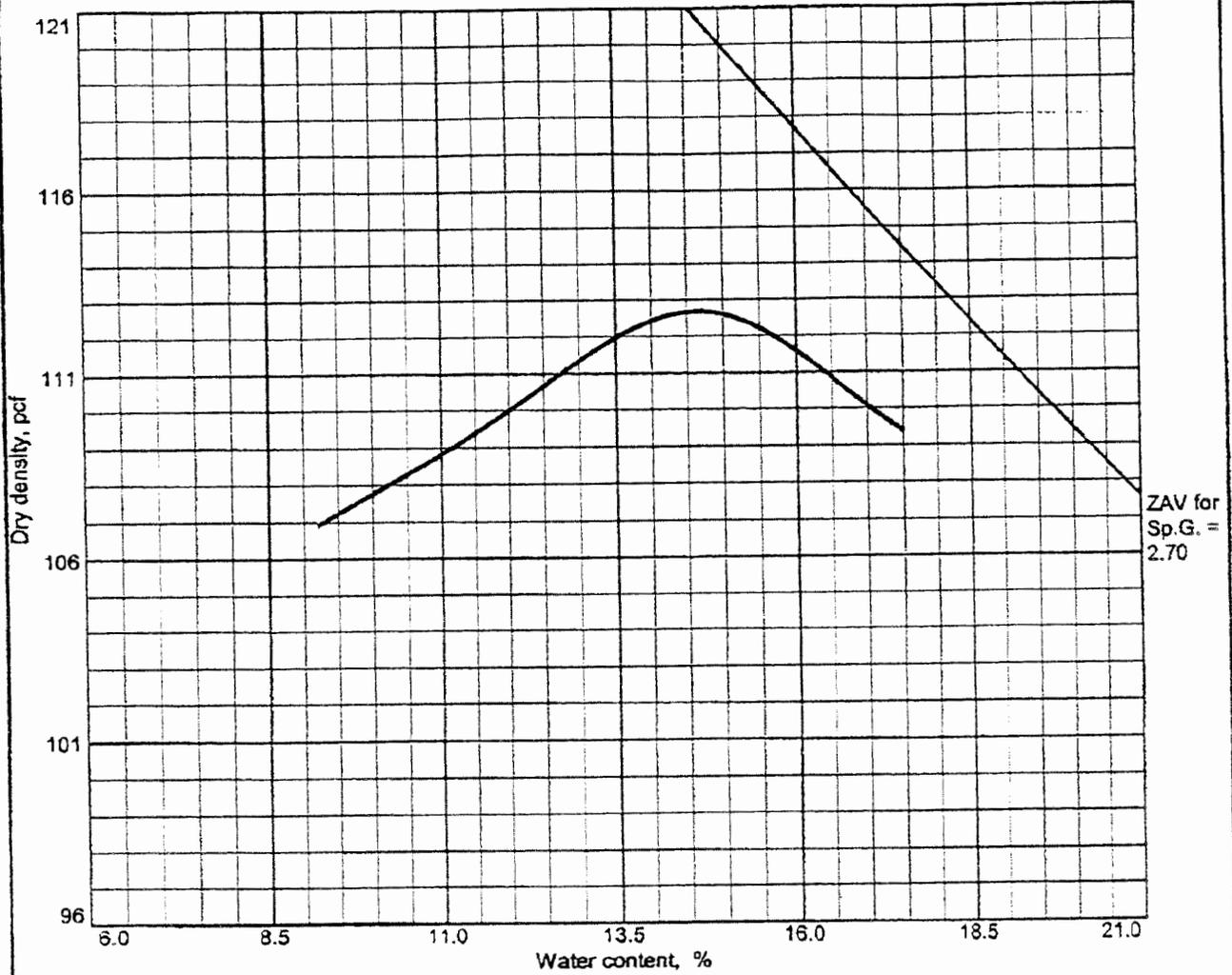


Test specification: ASTM D 1557-78 Method C, Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
			8.3 %					
TEST RESULTS					MATERIAL DESCRIPTION			
Maximum dry density = 115.8 pcf Optimum moisture = 11.7 %					RC-6			
Project No.: 02-155 Project: Aggregate Industries Location: Bladensburg Plant Date: 6-01-2002					Remarks:			
MOISTURE-DENSITY RELATIONSHIP TEST EARTH ENGINEERING & SCIENCES, INC.								
					Fig. No. _____			

Modified Proctor of RC-6

COMPACTION TEST REPORT



Test specification: ASTM D 698-91 Procedure B Standard

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/8 in.	% < No.200
	USCS	AASHTO						
	SM	A-2-4(0)		2.70	NP	NP	0.0	25.8

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 112.7 pcf Optimum moisture = 14.6 %	Brown silty sand
Project No. 02530A Client: SHAW Environmental Project: Indian Head NSWC ● Location: LaPlata Sand & Gravel	Remarks: 10/09/2002
COMPACTION TEST REPORT HILLIS-CARNES ENGINEERING ASSOCIATES, INC.	Figure

Compaction Testing

Area 1

Methods ASTM D 2922 and ASTM D 3017

Date 11-5-02		Proctor 112.7		Density Standard 2384		Moisture Standard 645	
Number	Location	Lift 6"	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
029	584	1st	85.6	96.4	123.3	26.8	27.8
030	558	"	86.2	97.1	122.0	24.8	25.6
031	592	"	93.8	105.7	127.9	22.1	20.9
032	609	"	93.9	105.8	127.1	24.3	20.1
033	617	"	95.0	107.1	127.2	20.1	18.7
034	611	"	87.8	99.0	121.5	22.5	22.7
035	615	"	86.1	97.1	122.1	25.0	25.8
036							
036	615	2nd	94.0	105.9	128.0	22.0	20.8
037	611	"	96.6	108.9	128.0	19.1	17.6
038	600	"	92.5	104.3	125.6	21.3	20.4
039	592	"	94.8	106.8	127.1	20.2	18.9
040	584	"	91.0	102.6	125.2	22.6	22.0
041	463 near	"	91.5	103.1	116.1	13.0	12.6
042	463 + 50's	"	96.3	108.5	123.5	15.1	13.9
043	503	"	90.4	101.9	114.0	12.1	11.8
044	506	"	98.2	110.7	124.2	13.6	12.3
045	466	"	96.9	109.3	123.8	14.5	13.3
046	466-50's	"	96.9	109.2	121.6	12.4	11.4
047	506-50's	"	96.8	109.0	122.2	13.2	12.1
048	541	"	90.4	101.9	112.9	10.9	10.7
049	510	"	92.8	104.6	118.6	14.0	13.4
050	544	"	91.1	102.6	121.8	19.2	18.7
051	574	"	89.6	101.0	114.5	13.6	13.4
052	546	"	93.5	105.4	119.2	13.8	13.1
053	510-50's	"	96.8	109.1	122.1	13.0	11.9
054	510-100's	"	98.2	110.6	125.6	15.0	13.5
055	546-50's	"	92.7	104.4	120.3	15.9	15.2
056	577	"	92.7	104.4	120.3	15.9	15.2
057	597	"	91.6	103.3	115.3	12.1	11.7
058	563	"	87.8	99.0	117.0	18.1	18.3

Compaction Testing

Area 1 3rd Lift

Methods ASTM D 2922 and ASTM D 3017

Date 11-10-02		Proctor 112.7		Density Standard 2372		Moisture Standard 638	
Number	Location	Lift	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
097	56K 613	3rd 6"	96.4	108.6	126.3	17.7	16.3
098	622	" "	96.1	108.4	126.5	18.1	16.9
099	611	" "	98.5	110.0	128.9	17.8	16.0
100	591		96.2	108.5	127.0	18.6	17.1
101	609		97.1	109.4	126.5	17.1	15.6
102	607		93.8	105.7	123.5	17.7	16.8
103	583		97.0	109.3	125.9	16.6	15.2
104	555		95.1	107.2	122.3	15.1	14.0
105	626		91.6	103.2	122.7	19.5	18.9
106	596		96.6	108.9	125.8	17.0	15.6
107	579		96.2	108.4	124.6	16.2	14.9
108	550		95.6	107.8	124.4	16.6	15.4
109	516		96.0	108.2	122.7	14.5	13.4
110	477		94.9	107.0	125.9	18.9	17.6
111	475		98.8	111.3	130.3	19.0	17.0
112	514		95.4	107.5	119.7	12.2	11.4
113	548		96.6	108.9	127.3	18.4	16.9
114	576		93.1	104.9	123.9	19.1	18.2
115	574		94.5	106.5	123.3	16.9	15.7
116	546		92.0	103.6	126.7	23.0	22.2
117	512		93.9	105.9	126.8	21.0	19.8
118	672		93.8	105.7	126.1	20.4	19.3
119	470		93.5	105.4	127.3	21.9	20.8
120	510		94.8	106.9	127.8	21.0	19.6
121	571		95.1	107.2	125.9	18.8	17.5
122	541		91.9	103.6	123.3	19.7	19.0
123	508		92.9	104.7	125.8	21.1	20.2
124	468		91.5	103.1	125.0	21.9	21.2
125	466		90.7	102.2	126.5	24.3	23.8
126	506		96.3	108.5	128.0	19.4	17.9
127	499		94.8	106.9	126.0	19.1	17.9

Compaction Testing

AREA 3 - 2ND LIFT

Methods ASTM D 2922 and ASTM D 3017

Date 11-26-02		Proctor 112.7		Density Standard 2369		Moisture Standard 640	
Number	Location	Lift	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
128	Stake 242	1 ST -6"	96.3	108.5	127.2	18.7	17.2
129	244	2 ND -6"	91.5	103.1	118.3	15.2	14.7
130	264	2 ND -6"	95.9	108.6	122.0	14.0	12.9
131	284	2 ND -6"	91.3	102.9	116.6	13.7	13.3
132	286	2 ND -6"	93.5	105.3	119.5	14.2	13.4
133	248	2 ND -6"	91.4	103.0	122.8	19.8	19.3
134	310	2 ND -6"	92.5	104.3	120.0	15.8	15.1
135	324	2 ND -6"	92.2	103.9	117.6	13.7	13.2
136	322	2 ND -6"	91.2	102.8	116.8	14.0	13.6
137	315	2 ND -6"	86.6	97.6	110.6	13.0	13.3
138	302	2 ND -6"	96.1	108.3	122.2	14.0	12.9
139	304	2 ND -6"	97.1	109.4	123.8	14.3	13.1
140	286	2 ND -6"	93.0	104.8	118.4	13.6	13.0
141	284	2 ND -6"	92.8	104.5	117.7	13.1	12.5
142	296	2 ND -6"	92.3	104.8	116.4	12.4	11.9
143	Between 300 & 294	2 ND -6"	91.8	103.4	117.3	13.9	13.4
NEW STANDARD COUNT : DS = 2387 MS = 644							
(TROXLER OFF/ON DUE TO PROBLEM WITH DEPTH)							
144	STAKE 277	2 ND -6"	89.3	100.7	110.8	10.1	10.0
145	265	2 ND -6"	90.7	102.2	114.8	12.6	12.3
146	267	2 ND -6"	92.9	104.7	122.3	17.5	16.7
147	272	2 ND -6"	91.2	102.8	121.8	18.2	17.7
148	BETWEEN 248 & 249	2 ND -6"	91.3	102.9	122.1	19.9	18.6
149	247	2 ND -6"	97.5	109.9	126.4	16.5	15.0
150	245	2 ND -6"	90.9	102.5	114.6	12.2	11.9
151	237	2 ND -6"	94.1	106.1	127.8	21.8	20.5
152	258	2 ND -6"	93.4	105.3	126.3	21.0	20.0
153	222	2 ND -6"	95.0	107.1	128.6	21.5	20.1
154	224	2 ND -6"	91.9	103.6	125.7	22.2	21.4

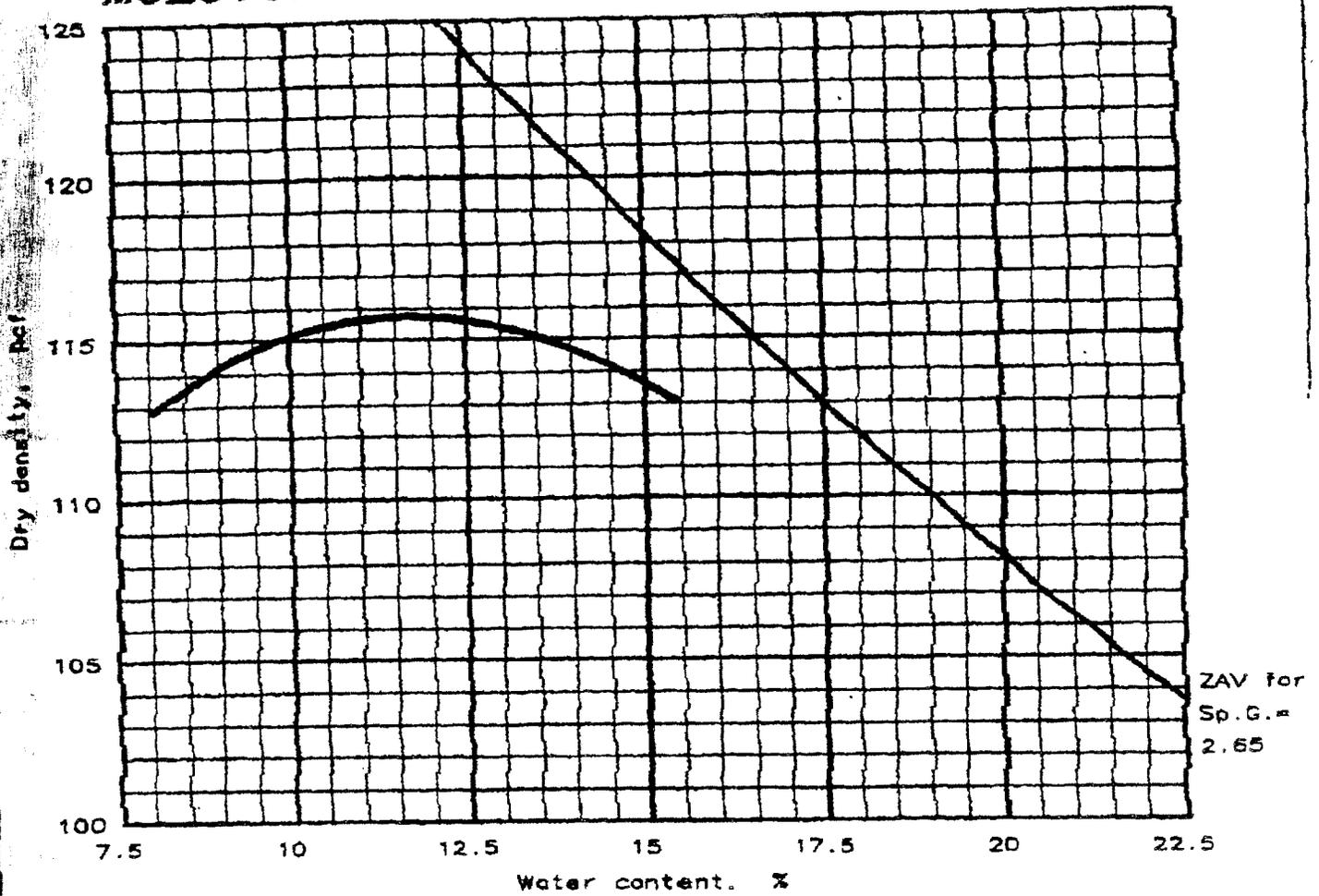
E Duke

Compaction Testing

Methods ASTM D 2922 and ASTM D 3017

Date 12-18-02		Proctor 112.7		Density Standard 2394		Moisture Standard 651	
Number	Area Location 2	Lift	% Proctor	Dry Density	Wet Density	Moisture	% Moisture
208	5TK 377	1st 6"	97.9	110.4	127.8	17.4	15.8
209	404	3rd 6"	100.4	113.2	131.8	18.6	16.5
210	392	3rd 6"	99.2	111.8	130.3	18.5	16.6
211	361	3rd 6"	99.7	112.4	129.2	16.9	15.0
212	348 50'S	3rd 6"	82.2	92.6	112.7	20.0	21.6
213	365 50'S	3rd 6"	99.9	112.6	131.1	18.5	16.5
214	406	3rd 6"	95.0	107.1	126.9	19.9	18.5
215	418	3rd 6"	98.8	111.3	129.8	18.5	16.6
216	377	2nd 6"	99.5	112.1	129.0	16.9	15.0
	Area 3						
217	248	3rd 6"	100.2	113.0	130.8	17.8	15.8
218	246	" "	96.4	108.6	127.8	19.2	17.7
219	244	" "	96.5	126.9	108.7	18.2	16.7
220	264	" "	95.2	107.3	128.4	21.2	19.7
221	264 30'S	" "	96.4	108.6	127.6	19.0	17.5
222	268	" "	96.2	108.4	127.1	18.7	17.3
223	265	" "	98.7	111.5	129.2	17.7	15.9
224	283	" "	92.8	104.6	124.0	18.4	18.5
225	282	" "	95.1	107.2	121.3	14.1	13.1
226	299	" "	100.4	113.1	130.0	16.9	13.8
227	302	" "	96.9	109.2	127.8	18.6	17.1
228	303	" "	94.6	106.6	126.6	19.9	18.7
229	304	" "	101.4	114.3	128.9	14.5	12.7
230	310	" "	90.0	101.1	117.3	15.9	15.7
231	325	" "	90.3	101.7	115.6	13.9	13.7
232	324	" "	95.9	108.1	122.8	14.7	13.6
233	323	" "	97.4	109.8	125.4	15.6	14.2
234	322	" "	97.0	109.3	126.0	17.2	15.8
235	321	" "	93.7	105.7	122.6	16.9	16.6
236	377	3rd 6"	97.5	109.9	129.4	19.6	17.6
237	P347 50'S	3rd 6"	99.8	111.4	131.7	20.3	18.2
238	386 50'S	" "	98.0	110.4	130.3	17.9	18.4

MOISTURE-DENSITY RELATIONSHIP TEST



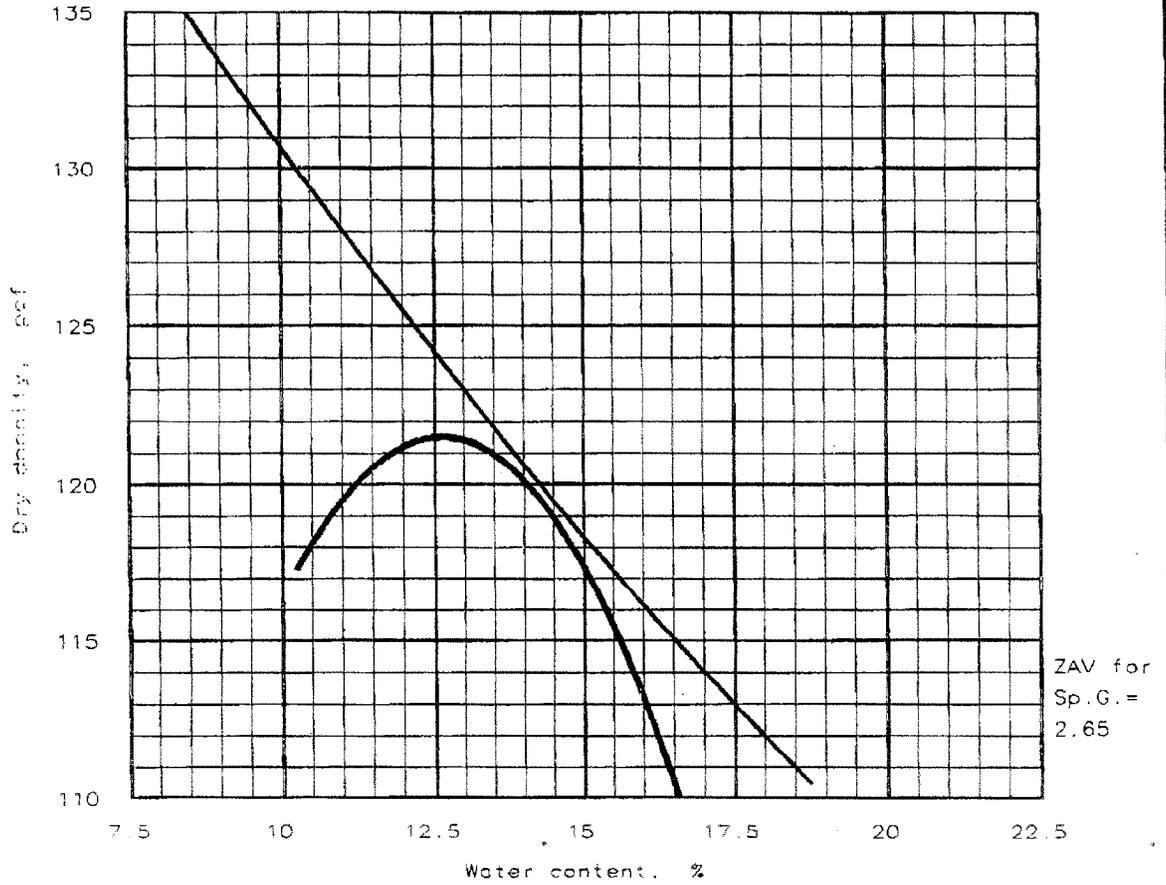
Test specification: ASTM D 1557-78 Method C, Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No.200
	USCS	AASHTO						
			8.3 %					

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 115.8 pcf Optimum moisture = 11.7 %	RC-6
Project No.: 02-155 Project: Aggregate Industries Location: Bladensburg Plant Date: 6-01-2002	Remarks:
MOISTURE-DENSITY RELATIONSHIP TEST EARTH ENGINEERING & SCIENCES, INC.	Fig. No. _____

Modified Proctor of RC-6

MOISTURE-DENSITY RELATIONSHIP TEST



Test specification: AASHTO T 180 Method C, Modified

Elev/ Depth	Classification		Nat. Moist.	Sp.G.	LL	PI	% > 3/4 in	% < No. 200
	USCS	AASHTO						
			13.6 %					

TEST RESULTS	MATERIAL DESCRIPTION
Maximum dry density = 121.5 pcf Optimum moisture = 12.6 %	
Project No.: W02106 Project: Dahlgren Location: Site 12 Date: 2-04-2003	Remarks: RC6 COC Number 809401
MOISTURE-DENSITY RELATIONSHIP TEST HILLIS-CARNES ENGINEERING ASSOCIATES, INC.	Fig. No. _____

APPENDIX H

HEALTH AND SAFETY DOCUMENTS

APPENDIX H

HEALTH AND SAFETY DOCUMENTS

- Safety Work Permit for Explosive Area
- Daily Health and Safety Reports
- Tailgate Safety Meetings
- Air Monitoring Readings and Calibration Logs
- Drum Sampling Logs
- Job Safety Analyses
- Safety Inspection Reports
- Hot Work Permit

DATE: 04/07/03
BLDG/AREA: TOWN-CUT

POST PERMIT ON WORKSITE
SAFETY WORK PERMIT FOR EXPLOSIVE AREA
INDIAN HEAD DIVISION, NAVAL SURFACE WARFARE CENTER

EXPIRES: 06/30/03

WORK PERFORMED BY: ACTIVITY FORCES-CODE () CONTRACTOR-NAME: SHAW ECI Inc ADHERE TO SPECS OF CONTRACT # 97-D-5000

YES NO RE-INSPECTION OF AREA BY SAFETY INSPECTOR REQUIRED PRIOR TO BEGINNING WORK CODE/INITIAL/DATE _____

DESCRIPTION OF WORK AUTHORIZED: Pave alkene road at Town-Cut, to place plants in the wet lands and to install monitoring wells

1. DECONTAMINATION OF AREA REQUIRED AS FOLLOWS:

- YES NO PRIOR TO START CLEAR WORK THROUGH BLDG/AREA SUPERVISOR DAILY
- A. REMOVE ALL EXPLOSIVES FROM (SPECIFY) _____
 - B. REMOVE HAZARDOUS MATERIALS (SPECIFY) _____
 - C. WASH AREA DOWN (SPECIFY) _____
 - D. TREAT WITH DESENSITIZING AGENT (SPECIFY) _____
 - E. SECURE EXPLOSIVE OPERATIONS IN _____
 - F. OTHER (SPECIFY) _____

2. OPEN FLAME (HOT) OR SPARK-PRODUCING WORK (WELDING, TORCH, SOLDERING, GRINDING, ETC.) AUTHORIZED _____ NOT AUTHORIZED

- YES NO
- A. HAVE FIRE EXTING. ON-SITE DURING HOT WORK (TYPE: _____)
 - B. HAVE FIRE WATCH ON-SITE DURING HOT WORK
 - C. STAY ON-SITE 30 MINUTES AFTER HOT WORK IS COMPLETE
 - D. REMOVE FLAMM./COMBUST. MATERIAL FROM HOT-WORK SITE
 - E. BUFFER BAY(S) REQUIRED (SPECIFY) _____
 - F. HOT WORK AREA TO REMAIN WET DURING WORK
 - G. OTHER (SPECIFY) _____

3. EQUIPMENT AUTHORIZED FOR USE

- YES NO
- A. TORCH/WELDER
 - B. POWER TOOLS (GRINDER, DRILL, SKILSAW, BACKHOE, GENERATOR, AIR COMPRESSOR)/POWER EQUIPMENT (SPECIFY) heavy equip
 - C. HAND TOOLS
 - D. NON-SPARKING TOOLS
 - E. OTHER (SPECIFY) _____

4. PERSONAL PROTECTIVE EQUIPMENT REQUIRED as per safety plan,

- YES NO
- EYE PROTECTION (SAFETY GLASSES, GOGGLES, FACE SHIELD)
 - HEARING PROTECTION
 - POWDER UNIFORM (COVERALLS & CAP)
 - CONDUCTIVE SHOES OR NO-STATS
 - RESPIRATORY PROTECTION (SPECIFY) _____
 - HAND/FOOT/HEAD PROTECTION (SPECIFY) _____
 - FALL PROTECTION REQUIRED (SPECIFY) _____
 - OTHER (SPECIFY) _____

5. ADDITIONAL REQUIREMENTS

- YES NO
- NOTIFY BLDG/AREA SUPERVISOR WHEN WORK IS COMPLETE
 - EXPLOSIVES TRANSFERS ALLOWED IN AREA DURING WORK
 - NOTIFY FIRE DEPT / PUBLIC WORKS UTILITIES OF WORK
 - LOCKOUT/TAGOUT HAZARDOUS ENERGY SOURCES (SPECIFY) _____
 - RE-INSPECTION OF AREA REQ'D BY SAFETY INSP UPON COMPLETION OF WORK
 - OTHER (SPECIFY) _____

6. OTHER:

SUPERVISOR IN IMMEDIATE AREA/DATE: [Signature] 4.7.03 SAFETY DEPARTMENT OFFICIAL/DATE: Frank James 04/07/03 CONTRACT REPRESENTATIVE/DATE: [Signature] 4.7.03 PUBLIC WORKS REPRESENTATIVE/DATE: _____

This permit is issued for the protection of all workers and equipment. No deviation from requirements of this permit is authorized without permission of the issuing agent. If method of work, or conditions of immediate area change, or other hazardous conditions arise during work, work will be stopped immediately and the Safety Department and/or the Firm Department will be notified. Notify the Safety Department when job is completed. All permits issued are good ONLY for the day issued and new permits will be issued every time work is to continue over a period of time unless otherwise stated.

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9-9--2

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
Site specific with all company workers		
Base Rules and Regulations		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	n/a	n/a
LEL/oxy meter	n/a	n/a
dataram dust meter	n/a	n/a
Other activities: <u>unload super silk fence9</u>		

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
Site Preperation	D	n/a
Site set Up	D	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Saftey Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Clear, Sunny and Warm Light Breeze from S.W. 5-10 mph Low 66 High 88

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SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/10/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
Drink plenty of water, watch for ticks , check yourself and others, slip,trip,fall hazards, material handling, uneven ground snakes, posion ivy, power tools		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	n/a	n/a
LEL/oxy meter	n/a	n/a
dataram dust meter	n/a	n/a
Other activities:		

Shaw Site Activities: **8 Employees on site**

Task Performed	Protection level	Type Air monitoring
site prep	d	n/a
clearing	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Sunny,mild, warm, light breeze low 68 high 86

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SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/11/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
Slip,trip,fall hazards uneven ground, material handling		
drink plenty of water, ticks, snakes, power tools		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	n/a	n/a
LEL/oxy meter	n/a	n/a
dataram dust meter	n/a	n/a
Other activities:		
Jsa's for work being done		

Shaw Site Activities: **8 Employees on site**

Task Performed	Protection level	Type Air monitoring
Site Prep.	d	n/a
clearing and grubbing	d	n/a
surveying	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: sunny,mild, warm, breezy low 64 high 87

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SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/12/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
chipper, power tools, slip,trip,fall hazards, material handling		
driving on base at base set speed limits		
working near the edge of bank at water edge		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	n/a	n/a
LEL/oxy meter	n/a	n/a
dataram dust meter	n/a	n/a
Other activities: check and clean out weir for water to flow freely		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
site prep	d	n/a
clearing and grubbing	d	n/a
site survey	d	n/a

Subcontractor activities: 1

Task Performed	Protection level	Type Air monitoring
electrical contractor on site to hook up	d	n/a
electrical power to trailer		

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Cooler morning warmer afternoon breezy, low 58 high 74

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/13/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
Slip, Trip, Fall Hazards uneven ground, material handling		
heavy equipment, pinch points, ticks, snakes,		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	n/a	n/a
LEL/oxy meter	n/a	n/a
dataram dust meter	n/a	n/a
Other activities:		

Shaw Site Activities:		8 Employees on site
Task Performed	Protection level	Type Air monitoring
clearing and grubbing	d	n/a
surveying	d	n/a

Subcontractor activities:		0
Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Saftey Observations/ Issues:	
observed all site conditions and site activities	
Weather Conditions:	Clear, sunny, warm, light breeze, low 64 high 83

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/16/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
Material Handling, Hand Tools, slip,trip,fall hazards Heavy Equip		
snakes, spiders, ticks, jiggers, spray yourself with deet		
weather conditions, drinking water		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
Photovac 2020-84592	y	n/a
LEL/oxy meter-H842167	y	n/a
dataram dust meter-82137	y	n/a
Other activities: Base electrical contractor on site to install power to trailer		
Base on site to issue hot work permit for week		

Shaw Site Activities: 10 Employees on site

Task Performed	Protection level	Type Air monitoring
clearing and grubbing	d	n/a
silk fence	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Rainy morning, clearing afternoon, low 58 high 76

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SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/17/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
Material handling, slip,trip,fall hazards, heavy equipment		
snakes, spiders, ticks, jiggers, uneven ground		
hand tools, power tools, haz. Com. Msds		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities: <u>hot work permit for weir cutting</u>		

Shaw Site Activities:	Employees on site	
0		
Task Performed	Protection level	Type Air monitoring
Weir cutting	d	n/a
erosion fence	d	n/a
clearing and grubbing	d	n/a

Subcontractor activities:	Protection level	Type Air monitoring
0		
n/a	n/a	n/a

Safety Observations/ Issues:
 observed all site conditions and site activities

Weather Conditions: Clear, warm, some clouds, sunny, low 65 high 84

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/18/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
working near water edge, wearing chest waders, uneven ground heavy equipment, material handling, ticks, snakes,		
Air monitoring instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities: Jsa on erosion control installation		

Shaw Site Activities: 10 Employees on site

Task Performed	Protection level	Type Air monitoring
safety fence install around perimeter	d	n/a
erosion super silk fence install	d	n/a
debri pickup around water edge	d	

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: mild sunny warm light breeze low 68 high 87

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/19/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
Jsa on silk fence install. Slip,trip,fall hazards, material handling heavy equipment, spiders, ticks, snakes, working near water edge		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities: received ice machine today		
some visitors on site today- Greg Klaas, Tom Kuntz, and the base C.O.		

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
Install Super Silk Fence	D	N/A
Install regular silk fence	D	N/A
Survey	D	N/A

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
N/A	N/A	N/A

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: CLOUDY, WARM, LIGHT BREEZE LOW 71 HIGH 84

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/23/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities:		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Clearing	d	n/a
Site Survey	d	n/a
Swale Install.	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Clear, Sunny some clouds cool morning Low 65 High 79

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SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 9/24/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground. Water hazard,		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y y	monitor well abandonment
LEL/oxy meter	y y	monitor well abandonment
dataram dust meter	y	n/a
Other activities: Jsa given to workers on Well abandonment		
and to subcontractor		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Silk fence installation area 3	d	n/a
Site Survey	d	n/a

Subcontractor activities: 1 worker

Task Performed	Protection level	Type Air monitoring
Well Abandonment 6 total wells	d	See Monitoring Sheet

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Clear Cool morning, sunny light breeze low 63 high 78

SHAW ENVIRONMENTAL
 Site Safety Officer
 Daily Report

Date: 9/25/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities:		

Shaw Site Activities: **8 Employees on site**

Task Performed	Protection level	Type Air monitoring
Clearing	d	n/a
Site Survey	d	n/a
Decon pad area install	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Cloudy, breezy, some sun low 63 high 77

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SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/26/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:

dress for conditions, tick and bug spray, slip,trip,fall hazards
material handling, heavy equipment, power tools
ear plugs, uneven ground.

Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a

Other activities: QC meeting today at 10:30 a.m.

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Clearing brush	d	n/a
Site Survey	d	n/a
fence orange along road	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: cloudy rainy, light breeze, low 63 high 74

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 9/30/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
excavation around perimeter of pond #1 UXO on site.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities: UXO on site as well as new operator both given Site Specific		

Shaw Site Activities:		10 Employees on site
Task Performed	Protection level	Type Air monitoring
excavation of Debris along pond #1 Edge	d	n/a As needed
Site Survey	d	n/a
excavation of swales along road Site#2area	d	n/a

Subcontractor activities:		0
Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:	
observed all site conditions and site activities	
Total rain over the weekend was around 8 tenths	
Weather Conditions:	Clear, cool morning, some sun and clouds low 57 High 77

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/1/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	excavations
LEL/oxy meter	y	excavations
dataram dust meter	y	n/a
Other activities: Hot work permit signed by base safety dept. today. For rest of week		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Excavations of 2ft.	d	l.e.l, pid
Drainage Channel	d	l.e.l, pid
Site Survey	d	n/a

Subcontractor activities: 1

Task Performed	Protection level	Type Air monitoring
Hertz to weld arm on excavator	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
Weather Conditions: Clear, mild morning, Sunny warm afternoon Low 61 High 83

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10-2-02
~~9/23/02~~ Project Number: 809401

SSO: Joe Walker Project Name Town Gut Landfill

Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS: JSA's for todays work		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities: Jsa for work being done.		
uxo on site to observe excavations		

Shaw Site Activities: 10 Employees on site

Task Performed	Protection level	Type Air monitoring
Excavation of pond area #1	d	n/a
Site Survey	d	n/a
Excavation of swale area #2	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Warm Sunny, light Breeze, some spotty clouds, low 62 high 86

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/3/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Hurricane Checklist, equip. inspections		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities: Site Meeting with Base Personnel and Citizens of comm. 14 people see visitor sign in sheet. Sign off on hurricane Preparedness		

Shaw Site Activities: 10 Employees on site

Task Performed	Protection level	Type Air monitoring
Excavation of soils Area #1	d	n/a
Site Survey	d	n/a
Hoe Ram Concrete Block	d/ear plug area	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Clear, warm and sunny light breeze, low 64 high 87

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SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 10/7/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Make sure no matches or lighters are in pov or company veh.		
while on site at site 12		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y y	excavation area #2
LEL/oxy meter	y y	excavation area #2
dataram dust meter	y	n/a
Other activities: Hertz personnel on site to work on equip.		

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
Site Survey	d	n/a
Excavation of pond area #2	d	L.E.L/O2, PID

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
Weather Conditions: Clearing, cool morning, warmer afternoon, light breeze, some clouds
Low 58 High 74

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/8/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
car plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities:		

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
excavation of soils area #2	d	n/a
Site Survey	d	n/a
Grading area #1 and #2	d	n/a
riprap installation for swales	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Clear, cooler morning, light breeze and sunny low 50 High 67

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/9/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y	n/a
LEL/oxy meter	y	n/a
dataram dust meter	y	n/a
Other activities:		

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
Rip Rap placement	d	n/a
Site Survey	d	n/a
Grading	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Clear, cool morning, warmer afternoon low 57 high 68

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/14/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
Cooler Mornings dress for conditions, tick and bug spray, slip, trip, fall Hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring instruments:	Calibrated/Checked	Task Monitored
photovac 2020	y y	drums area 1
LEL/oxy meter	y y	drums area 1
dataram dust meter	y	n/a
Other activities:		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
grading area 1	d	n/a
hauling debri to area 3	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Cooler morning, breezy, sunny and warmer afternoon low 51 high 64

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/15/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	Y	n/a
Other activities: COLLECTED SAMPLES FROM DRUMS THAT WERE FOUND YESTERDAY		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
GRADING	d	n/a
Site Survey	d	n/a
SOIL PLACEMENT	D	N/A

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
N/A	N/A	N/A

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: CHILLY, DAMP, COOL MORNING, CLOUDY AND A CHANCE FOR RAIN LATER TODAY. LOW 49 HIGH 67

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/16/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
weather conditions, vehicle inspections		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities: heavy rain overnight and today prevents any work being done today.		
over 1 inch of rain fell over night, and continues to rain		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
vehicle maint.	d	n/a
erosion control	d	n/a
haul scrape off site	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
rolloff for scrape to be hauled away	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
weather conditions prevents any heavy equip. operations
Weather Conditions: rain, cloudy, chilly, low 54 high 66

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/17/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground. Muddy conditions		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities:		
a total of 1.5" of rain fell on Wednesday, no heavy equip. will operate today		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
safety fence install	d	n/a
equipment maint.	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
Weather Conditions: clear cool morning, cloudy, warmer afternoon low 49 high 67

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 10/21/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
WATCH MUDDY AREAS, safety observer		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities:		

Shaw Site Activities: **9 Employees on site**

Task Performed	Protection level	Type Air monitoring
grading all 3 areas	d	n/a
Site Survey	d	n/a
decon equip	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: cloudy, damp, some drizzle, trace of rain over the weekend low 51 high 62

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SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/22/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
cold stress, dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities: JSA on Transport of debri off site load out		

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading	d	n/a
Site Survey	d	n/a
Load out debri	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
Safety observer done today at tailgate

Weather Conditions: Chilly, cool morning, cloudy, warmer afternoon low 49 high 63

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SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/23/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS: cold stress, soil placement,
dress for conditions, tick and bug spray, slip,trip,fall hazards
material handling, heavy equipment, power tools
ear plugs, uneven ground.

Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	soil installation

Other activities: trucks hauled soil to site for cover installation of landfill

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading area 3	d	n/a
Soil placement area 1	d	area

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
aggerate industries hauling soil to site	d	dust area

Safety Observations/ Issues:
observed all site conditions and site activities

Weather Conditions: Clear, cool morning, some clouds and sun low 47 high 56

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/24/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	Trucks hauling in soil
Other activities: QC MEETING TODAY		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Soil Placement on landfill	d	Dust area
Grading	d	Dust area
Roller for compaction	d	Dust area

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
Trucks hauling soil to landfill	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Cloudy all day cool morning low 46 high 57

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/28/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities: Rain started at 10:45 am shut down site at 11:30		

Shaw Site Activities: 6 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading landfill	d	n/a
roll soil on landfill	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
Trucks hauling soil to site for landfill	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: cloudy, chilly, rain started about 10:45 and continue low 45 high 55

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/29/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
	y	
Other activities:		
weather delay sent all workers home at 9am		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
site maintenance	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
over .75 in. of rain fell on Monday, site to wet to work
Weather Conditions: cloudy, damp, wet, chance of rain today, cold morning low 41 high 56

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 10/30/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities: checked weir for backup and secure site rotation today due to all week rain.		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
site shutdown	d	n/a
secure site for rotation	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
yesterday and overnight rain produced another .75 in. of rain
Weather Conditions: rainy, damp, wet chilly cold, low 39 high 49

SHAW ENVIRONMENTAL

Site Safety Officer Daily Report

Date: 11/7/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities: Q.C. Meeting today on site 12 and site 41		
Visit site 41		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading area 1	d	n/a
Excavation of waste Area 1 and 3	d	n/a
Erosion control repair	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: cloudy, chilly morning some sun afternoon low 36 high 52

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/6/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground. Weather conditions cold stress		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities: Rain heavy overnight about 1in. Of rain fell.		
shut down all equip. operations		

Shaw Site Activities: 6 Employees on site

Task Performed	Protection level	Type Air monitoring
Site Survey	d	n/a
clear weir	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: very wet conditions, cloudy low 38 high today to reach 55 breezy

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/5/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, tick and bug spray, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities:		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading area 1	d	n/a
Soil placement	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
trucks bringing soil to site	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
started to drizzle around 3:15 p.m.
Weather Conditions: cloudy, cool morning, light breeze, low 38 high 51

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/4/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground. Cold stress		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
dataram dust meter	y	n/a
Other activities: weight trucks with scales		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
SOIL PLACEMENT	d	n/a
GRADING	d	n/a
COMPACTION	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
trucks hauling soil	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
Weather Conditions: cloudy some drizzle, clearing and cool morning low 43 high 55

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/8/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
trucks backing up		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: sent dust meter back to findley		
use of scales to weight 6 trucks		

Shaw Site Activities: 9 Employees on site

Task Performed	Protection level	Type Air monitoring
grading	d	n/a
Site Survey	d	n/a
soil placement area 1 and 3	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
trucks hauling soil to site	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: clear, cool morning warmer afternoon and sun low 36 high 66

--

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/11/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		
weather delay due to rain		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
check weir	d	n/a
erosion control	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: rain, cloudy, windy low 54 high 71

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/12/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: Rain today no work at site 12		

Shaw Site Activities: 12 Employees on site

Task Performed	Protection level	Type Air monitoring
weir clean out	d	n/a
equipment inspect	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: cloudy, breezy rain off on all day low 51 high 67

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11-13-02
~~9/20/02~~ Project Number: 809401

SSO: Joe Walker Project Name Town Gut Landfill

Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: no work being done at this site today		

Shaw Site Activities: 0 Employees on site

Task Performed	Protection level	Type Air monitoring
clean out weir	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: cloudy, breezy, clearing afternoon low 43 high 52

--

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11/14/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: still waiting for soil to dryout		

Shaw Site Activities: 2 Employees on site

Task Performed	Protection level	Type Air monitoring
tracking soil to air dry	d	n/a
weir cleanout	d	n/a
Entrance stone for trucks	d	n/a
drain water	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
Haul common stone to site 2 trucks	d	n/a
Haul riprap to site 2 trucks	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: clear cold morning, sunny and mild afternoon low 38 high 62

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/15/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: trucks hauling soil to site		

Shaw Site Activities: 4 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading soil to area #3	d	n/a
Scale trucks	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
Soil Delivery	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Cool morning, warmer and sunny afternoon low 42 High 64

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11/18/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip, trip, fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: weather conditions over the weekend prevents any work to be done today		

Shaw Site Activities: 4 Employees on site

Task Performed	Protection level	Type Air monitoring
weir cleanout	d	n/a
erosion control repair	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ issues:

observed all site conditions and site activities
Total rain fall over weekend 2.1 inches of rain.
Weather Conditions: clear, cool, light breeze low 37 high 53

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/19/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: water truck used for dust control		

Shaw Site Activities: 2 Employees on site

Task Performed	Protection level	Type Air monitoring
tracking wet soil in area #3	d	n/a
erosion control	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

no intrusive work being done today due to ground conditions to wet

Weather Conditions: Clear, cool morning some clouds. Low 34 high 55

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11/20/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: stone being hauled to site		
by trucking co.		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading	d	n/a
stone placement	d	n/a
erosion control	d	n/a
weir clean out	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: chilly morning, some breeze, sunny and mild afternoon low 36 high 64

--

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11/21/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
N/A	N/A	n/a
Other activities:		

Shaw Site Activities: 4 Employees on site

Task Performed	Protection level	Type Air monitoring
SOILS TO AREA #3	d	n/a

Subcontractor activities:

Task Performed	Protection level	Type Air monitoring
TRUCKS HAULING SOIL TO SITE	D	N/A

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions:	CHILLY MORNING, WARMER AFTERNOON LOW 36 HIGH 56
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SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11/22/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: no work today due to accident over at site 41		

Shaw Site Activities: 2 Employees on site

Task Performed	Protection level	Type Air monitoring
n/a	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
see sign in sheets for all on site
Weather Conditions: clear, cool morning, some fog in areas low 35 high 57

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11/25/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
WATCH FOR TRUCKS BACKING UP INTO AREA		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
N/A	N/A	n/a
Other activities: trucks hauling select fill to site		

Shaw Site Activities: 4 Employees on site

Task Performed	Protection level	Type Air monitoring
grading soil in site area 3	d	n/a
off loading soils		

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
trucks hauling soil to site	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: clear, cool, morning warmer afternoon low 34 high 59

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 11/26/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
backing in trucks, hand signals, visual contact		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		
site 41 still down		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
surveying	d	n/a
grading area 3 and area 2 stockpiling soil	d	n/a

Subcontractor activities:

Task Performed	Protection level	Type Air monitoring
trucks delivering soil to site	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: cloudy, damp, chance of rain, cold morning low 34 high 46

--

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 11/27/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		
rotation break for holiday		

Shaw Site Activities: **8 Employees on site**

Task Performed	Protection level	Type Air monitoring
site shutdown	d	n/a
site security and lockdown	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: clear, cool morning, some clouds low 35 high 44

--

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 12/2/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
grading area 2 and 3	d	n/a
soil placement area 2	d	n/a
compaction testing area 2 and 3	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: clear,cold morning sunny afternoon light breeze low 34 high 47

--

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/4/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
COLD STRESS jsa given today		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		
trucks hauling soils to site		

Shaw Site Activities: 10 Employees on site

Task Performed	Protection level	Type Air monitoring
grading soils areas 2 and 1	d	n/a
surveying	d	n/a
compaction testing	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
aggrerate hauling soils to site by trucks	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Cloudy, chilly, some frost morning, little breezy 5-10-mph low 18 high 34

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/5/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground. driving conditions		
snow fall, shoveling		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: 6 inches of snow fell over wed. nite into Thursday		
equip maint.		

Shaw Site Activities: **8 Employees on site**

Task Performed	Protection level	Type Air monitoring
clearing road of snow	d	n/a
general housekeeping	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Very cold, and icy no work today to weather conditions low 24 high 34

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/6/02 Project Number: 809401
 SSO: Joe Walker Project Name Town Gut Landfill
 Site Supervisor: Steve Carriere Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		driving conditions
snow fall, shoveling		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: 6 inches of snow fell over wed. nite into Thursday		
equip maint.		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
clearing road of snow	d	n/a
general housekeeping	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Very cold, and icy no work today to weather conditions low 24 high 34

--

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/9/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		

Shaw Site Activities: 7 Employees on site

Task Performed	Protection level	Type Air monitoring
vehicle maint.	d	n/a
drums ready for shipment	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities
Weather Conditions: cold, morning some sun low 27 high 37

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/10/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		

Shaw Site Activities:		4 Employees on site
Task Performed	Protection level	Type Air monitoring
Regrade areas	d	n/a
touch up grading	d	n/a

Subcontractor activities:		0
Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:
observed all site conditions and site activities

Weather Conditions: Clear, cold morning, some clouds low 26 high 39

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 12/11/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities: 1.3 in of rain fell and freezing rain		

Shaw Site Activities: 7 Employees on site

Task Performed	Protection level	Type Air monitoring
Decon Equipment	D+	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Freezing rain and rain fell most of day weather delay for work low 27 high 35

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/12/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
JSA GIVEN ON HAULING AND LOADOUT		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
N/A	N/A	n/a
		n/a
		n/a
Other activities:		
DAN PRINGLE AND JANNA STASZAK ON SITE		
QC MEETING TODAY		

Shaw Site Activities: 7 Employees on site

Task Performed	Protection level	Type Air monitoring
LOADOUT DEBRI	d	n/a
Site Survey	d	n/a
EROSION CONTROL	D	N/A

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
HAUL DEBRI AWAY (REDBONE)	D	N/A

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: CHILLY, COOL MORNING LIGHT BREEZE LOW 26 HIGH 41

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SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 12/13/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
Loadout drums	d	n/a
Loadout debri	d	n/a
clean vehicles	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
hauling debri off site	d	n/a
hauling drums off site	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: chilly morning cloudy skies chance of rain low 34 high 40

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 12/16/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		

Shaw Site Activities: 7 Employees on site

Task Performed	Protection level	Type Air monitoring
grading wet soil for irrigation to dryout	d	n/a
decon dozer	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
n/a	n/a	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Clear and cold, some sun, very windy 15-25mph low 36 high 42

SHAW ENVIRONMENTAL

Site Safety Officer

Daily Report

Date: 12/17/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip,trip,fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		

Shaw Site Activities: 8 Employees on site

Task Performed	Protection level	Type Air monitoring
GRADING AREA 1	d	n/a
DECON ROLLER	d	N/A

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
N/A	N/A	N/A

Safety Observations/ Issues:

observed all site conditions and site activities

safety observer given today by Mike Campbell

Weather Conditions: Chilly, morning, warmer afternoon low 26 high 42

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/18/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:

dress for conditions, slip,trip,fall hazards

material handling, heavy equipment, power tools

ear plugs, uneven ground.

Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a

Other activities:

Shaw Site Activities: 7 Employees on site

Task Performed	Protection level	Type Air monitoring
Grading soil in place area 2	d	n/a
compaction testing	d	n/a

Subcontractor activities: 0

Task Performed	Protection level	Type Air monitoring
2 trucks hauling select fill to area 2	d	n/a

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: Chilly, cool morning, cloudy, low 29 high 44

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 12/19/02

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:		
dress for conditions, slip, trip, fall hazards		
material handling, heavy equipment, power tools		
ear plugs, uneven ground.		
Air monitoring Instruments:	Calibrated/Checked	Task Monitored
n/a	n/a	n/a
Other activities:		

Shaw Site Activities:	7 Employees on site	
Task Performed	Protection level	Type Air monitoring
Grading soils in area 2X /	d	n/a
Site Security, maintenance	d	n/a
compaction testing	d	n/a

Subcontractor activities:	0	
Task Performed	Protection level	Type Air monitoring
Hauling soils to site	d	n/a

Safety Observations/ Issues:
observed all site conditions and site activities

Weather Conditions: Chilly, grey morning, some clouds, low 34 high 49

SHAW ENVIRONMENTAL

Site Safety Officer
Daily Report

Date: 1-16-03

Project Number: 809401

SSO: Joe Walker

Project Name Town Gut Landfill

Site Supervisor: Steve Carriere

Site - 12

SAFETY MEETING TOPICS:

*DRIVER AWARENESS
DRIVING IN SNOW*

Air monitoring Instruments:	Calibrated/Checked	Task Monitored
photovac 2020	<i>N/A</i>	<i>N/A</i>
LEL/oxy meter	<i>N/A</i>	<i>N/A</i>
dataram dust meter	<i>N/A</i>	<i>N/A</i>
Other activities: <i>TRUCKS HAULING TOP SOIL TO AREA #1</i>		
<i>HYDROSEEDING</i>		
<i>H&S on site to Review Paperwork.</i>		

Shaw Site Activities:

Employees on site

Task Performed	Protection level	Type Air monitoring
<i>SURVEYING</i>	<i>D</i>	<i>N/A</i>
<i>GRADING</i>	<i>D</i>	<i>N/A</i>

Subcontractor activities:

Task Performed	Protection level	Type Air monitoring
<i>SOIL PLACEMENT</i>	<i>D</i>	<i>N/A</i>
<i>HYDROSEEDING</i>	<i>2 MEN D</i>	<i>N/A</i>

Safety Observations/ Issues:

observed all site conditions and site activities

Weather Conditions: *COLD CHANCE OF SNOW LATE TODAY
LOW 18° - HIGH 32°*



IT CORPORATION
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TAILGATE SAFETY MEETING

Date: 9-9-02 Time: 1:30 PM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

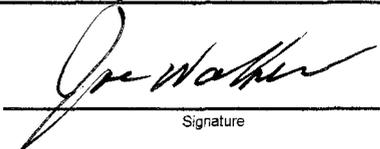
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Wm. Dennis Gardner	Wm. Dennis Gardner
2.	Mark Lindsey	Mark Lindsey
3.	Gitch Coker	Gitch Coker
4.	Mike Campbell	Mike Campbell
5.	Edwin Duke	Edwin Duke
6.	Steve Conner	Steve Conner
7.	Barry Johnson	Barry Johnson
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IT CORPORATION
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TAILGATE SAFETY MEETING

Date: 9-10-02 Time: 7³⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed) Joe Walker
Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Wm Dennis Gardner	Wm Dennis Gardner
2.	Patrick Cohen	Patrick Cohen
3.	MARK Lindsay	Mark Lindsay
4.	MIKE Campbell	Mike Campbell
5.	Ernie Duce	Ernie Duce
6.	Buddy Johnson	Buddy Johnson
7.	Steve Corcoran	Steve Corcoran
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IT CORPORATION
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TAILGATE SAFETY MEETING

Date: 9-11-02 Time: 7:00 A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

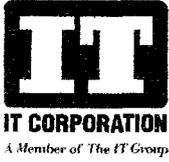
Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	Witch Coker	Witch Coker
3.	MARK Lindsey	Mark Lindsey
4.	Ernie Duke	Ernie Duke
5.	Dennis Gardner	Dennis Gardner
6.	Randy Johnson	Randy Johnson
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TAILGATE SAFETY MEETING

Date: 9-12-02 Time: 7:00 AM.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

Joe Walker
Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Dennis Gardner	Dennis Gardner
3.	Mike Campbell	Mike Campbell
4.	Randy Johnson	Randy Johnson
5.	Bitch Coker	Bitch Coker
6.	Ernie Duke	Ernie Duke
7.	Steve Carriere	Steve Carriere
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TAILGATE SAFETY MEETING

Date: 9-13-02 Time: 7⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



IT CORPORATION
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TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	Dennis Gardner	Dennis Gardner
3.	Shitch Coker	Shitch Coker
4.	MARK Lindsey	Mark Lindsey
5.	Nandy Johnson	Nandy Johnson
6.	E. Duke	E. DUKE
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TAILGATE SAFETY MEETING

Date: 9-16-02 Time: 07⁰⁰ AM

Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance

Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.

weather conditions, noise, snakes, ticks, lightning, working near water

Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	Witch Cohen	Witch Cohen
3.	MARK Lindsey	Mark Lindsey
4.	Dennis Gaudin	Dennis Gaudin
5.	Randy HAWES	Randy Hawes
6.	Kerbes manca	Minda Kerbes
7.	Steve CARRIER	Steve Carrier
8.	Randy Johnson	Randy Johnson
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TAILGATE SAFETY MEETING

Date: 9-17-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	<i>Bitch Baker</i>	<i>Bitch Baker</i>
2.	<i>Peggy Gardner</i>	<i>Demi Gardner</i>
3.	<i>Mike Campbell</i>	<i>Mike Campbell</i>
4.	<i>MARK Lindsey</i>	<i>Mark Lindsey</i>
5.	<i>Randy Johnson</i>	<i>Randy Johnson</i>
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IT CORPORATION
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TAILGATE SAFETY MEETING

Date: 9-18-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Dennis Gardner	Dennis Gardner
2.	Randy Johnson	Randy Johnson
3.	Randy Hawes	Randy Hawes
4.	MIKE CAMPBELL	Mike Campbell
5.	MONICA KEVELS	Monica Kevels
6.	MARK LINDSEY	Mark Lindsey
7.	ERIE DUKE	Erie Duke
8.	MITCH COKER	Mitch Coker
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TAILGATE SAFETY MEETING

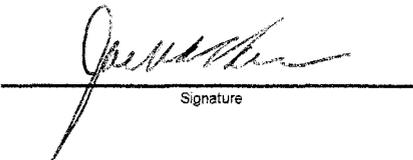
Date: 9-19-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Eric Duke	Eric Duke
2.	Mike Campbell	Mike Campbell
3.	Nancy Johnson	Nancy Johnson
4.	Randy Hawes	Randy Hawes
5.	Witch Coker	Witch Coker
6.	Dennis Gardner	Dennis Gardner
7.	Mark Lindsey	Mark Lindsey
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TAILGATE SAFETY MEETING

Date: 9-20-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S Steve Carrick
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Gandy Johnson	Gandy Johnson
2.	Gandy HAVES	Gandy Haves
3.	MONA KEAVEG	MONA KEAVEG
4.	Dennis Gardner	Dennis Gardner
5.	MARK LINDSEY	Mark Lindsey
6.	MIKE CAMPBELL	Mike Campbell
7.	BRITISH COKER	British Coker
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TAILGATE SAFETY MEETING

Date: 9-23-02 Time: 07⁰⁰ AM
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

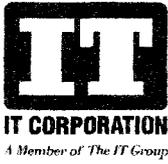
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)  Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	<i>Mark Lindsey</i>
2.	Dennis Gardner	<i>Dennis Gardner</i>
3.	Mike Campbell	<i>Mike Campbell</i>
4.	Nandy Johnson	<i>Nandy Johnson</i>
5.	Eric Duke	<i>Eric Duke</i>
6.	Witch Baker	<i>Witch Baker</i>
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TAILGATE SAFETY MEETING

Date: 9-24-02 Time: 07⁰⁰AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Mike Campbell	Mike Campbell
3.	Dennis Gardner	Dennis Gardner
4.	Ernie Dake	Ernie Dake
5.	Whitch Coker	Whitch Coker
6.	Randy Johnson	Randy Johnson
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TAILGATE SAFETY MEETING

Date: 9-25-02 Time: 07⁰⁰ A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

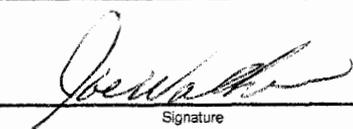
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting,
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Randy Johnson	Randy Johnson
2.	MIKE CAMPBELL	Mike Campbell
3.	Ernie Duke	Ernie Duke
4.	MARK Lindsey	Mark Lindsey
5.	Dennis Gardner	Dennis Gardner
6.	Mitch Coker	Mitch Coker
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TAILGATE SAFETY MEETING

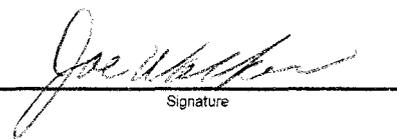
Date: 9-26-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Randy Johnson	Randy Johnson
2.	Whitch Coker	Whitch Coker
3.	MARK Lindsey	Mark Lindsey
4.	Mike Campbell	Mike Campbell
5.	Dennis Gardner	Dennis Gardner
6.	DAN PRINGLE	Daniel W. Pringle
7.	Ernie Duke	Ernie Duke
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TAILGATE SAFETY MEETING

Date: 9-27-02 Time: 8:00 A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed) Signature



IT CORPORATION

A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Michael Campbell	Michael Campbell
2.	Randy Johnson	Randy Johnson
3.	MARK Lindsey	Mark Lindsey
4.	Michael Coker	Michael Coker
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TAILGATE SAFETY MEETING

Date: 9-30-02 Time: 7:00
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

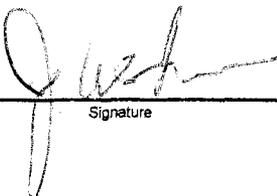
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	David [unclear]	David [unclear]
3.	Debbie Gardner	Debbie Gardner
4.	[unclear]	[unclear]
5.	Mitch Baker	Mitch Baker
6.	Valerie Lindstaff	Valerie Lindstaff
7.	Mike Campbell	Mike Campbell
8.	Ernie Duke	Ernie Duke
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TAILGATE SAFETY MEETING

Date: 10-1-02 Time: 0700 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Nandy Johnson	Nandy Johnson
2.	Patricia Coker	Patricia Coker
3.	MARK Lindae	Mark Lindae
4.	Mike Campbell	Mike Campbell
5.	Valerie Lovestall	Valerie Lovestall
6.	Ernie Dure	Ernie Dure
7.	Dennis Gardner	Dennis Gardner
8.	Kevin Skipper	Kevin Skipper
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TAILGATE SAFETY MEETING

Date: 10-2-02 Time: 07:00 A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Dennis Gardale	Dennis Gardale
3.	Kelvin SKIPPER	Kelvin Skipper
4.	Randy Johnson	Randy Johnson
5.	Phil Walker	Phil Walker
6.	Mike Campbell	Mike Campbell
7.	Valerie LAWSON	Valerie Lawson
8.	ERIC Dake	Eric Dake
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TAILGATE SAFETY MEETING

Date: 10-3-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

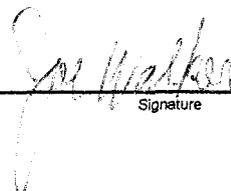
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Bundy Johnson	Bundy Johnson
2.	DAN PRINGLE	Daniel N Pringle
3.	Kevin SKIPPER	Kevin Skipper
4.	Pennis Gardner	Pennis Gardner
5.	Mike Campbell	Mike Campbell
6.	Valerie Lovasone	Valerie Lovasone
7.	Theresa Baker	Theresa Baker
8.	Samie Duke	Samie Duke
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TAILGATE SAFETY MEETING

Date: 10-4-02 Time: 0700 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE CAMPBELL	MIKE CAMPBELL
2.	DENNIS GARDNER	DENNIS GARDNER
3.	ERIC DUKE	ERIC DUKE
4.	VALERIE LONGSTAFF	Valerie Longstaff
5.	KELVIN SKIPPEN	Kelvin Skippen
6.	RANDY JOHNSON	Randy Johnson
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TAILGATE SAFETY MEETING

Date: 10-7-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

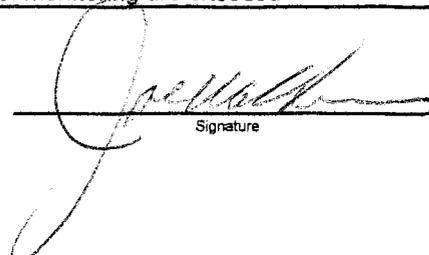
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
 Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Kevin Skipper	[Signature]
2.	MARK Lindsey	[Signature]
3.	Dennis Gardner	[Signature]
4.	Mitch Coker	[Signature]
5.	Valerie Langstaff	[Signature]
6.	Ernie Duke	[Signature]
7.	Mitch Coker	[Signature]
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TAILGATE SAFETY MEETING

Date: 10-8-02 Time: 07⁰⁰ AM.

Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance

Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.

weather conditions, noise, snakes, ticks, lightning, working near water

Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsay	<i>Mark Lindsay</i>
2.	Mike Campbell	<i>Mike Campbell</i>
3.	Phil Cook	<i>Phil Cook</i>
4.	Earle Duke	<i>Earle Duke</i>
5.	Gandy Johnson	<i>Gandy Johnson</i>
6.	Dennis Gardner	<i>Dennis Gardner</i>
7.	Kelvin Skipper	<i>Kelvin Skipper</i>
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TAILGATE SAFETY MEETING

Date: 10-9-02 Time: 07:00 AM.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

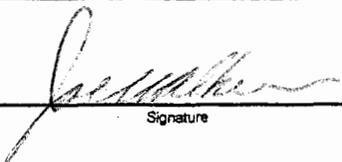
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting,
weather conditions, noise, snakes, ticks, lightning, working near water
 Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsay	Mark Lindsay
2.	Mike Campbell	Mike Campbell
3.	Mitch Coker	Mitch Coker
4.	Handy Johnson	Handy Johnson
5.	Earle Duke	Earle Duke
6.	Kevin SKIPPER	Kevin Skipper
7.	Dennis Cardno	Dennis Cardno
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TAILGATE SAFETY MEETING

Date: 10-10-02 Time: 07⁰⁰ A.M.
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

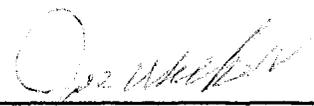
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting,
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE CAMPBELL	Mike Campbell
2.	MARK Lindsay	Mark Lindsay
3.	Dennis Cardano	Dennis Cardano
4.	Mike Coker	Mike Coker
5.	Kelvin L. S. PPE	Kelvin L. S. PPE
6.	Randy Johnson	Randy Johnson
7.	Earie Duke	Earie Duke
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TAILGATE SAFETY MEETING

Date: 10-11-02 Time: 0700 AM
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
The following PPE shall be worn while performing the activities AT A MINIMUM:

Table with 2 columns: Activity and PPE Required. Rows include CLEARING AND GRUBBING, SITE SET UP, SITE PREPERATION, SITE SURVEY, DEWATERING, WASTE REMOVAL, REGRADING, DRAINAGE INSTALLATION, SOIL COVER INSTALLATION, MONITORING WELL ABANDONMENT, MONITORING WELL INSTALLATION, EQUIPMENT DECONTAMINATION, and SITE RESTORATION.

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	Witch Coker	Witch Coker
3.	Dennis Gardner	Dennis Gardner
4.	Handy Johnson	Handy Johnson
5.	MARK Lindsey	Mark Lindsey
6.	Earle Duke	Earle Duke
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TAILGATE SAFETY MEETING

Date: 10-19-02 Time: 09:00 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

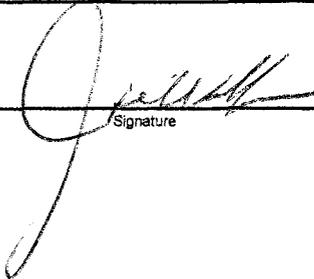
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Nandy Johnson	Nandy Johnson
2.	Bitch Baker	Bitch Baker
3.	Mike Campbell	Mike Campbell
4.	MARK Lindsey	Mark Lindsey
5.	Earle Duke	Earle Duke
6.	Kelvin SHPPER	Kelvin Shpper
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TAILGATE SAFETY MEETING

Date: 10-15-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

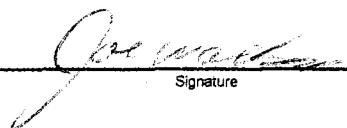
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity:	<u>CLEARING AND GRUBBING</u>	PPE Required:	<u>Level D Protection</u>
	<u>SITE SET UP</u>		<u>Level D Protection</u>
	<u>SITE PREPERATION</u>		<u>Level D Protection</u>
Activity:	<u>SITE SURVEY</u>	PPE Required:	<u>Level D Protection</u>
	<u>DEWATERING</u>		<u>Modified D/With tyvek, gloves</u>
Activity:	<u>WASTE REMOVAL</u>	PPE Required:	<u>Level D / Modified D</u>
	<u>REGRADING</u>		<u>Level D</u>
Activity:	<u>DRAINAGE INSTALLATION</u>	PPE Required:	<u>Level D / Modified D</u>
	<u>SOIL COVER INSTALLATION</u>		<u>Level D</u>
	<u>MONITORING WELL ABANDONMENT</u>		<u>MODIFIED D</u>
Activity:	<u>MONITORING WELL INSTALLATION</u>	PPE Required:	<u>Modified D</u>
	<u>EQUIPMENT DECONTAMINATION</u>		<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity:	<u>SITE RESTORATION</u>	PPE Required:	<u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Randy Johnson	Randy Johnson
2.	MARIL Lindsey	MARIL Lindsey
3.	MIKE Campbell	MIKE Campbell
4.	Dennis Gardner	Dennis Gardner
5.	WITCH Baker	WITCH Baker
6.	Ernie Duke	Ernie Duke
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TAILGATE SAFETY MEETING

Date: 10-16-02 Time: 7:00 A.M.
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
The following PPE shall be worn while performing the activities AT A MINIMUM:

Table with 2 columns: Activity and PPE Required. Rows include CLEARING AND GRUBBING, SITE SET UP, SITE PREPERATION, SITE SURVEY, DEWATERING, WASTE REMOVAL, REGRADING, DRAINAGE INSTALLATION, SOIL COVER INSTALLATION, MONITORING WELL ABANDONMENT, MONITORING WELL INSTALLATION, EQUIPMENT DECONTAMINATION, and SITE RESTORATION.

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

Signature



IT CORPORATION
A Member of The FT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE Campbell	MIKE Campbell
2.	MARK Lindsey	Mark Lindsey
3.	Kelvin SKIPPER	KL
4.	Dennis Gardner	Dennis Gardner
5.	Witch Baker	Witch Baker
6.	Ernie Duke	Ernie Duke
7.	Randy Johnson	Randy Johnson
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TAILGATE SAFETY MEETING

Date: 10-17-02 Time: 7⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting,
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

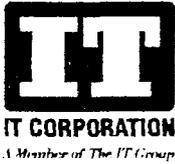
Meeting Conducted by: Joe Walker H & S Joe Walker
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Whitch Coker	Whitch Coker
2.	Mike Campbell	Mike Campbell
3.	Dennis Cardato	Dennis Cardato
4.	MARK Lindsey	Mark Lindsey
5.	Nandy Johnson	Nandy Johnson
6.	Casey Duke	Casey Duke
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TAILGATE SAFETY MEETING

Date: 10-18-02 Time: 07:00 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting,
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S _____
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	MARK Lindsey	Mark Lindsey
3.	Patrick Coker	Patrick Coker
4.	Dennis Gardner	Dennis Gardner
5.	ERDIE DUKE	Erdie Duke
6.	Randy Johnson	Randy Johnson
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TAILGATE SAFETY MEETING

Date: 10-21-02 Time: 0700 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911
 Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting,
weather conditions, noise, snakes, ticks, lightning, working near water
 Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mark Lindsay	MARK Lindsay
2.	Mike Campbell	Mike Campbell
3.	Randy Johnson	Randy Johnson
4.	Scott Baker	Scott Baker
5.	Dennis Gardner	Dennis Gardner
6.	Kelvin SIPPET	Kelvin Sippet
7.	Eric Duke	Eric Duke
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TAILGATE SAFETY MEETING

Date: 10-22-02 Time: 07:00 A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: <u>CLEARING AND GRUBBING</u>	PPE Required: <u>Level D Protection</u>
<u>SITE SET UP</u>	<u>Level D Protection</u>
<u>SITE PREPERATION</u>	<u>Level D Protection</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
<u>DEWATERING</u>	<u>Modified D/With tyvek, gloves</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
<u>MONITORING WELL ABANDONMENT</u>	<u>MODIFIED D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting.
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

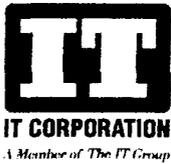

Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE Campbell	Mike Campbell
2.	Ernie Duce	Ernie Duce
3.	Thitch Baker	Thitch Baker
4.	MARK Lindsey	Mark Lindsey
5.	Nandy Johnson	Nandy Johnson
6.	Dennis Gardner	Dennis Gardner
7.	KELVIN SKIPPER	Kelvin Skipper
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TAILGATE SAFETY MEETING

Date: 10-23-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

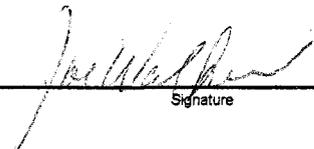
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE Campbell	MIKE Campbell
2.	Dites Cokert	Dites Cokert
3.	MARK Lindsey	Mark Lindsey
4.	Dennis Gardner	Dennis Gardner
5.	Nandy Johnson	Nandy Johnson
6.	Colin Duke	Colin Duke
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TAILGATE SAFETY MEETING

Date: 10-24-02 Time: 09⁰⁰ A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

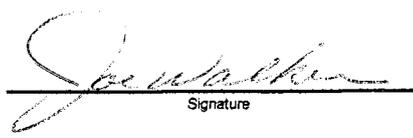
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Mike Campbell	Mike Campbell
3.	Keleisa SHIPPER	Keleisa Shipper
4.	Whitch Coker	Whitch Coker
5.	Nandy Johnson	Nandy Johnson
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IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

Date: 10-25-02 Time: 0700 A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRAIDING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S _____
Name (Printed) Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	<i>Mark Lindsey</i>
2.	KEVIN SHIPPER	<i>Kevin Shipper</i>
3.	MITCH COKE	<i>Mitch Coke</i>
4.	MIKE CAMPBELL	<i>Mike Campbell</i>
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TAILGATE SAFETY MEETING

Date: 10-28-02 Time: 0700 - 1130 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

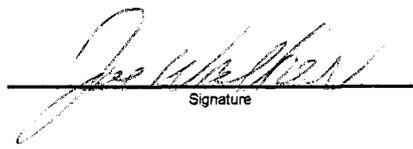
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
Activity: <u>REGRADING</u>	PPE Required: <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
Activity: <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
Activity: <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

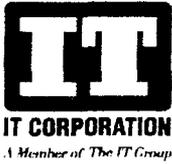

Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	MARK Lindsey	Mark Lindsey
3.	Randy Johnson	Randy Johnson
4.	Dennis Gardner	Dennis Gardner
5.	Kevin SKIPPER	Kevin Skpper
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TAILGATE SAFETY MEETING

Date: 10-29-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

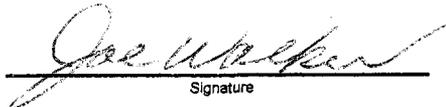
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRAIDING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	Dennis Gardner	Dennis Gardner
3.	KELVIN LSHIPPER	Kelvin Lshipper
4.	MARIS, Lindsey	Maris Lindsey
5.	Whitely, Coker	Whitely Coker
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TAILGATE SAFETY MEETING

Date: 10-30-02 Time: 0700
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

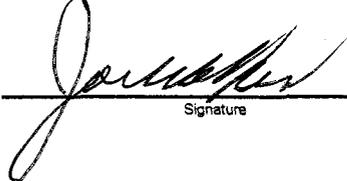
Personal Protective Equipment: Most work should be done in level D or Modified D

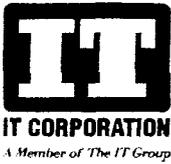
The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	Mark Lindsay	Mark Lindsay
3.	Witch Coker	Witch Coker
4.	Randy Johnson	Randy Johnson
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IT CORPORATION
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TAILGATE SAFETY MEETING

Date: 11-7-02 Time: 07⁰⁰ AM
 Project Name: SITE -41 SCRAP YARD Project Number: 831866
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: REMEDIATION
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, arsenic, pcb's cadmium, lead
 Site Physical Hazards: UXO Ordinance Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>Site setup and prep.</u>	PPE Required: <u>Level D</u>
<u>Clearing and Grubbing</u>	<u>Level D with chaps, face shield, gloves</u>
<u>Erosion Control</u>	<u>Level D Protection</u>
Activity: <u>UXO DEMILLING, SCREENING</u>	PPE Required: <u>Level D Protection</u>
<u>PLASMA CUTTING OPER.</u>	
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Mike Campbell	Mike Campbell
3.	Nancy Johnson	Nancy Johnson
4.	Michael Carter	Michael Carter
5.	Kevin Skippick	Kevin Skippick
6.	Ernie Duke	Ernie Duke
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TAILGATE SAFETY MEETING

Date: 11-06-02 Time: 07:00 AM.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

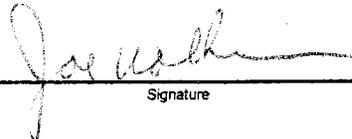
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

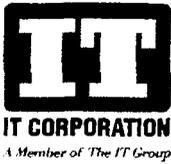
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S _____
Name (Printed) 
Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Randy Johnson	Randy Johnson
2.	KEVIN SKIPPER	Kevin Skipper
3.	Dennis Gardner	Dennis Gardner
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TAILGATE SAFETY MEETING

Date: 11-5-02 Time: 07:00 A.M.
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
The following PPE shall be worn while performing the activities AT A MINIMUM:

Table with 2 columns: Activity and PPE Required. Rows include: SITE SURVEY (Level D Protection), WASTE REMOVAL (Level D / Modified D), REGRADING (Level D), DRAINAGE INSTALLATION (Level D / Modified D), SOIL COVER INSTALLATION (Level D), MONITORING WELL INSTALLATION (Modified D), EQUIPMENT DECONTAMINATION (MODIFIED D rain suit or poly coated tyvek), SITE RESTORATION (LEVEL D).

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Dennis Cardenas	Dennis Cardenas
2.	Ernie Duke	Ernie Duke
3.	MIKE Campbell	MIKE Campbell
4.	Witch Coker	Witch Coker
5.	Randy Johnson	Randy Johnson
6.	MARK Lindsey	MARK Lindsey
7.	KELVIN SKIPPER	KELVIN SKIPPER
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TAILGATE SAFETY MEETING

Date: 11-4-02 Time: 07:00 AM
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

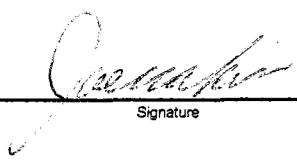
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK LINDSEY	Mark Lindsey
2.	MIKE CAMPBELL	Mike Campbell
3.	KELVIN SKIPPERS	Kelvin Skippers
4.	MIKE COOPER	Mike Cooper
5.	RANDY JOHNSON	Randy Johnson
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TAILGATE SAFETY MEETING

Date: 11-08-02 Time: 07:00 A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S _____
Name (Printed) Joe Walker
Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mark Lindsay	Mark Lindsay
2.	Mike Campbell	Mike Campbell
3.	KELVIN SKIPPER	Kelvin Skipper
4.	Dennis Gardner	Dennis Gardner
5.	Eddie Duke	Eddie Duke
6.	Nandy Johnson	Nandy Johnson
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TAILGATE SAFETY MEETING

Date: 11-9-02 Time: 07⁰⁰ AM.

Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance

Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____ PPE Required: _____

Activity: SITE SURVEY PPE Required: Level D Protection

Activity: WASTE REMOVAL PPE Required: Level D / Modified D
REGRADING Level D

Activity: DRAINAGE INSTALLATION PPE Required: Level D / Modified D
SOIL COVER INSTALLATION Level D

Activity: MONITORING WELL INSTALLATION PPE Required: Modified D
EQUIPMENT DECONTAMINATION MODIFIED D rain suit or poly coated tyvek

Activity: SITE RESTORATION PPE Required: LEVEL D

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water

Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE Campbell	Mike Campbell
2.	MARK Lindsey	Mark Lindsey
3.	MIKE	
4.	Dennis Gardner	Dennis Gardner
5.	Handy Johnson	Handy Johnson
6.	Edwin Duke	Edwin Duke
7.	Timothy Coker	Timothy Coker
8.	Kelvin SHIPPER	Kelvin Shipper
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TAILGATE SAFETY MEETING

Date: 11-16-02 Time: 0700 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRAIDING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S _____
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Witch Baker	Witch Baker
2.	MARILY Lindsey	Marilyn Lindsey
3.	MIKE Campbell	Mike Campbell
4.	Dennis Gardner	Dennis Gardner
5.	Fandy Johnson	Fandy Johnson
6.	KEVIN SHIPPER	Kevin Shipper
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TAILGATE SAFETY MEETING

Date: 11-11-02 Time: 07⁰⁰
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)  Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Dennis Gaudin	Dennis Gaudin
3.	Mike Campbell	Mike Campbell
4.	Kelvin Spitzer	Kelvin Spitzer
5.	Randy Johnson	Randy Johnson
6.	Walt G. G. G.	Walt G. G. G.
7.	CARIE Duke	CARIE Duke
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TAILGATE SAFETY MEETING

Date: 11-12-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRAIDING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE Campbell	Mike Campbell
2.	MIKE Campbell	Mike Campbell
3.	MARK Lindsey	Mark Lindsey
4.	ERRIE Duke	Errie Duke
5.	AL ADAMS	Al Adams
6.	Rebecca ANDERSON	Rebecca Anderson
7.	BRUCE TIMMONS	Bruce Timmons
8.	Nancy Johnson	Nancy Johnson
9.	Donna Gardner	Donna Gardner
10.	KEVIN SKIDDER	Kevin Skidder
11.	LARRY MAHONEY	Larry Mahoney
12.	STEVE JACKSON	Steve Jackson
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TAILGATE SAFETY MEETING

Date: 11-13-02 Time: 7:00 A.M.
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

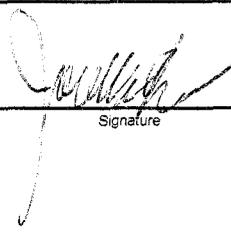
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature

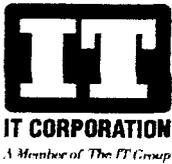


IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARIE Lindsey	<i>Marie Lindsey</i>
2.	Nancy Johnson	<i>Nancy Johnson</i>
3.	Earle Duke	<i>Earle Duke</i>
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TAILGATE SAFETY MEETING

Date: 11-14-02 Time: 7:00 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

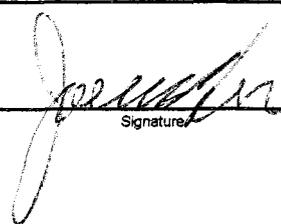
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsay	<i>Mark Lindsay</i>
2.	KEVIN SKIPPED	<i>Kevin Skipped</i>
3.	Randy Johnson	<i>Randy Johnson</i>
4.	SPRUE D LINDENM	<i>SPRUE D LINDENM</i>
5.	ERIE Duke	<i>Erie Duke</i>
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TAILGATE SAFETY MEETING

Date: 11-15-02 Time: 0700 AM
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
The following PPE shall be worn while performing the activities AT A MINIMUM:

Table with 2 columns: Activity and PPE Required. Rows include: Activity: PPE Required:; Activity: SITE SURVEY PPE Required: Level D Protection; Activity: WASTE REMOVAL REGRADING PPE Required: Level D / Modified D Level D; Activity: DRAINAGE INSTALLATION SOIL COVER INSTALLATION PPE Required: Level D / Modified D Level D; Activity: MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION PPE Required: Modified D MODIFIED D rain suit or poly coated tyvek; Activity: SITE RESTORATION PPE Required: LEVEL D

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

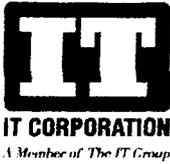
Meeting Conducted by: Joe Walker H & S
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Dennis Gardner	Dennis Gardner
2.	MARK Lindsey	Mark Lindsey
3.	Ernie Duke	Ernie Duke
4.	Nandy Johnson	Nandy Johnson
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TAILGATE SAFETY MEETING

Date: 11-18-02 Time: 0700 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

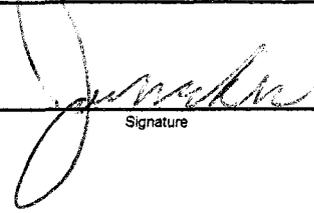
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Pamela Goodwin	Pamela Goodwin
2.	Randy Johnson	Randy Johnson
3.	MARK Lindsey	Mark Lindsey
4.	Kelvin SKIPPER	Kelvin Skipper
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TAILGATE SAFETY MEETING

Date: 11-19-02 Time: 06:30 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

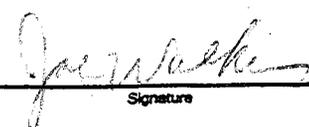
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Grady Johnson	Grady Johnson
3.	Ernie Duce	Ernie Duce
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TAILGATE SAFETY MEETING

Date: 11-20-02 Time: 06³⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

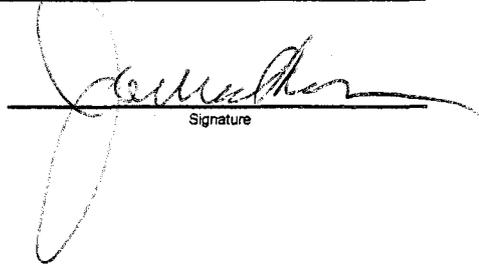
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Randy Johnson	Randy Johnson
2.	MARK Lindsay	Mark Lindsay
3.	Dennis Gardner	Dennis Gardner
4.	KEVIN SKIPPER	Kevin Skipper
5.	Eric Duke	Eric Duke
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TAILGATE SAFETY MEETING

Date: 11-21-02 Time: 07⁰⁰AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETTTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

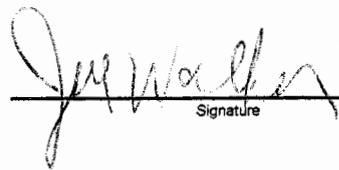
Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRAIDING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)  Signature



IT CORPORATION
A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Sandy Johnson	Sandy Johnson
2.	MARK Lindsey	Mark Lindsey
3.	KEVIN SMITH	Kevin Smith
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TAILGATE SAFETY MEETING

Date: 11-25-02 Time: 0700 AM

Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance

Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____ PPE Required: _____

Activity: SITE SURVEY PPE Required: Level D Protection

Activity: WASTE REMOVAL PPE Required: Level D / Modified D
REGRADING Level D

Activity: DRAINAGE INSTALLATION PPE Required: Level D / Modified D
SOIL COVER INSTALLATION Level D

Activity: MONITORING WELL INSTALLATION PPE Required: Modified D
EQUIPMENT DECONTAMINATION MODIFIED D rain suit or poly coated tyvek

Activity: SITE RESTORATION PPE Required: LEVEL D

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Kevin S. J. J. J.	[Signature]
2.	Devin Gardner	[Signature]
3.	Alison Howard	[Signature]
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TAILGATE SAFETY MEETING

Date: 11-26-02 Time: 0700 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

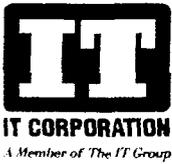
The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity:	_____	PPE Required:	_____
Activity:	<u>SITE SURVEY</u>	PPE Required:	<u>Level D Protection</u>
Activity:	<u>WASTE REMOVAL</u>	PPE Required:	<u>Level D / Modified D</u>
	<u>REGRADING</u>		<u>Level D</u>
Activity:	<u>DRAINAGE INSTALLATION</u>	PPE Required:	<u>Level D / Modified D</u>
	<u>SOIL COVER INSTALLATION</u>		<u>Level D</u>
Activity:	<u>MONITORING WELL INSTALLATION</u>	PPE Required:	<u>Modified D</u>
	<u>EQUIPMENT DECONTAMINATION</u>		<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity:	<u>SITE RESTORATION</u>	PPE Required:	<u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

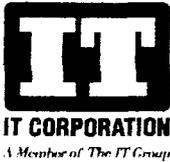

Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Kelvin SHAPEN	<i>[Signature]</i>
2.	Dennis Gardner	<i>[Signature]</i>
3.	MARK Lindsey	<i>[Signature]</i>
4.	Jenna Skazek	<i>[Signature]</i>
5.	Mr. Guro	<i>[Signature]</i>
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TAILGATE SAFETY MEETING

Date: 11-27-02 Time: 7⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
Activity: <u>REGRADING</u>	PPE Required: <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
SOIL COVER INSTALLATION	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
EQUIPMENT DECONTAMINATION	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S S.C.
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Michael Coker	Michael Coker
2.	MARK Lindsey	Mark Lindsey
3.		Grant Sperry
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5.	Mike Campbell	Mike Campbell
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TAILGATE SAFETY MEETING

Date: 12-2-02

Time: 7:00 AM

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance

Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____ PPE Required: _____

Activity: SITE SURVEY PPE Required: Level D Protection

Activity: WASTE REMOVAL PPE Required: Level D / Modified D
REGRADING PPE Required: Level D

Activity: DRAINAGE INSTALLATION PPE Required: Level D / Modified D
SOIL COVER INSTALLATION PPE Required: Level D

Activity: MONITORING WELL INSTALLATION PPE Required: Modified D
EQUIPMENT DECONTAMINATION PPE Required: MODIFIED D rain suit or poly coated tyvek

Activity: SITE RESTORATION PPE Required: LEVEL D

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS

weather conditions, noise, snakes, ticks, lightning, working near water

Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S

Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Randy Johnson	Randy Johnson
2.	Mike Campbell	Mike Campbell
3.	Bitch Coker	Bitch Coker
4.	MARK Lindsay	Mark Lindsay
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TAILGATE SAFETY MEETING

Date: 12-4-02 Time: 6:30 AM
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
The following PPE shall be worn while performing the activities AT A MINIMUM:

Table with 2 columns: Activity and PPE Required. Rows include: Activity: PPE Required:; Activity: SITE SURVEY PPE Required: Level D Protection; Activity: WASTE REMOVAL REGRADING PPE Required: Level D / Modified D Level D; Activity: DRAINAGE INSTALLATION SOIL COVER INSTALLATION PPE Required: Level D / Modified D Level D; Activity: MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION PPE Required: Modified D MODIFIED D rain suit or poly coated tyvek; Activity: SITE RESTORATION PPE Required: LEVEL D

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)

Signature: Joe Walker

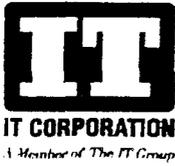


IT CORPORATION
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TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mike Campbell	Mike Campbell
2.	JANNA STASZAK	Janna Staszak
3.	PENNIS GARDNER	Pennis Gardner
4.	KEVIN S. [unclear]	Kevin S. [unclear]
5.	MARK LINDSEY	Mark Lindsey
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TAILGATE SAFETY MEETING

Date: 12-6-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Janna Staszak	Janna Staszak
2.	Witch Coker	Witch Coker
3.	Mike Campbell	Mike Campbell
4.	Kevin Skipper	Kevin Skipper
5.	Dave Johnson	Dave Johnson
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TAILGATE SAFETY MEETING

Date: 12-9-02 Time: 7:00 AM
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
The following PPE shall be worn while performing the activities AT A MINIMUM:

Table with 2 columns: Activity and PPE Required. Rows include: Activity: PPE Required:; Activity: SITE SURVEY PPE Required: Level D Protection; Activity: WASTE REMOVAL REGRADING PPE Required: Level D / Modified D Level D; Activity: DRAINAGE INSTALLATION SOIL COVER INSTALLATION PPE Required: Level D / Modified D Level D; Activity: MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION PPE Required: Modified D MODIFIED D rain suit or poly coated tyvek; Activity: SITE RESTORATION PPE Required: LEVEL D

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed) Signature



IT CORPORATION

A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE CAMPBELL	Mike Campbell
2.	Timothy Cook	Timothy Cook
3.	Kevin Skippers	Kevin Skippers
4.	Mike Lindsey	Mike Lindsey
5.	Randy Johnson	Randy Johnson
6.	Eddie Duke	Eddie Duke
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TAILGATE SAFETY MEETING

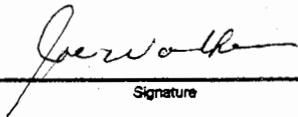
Date: 12-10-02 Time: 7⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURREATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D
 The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Heat Stress, Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S 
Name (Printed) Signature



IT CORPORATION

A Member of The IT Group

TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE CAMPBELL	Mike Campbell
2.	MARK GINSEY	Mark Ginsky
3.	ITCH COKE	ITCH COKE
4.	EDDIE DUKE	Eddie Duke
5.	NANDY JOHNSON	Nandy Johnson
6.	KELVIN SKIPPER	Kelvin Skipper
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TAILGATE SAFETY MEETING

Date: 12-11-02 Time: 07:00 AM
Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Table with 2 columns: Activity and PPE Required. Rows include: Activity: (blank), PPE Required: (blank); Activity: SITE SURVEY, PPE Required: Level D Protection; Activity: WASTE REMOVAL, REGRADING, PPE Required: Level D / Modified D, Level D; Activity: DRAINAGE INSTALLATION, SOIL COVER INSTALLATION, PPE Required: Level D / Modified D, Level D; Activity: MONITORING WELL INSTALLATION, EQUIPMENT DECONTAMINATION, PPE Required: Modified D, MODIFIED D rain suit or poly coated tyvek; Activity: SITE RESTORATION, PPE Required: LEVEL D

Other Safety Topic(s): Housekeeping, Heavy Equipment, Lifting. COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

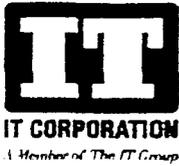
Meeting Conducted by: Joe Walker H & S
Name (Printed) Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindgren	Mark Lindgren
2.	Mike Campbell	Mike Campbell
3.	Ditch Coker	Ditch Coker
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TAILGATE SAFETY MEETING

Date: 12-02-02 Time: 7:00 AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

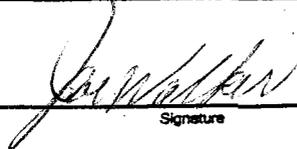
Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>Debris Loadout</u>	PPE Required: <u>D</u>
<u>JSA on Load out</u>	
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRAVING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MARK Lindsey	Mark Lindsey
2.	Mike Campbell	Mike Campbell
3.	Mitch Coker	Mitch Coker
4.	Kevin SKIPPER	Kevin Skipper
5.	Nandy Johnson	Nandy Johnson
6.	Ernie Duke	Ernie Duke
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TAILGATE SAFETY MEETING

Date: 12-18-02 Time: 07⁰⁰ AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRATTS RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: <u>Loadout Debris</u>	PPE Required: <u>D</u>
<u>Loadout DRUMS</u>	<u>D</u>
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRAIDING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed)


Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	Mitch Coker	Mitch Coker
2.	KEVIN SKIPPER	Kevin Skipper
3.	MIKE CAMPBELL	Mike Campbell
4.	Randy Johnson	Randy Johnson
5.	MARK LINDSEY	Mark Lindsey
6.	Steve Carver	Steve Carver
7.	ERDIE DUKE	Ernie Duke
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TAILGATE SAFETY MEETING

Date: 12-16-02 Time: 0700AM
 Project Name: TOWN GUT LANDFILL SITE-12 Project Number: 809401
 Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD MARYLAND
 Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.
 Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL 7503 SURRETT'S RD. CLINTON, MD. 20735
 Hospital Phone No.: 301-868-8000 Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, gasoline, Possible paints, thinners, possible ordinance
 Site Physical Hazards: Heat Stress, Strains & Sprains, Slips, Trips & Falls material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u>	PPE Required: <u>Level D / Modified D</u>
<u>REGRADING</u>	<u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u>
<u>SOIL COVER INSTALLATION</u>	<u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u>	PPE Required: <u>Modified D</u>
<u>EQUIPMENT DECONTAMINATION</u>	<u>MODIFIED D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>LEVEL D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment, Lifting, COLD STRESS
weather conditions, noise, snakes, ticks, lightning, working near water
Other levels of PPE will be worn when levels of monitoring are exceeded

Meeting Conducted by: Joe Walker H & S
Name (Printed) Joe Walker
Signature



TAILGATE SAFETY MEETING

- Continued -

	Employee Name	Employee Signature
1.	MIKE CAMPBELL	MIKE CAMPBELL
2.	WITCHER	WITCHER
3.	MARK LINDSEY	MARK LINDSEY
4.	ERIC DUNE	ERIC DUNE
5.	KEVIN SKIPPER	KEVIN SKIPPER
6.	STEVE CARROLL	STEVE CARROLL
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 12-17-02

Time: 07⁰⁰ AM

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sanks, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)


SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>Steve Carriere</i>
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	<i>Mitch Coker</i>
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	<i>Mark Lindsey</i>
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 12-18-02

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRAVING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	<i>Mitch Coker</i>
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	<i>Mark Lindsey</i>
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 12-19-02

Time: 07⁰⁰ AM

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankses, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Joe Walker
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>Steve Carriere</i>
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	<i>Mitch Coker</i>
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	<i>Mark Lindsey</i>
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 12-20-02

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankses, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED:

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	<i>Mitch Coker</i>
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	<i>Mark Lindsey</i>
6	Kelvin Skipper	
7	Ernie Duke	<i>E Duke</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-6-03

Time: 11:00 AM

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Michael Campbell
Joe Walker H & S
NAME (PRINTED)

Michael Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	<i>[Signature]</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-7-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Michael Campbell
Joe Walker H & S
NAME (PRINTED)

Michael Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	<i>[Signature]</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-8-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: MIKE Campbell
Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	DAN SCHMIDT	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-9-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Mike Campbell
Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	<i>[Signature]</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	DAN SCHWAB	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-10-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRAIDING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Michael Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED:

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	<i>Don Schultz</i>	<i>Don Schultz</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-4-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities AT A MINIMUM:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sanks, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Joe Walker H&S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	<i>Dan Schultz</i>	<i>Dan Schultz</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-12-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRAIDING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankses, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: MIKE Campbell
Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	<i>Dan Schulte</i>	<i>Dan Schulte</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-13-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

CONTINUED:

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	DAN Schultz	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-14-03

Time: 07⁰⁰

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankses, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	JANNA SCASZAK	<i>[Signature]</i>
9	IAN SCHULTZ	<i>[Signature]</i>
10	JOE WALKER	<i>Joe Walker</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-15-03

Time: _____

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankses, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Mike Campbell
Joe Walker H & S
NAME (PRINTED)

[Signature]
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	<i>[Signature]</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	DAN SCHULTZ	<i>[Signature]</i>
9	SYMA STASZAK	<i>[Signature]</i>
10	JOE WALKER	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-16-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sanks, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	<i>[Signature]</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	DAN PRINGLE	<i>[Signature]</i>
9	JANNA STASZAK	<i>[Signature]</i>
10	DAN SCHULTZ	<i>[Signature]</i>
11	Joe Walker	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-17-02

Time: _____

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION NAVAL SURFACE WARFARE CENTER INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: _____	PPE Required: _____
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: _____	PPE Required: _____
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: _____	PPE Required: _____
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: _____	PPE Required: _____
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Snakes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)
Randy Johnson

Randy Johnson
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	
5	Mark Lindsey	
6	Kelvin Skipper	
7	Ernie Duke	<i>ED</i>
8	<i>Dan Schultz</i>	
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-20-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	<i>JAN Schultz</i>	<i>JAN Schultz</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-31-03

Time: _____

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Mike Campbell
Joe Walker H & S
NAME (PRINTED)

Michaela Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	Don Schultz	<i>Don Schultz</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1/22/03

Time: _____

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Snakes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	<i>Don Schutz</i>	<i>Don Schutz</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-23-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sanks, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Michael Campbell
SIGNATURE



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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	<i>Wino Schultz</i>	<i>Wino Schultz</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-24-03

Time: 6700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRAIDING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions,
Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn
when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	DAN SCHULTZ	<i>Dan Schultz</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-27-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activites: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL</u> <u>REGRADING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Michael Caprio
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>Kelvin Skipper</i>
7	Ernie Duke	<i>Ernie Duke</i>
8	DAN Schuff	<i>Dan Schuff</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-28-07

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activites: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETTTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM**:

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	<i>[Signature]</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	DAN SCHULTZ	<i>[Signature]</i>
9	DAN PRINGLE	<i>[Signature]</i>
10	Joe WALKER	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-29-03

Time: 0700

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activites: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRETT'S RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceeded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Michael Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	
3	Mitch Coker	
4	Mike Campbell	
5	Mark Lindsey	
6	Kelvin Skipper	
7	Ernie Duke	
8	DAN SCHULTZ	
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 1-30-03

Time: _____

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done in level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: <u>WASTE REMOVAL REGRADING</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>DRAINAGE INSTALLATION SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D Level D</u>
Activity: <u>MONITORING WELL INSTALLATION EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D Modified D rain suit or poly coated tyvek</u>
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Joe Walker H & S
NAME (PRINTED)

Mike Campell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	<i>[Signature]</i>
2	Randy Johnson	<i>[Signature]</i>
3	Mitch Coker	
4	Mike Campbell	<i>[Signature]</i>
5	Mark Lindsey	
6	Kelvin Skipper	<i>[Signature]</i>
7	Ernie Duke	<i>[Signature]</i>
8	<i>Don Schultz</i>	<i>[Signature]</i>
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Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

Date: 11-27-03

Time: _____

Project Name: TOWN GUT LANDFILL SITE-12

Project Number: 809401

Client: INDIAN HEAD DIVISION-NAVAL SURFACE WARFARE CENTER, INDIAN HEAD, MARYLAND

Work Activities: INSTALLATION OF SOIL CAP, DEWATERING, ROAD EXT.

Hospital Name/Address: SOUTHERN MARYLAND HOSPITAL / 7503 SURRATTS RD. CLINTON, MD. 20735

Hospital Phone No.: 301-868-8000

Ambulance Phone No.: 911

Site Chemical Hazards: Diesel fuel, Gasoline, Possible paints, Thinners, Possible ordinance

Site Physical Hazards: Heat stress, Strains & Sprains, Slips, Trips & Falls, Material handling

Personal Protective Equipment: Most work should be done In level D or Modified D

The following PPE shall be worn while performing the activities **AT A MINIMUM:**

Activity: _____	PPE Required: _____
Activity: _____	PPE Required: _____
Activity: <u>SITE SURVEY</u>	PPE Required: <u>Level D Protection</u>
Activity: _____	PPE Required: _____
Activity: <u>WASTE REMOVAL</u> <u>REGRADEING</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: _____	PPE Required: _____
Activity: <u>DRAINAGE INSTALLATION</u> <u>SOIL COVER INSTALLATION</u>	PPE Required: <u>Level D / Modified D</u> <u>Level D</u>
Activity: _____	PPE Required: _____
Activity: <u>MONITORING WELL INSTALLATION</u> <u>EQUIPMENT DECONTAMINATION</u>	PPE Required: <u>Modified D</u> <u>Modified D rain suit or poly coated tyvek</u>
Activity: _____	PPE Required: _____
Activity: <u>SITE RESTORATION</u>	PPE Required: <u>Level D</u>

Other Safety Topic(s): Housekeeping, Heavy Equipment Lifting, Cold Stress, Weather Conditions, Noise, Sankes, Ticks, Working near water, Other levels of PPE will be worn when monitoring are exceded.

Meeting Conducted by: Mike Campbell
Joe Walker H & S
NAME (PRINTED)

Michael Campbell
SIGNATURE



Shaw Environmental & Infrastructure, Inc.

TAILGATE SAFETY MEETING

-CONTINUED-

	EMPLOYEE NAME	EMPLOYEE SIGNATURE
1	Steve Carriere	
2	Randy Johnson	<i>Randy Johnson</i>
3	Mitch Coker	
4	Mike Campbell	<i>Mike Campbell</i>
5	Mark Lindsey	
6	Kelvin Skipper	
7	Ernie Duke	<i>Ernie Duke</i>
8	DAN SCHULTZ	<i>Dan Schultz</i>
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Photoionization Detector Calibration Log

Project Name TOWN GUT LANDFILL

Project No. 809401

Date 9-24-02

Calibrated by J. WALKER

Instrument: Mfg/Model/Serial No. PHOTOARC 2020 #84592

Time	Probe Type (eV)	Battery Charged (Y/N)	Calibration Standard	Calibration Standard Concentration (ppm)	Span Setting	Meter Scale Setting	Zeroed (Y/N)	Expected Meter Reading (ppm)	Actual Meter Reading (ppm)
8:15 AM	10.5eV	Y	Isobutylene	100			Y	100	99.0

Comments DURING Well ABANDONMENT



DRUM INVENTORY LOG

DRUM NO. 001
 PROJECT NUMBER 809401
 PAGE 1 OF 1

PROJECT LOCATION Site 12 Indian Head LOGGER JOE WALKER DATE 10-14-02
 PROJECT CONTACT J. Walker SAMPLER JOE WALKER TIME 8:35 AM
 PHONE 301-743-3550 WEATHER Clear, Cool, & Sunny Breezy

DRUM TYPE: FIBER POLY-LINED STEEL POLY STAINLESS STEEL NICKEL
 LD TYPE: RINGTOP CLOSED TOP
 DRUM CONDITION: MEET DOT SPEC. GOOD FAIR POOR
 DRUM SIZE: 110 85 55 42 30 16 10 5 OTHER
 DRUM CONTENTS: VOLUME FULL 3/4 1/2 1/4 <1/4 MT
 OVERPACKED: NO YES Overpack Type: FIBER STEEL POLY

PHYS. STATE					COLOR	CLARITY			LAYER THICKNESS	FIELD ANALYSIS			
L	L	S	G	S	USE STD COLORS	C	C	O	INCHES	pH	SU	PID	ppm
AYER	QUID	LID	EL	LUDGE		LEAR	LOUDY	PAQUE			DOSIMETER	OTHER	
T	X				Black							0.0	
M										DRUM LABELS/MARKINGS			
B										DOT HAZ		UN/NA	

MFG NAME _____
 CHEMICAL NAME _____
 ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA
 MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

RADIATION: POS NEG MREM/HR _____
 DRUM CAT: _____
 ANALYSTS: _____
 DATE PERFORMED: _____

PHYS. STATE					COLOR	CLARITY			WATER SOL	REACT	pH	HEX. SOL	PER	OXID	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	LAYER CLASS	
L	L	S	G	S	USE STD COLORS	C	C	O	SOLUBILITY SPSI DENSITY H OR L	A=AIR W=WATER	STD. UNIT	S OR I	+	+	+	+	+	<60°C + OR -	+	-	
AYER	QUID	LID	EL	LUDGE		LEAR	LOUDY	PAQUE													
T																					
M																					
B																					

COMMENTS: _____
 PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____
 DATA REVIEWER: _____ DATA REVIEW DATE: _____
 FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
2				
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DRUM INVENTORY LOG

DRUM NO. 002
 PROJECT NUMBER 809401
 PAGE 1 OF 1

PROJECT LOCATION Site-12 Indian Head LOGGER J. Walker DATE 10-14-02
 PROJECT CONTACT J. Walker SAMPLER J. Walker TIME 8:40 am
 PHONE 301-743-3550 WEATHER Clear, Cool, Sunny Breezy

DRUM TYPE: FIBER POLY-LINED STEEL POLY STAINLESS STEEL NICKEL
 LID TYPE: RINGTOP CLOSED TOP
 DRUM CONDITION: MEET DOT SPEC. GOOD FAIR POOR
 DRUM SIZE: 110 85 55 42 30 16 10 5 OTHER
 DRUM CONTENTS: VOLUME FULL 3/4 1/2 1/4 <1/4 MT
 OVERPACKED: NO YES Overpack Type: FIBER STEEL POLY

PHYS. STATE					COLOR	CLARITY			LAYER THICKNESS	FIELD ANALYSIS			
L	L	S	G	S	USE STD COLORS	C	C	O	INCHES				
AYERS	QUID	SOLID	GEL	LUDDGE		LEAR	LOUDY	PAQUE					
T	X				BLACK					pH _____ SU PID <u>0.0</u> ppm DOSIMETER _____ OTHER <u>LEL - 0% O2 20.4%</u> <u>CO 0 PPM</u>			
M										DRUM LABELS/MARKINGS			
B										DOT HAZ _____ UN/NA _____			

MFG NAME _____
 CHEMICAL NAME _____
 ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA
 MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

DRUM CAT: _____
 ANALYSTS: _____
 DATE PERFORMED: _____

RADIATION: POS NEG _____ MREM/HR

PHYS. STATE					COLOR	CLARITY			WATER SOL	REACT	pH	HEX. SOL	PER	OXID	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	LAYER CLASS	
L	L	S	G	S	USE STD COLORS	C	C	O	SOLUBILITY SPSI DENSITY H OR L	A=AIR W=WATER	STD. UNIT	S OR I	+	+	+	+	+	<60°C + OR -	+	-	
AYERS	QUID	SOLID	GEL	LUDDGE		LEAR	LOUDY	PAQUE													OR
T																					
M																					
B																					

COMMENTS: _____

PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____

DATA REVIEWER: _____ DATA REVIEW DATE: _____

FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
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DRUM INVENTORY LOG

DRUM NO. 003
 PROJECT NUMBER 809401
 PAGE 1 OF 1

PROJECT LOCATION Site-12 Indian Head LOGGER J WALKER DATE 10-14-02
 PROJECT CONTACT J WALKER SAMPLER J WALKER TIME 8:45 AM
 PHONE 301-743-3550 WEATHER Clear, Cool, Breezy

DRUM TYPE: FIBER POLY-LINED STEEL POLY STAINLESS STEEL NICKEL
 LID TYPE: RINGTOP CLOSED TOP
 DRUM CONDITION: MEET DOT SPEC. GOOD FAIR POOR
 DRUM SIZE: 110 85 55 42 30 16 10 5 OTHER _____
 DRUM CONTENTS: VOLUME _____ FULL 3/4 1/2 1/4 <1/4 MT
 OVERPACKED: NO YES Overpack Type: FIBER STEEL POLY

PHYS. STATE					COLOR	CLARITY			LAYER THICKNESS	FIELD ANALYSIS			
L	L	S	G	S	USE STD COLORS	C	C	O	INCHES	pH	SU	PID	ppm
AYER	LIQ	SOL	GEL	LU		LEAR	LOUDY	PAQUE			DOSIMETER	OTHER	
T		✓			BLACK							0.0	
M										DRUM LABELS/MARKINGS			
B										DOT HAZ _____ UN/NA _____			

MFG NAME _____
 CHEMICAL NAME _____
 ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA

MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

RADIATION: POS NEG _____ MREM/HR

PHYS. STATE	COLOR	CLARITY	WATER SOL	REACT	pH	HEX: SOL	PER	OXID	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	LAYER CLASS
LAYER	USE STD COLORS	CLEAR	SOLUBILITY	A=AIR	STD. UNIT	S OR I	+	+	+	+	+	<60°C	+	
LIQUID		CLOUDY	SPSI	W=WATER			-	-	-	-	-	+ OR -	OR -	
SOLID		OPAQUE	DENSITY											
GEL			H OR L											
SLUDGE														
T														
M														
B														

COMMENTS: _____

PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____

DATA REVIEWER: _____ DATA REVIEW DATE: _____

FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
2				
3				



DRUM INVENTORY LOG

DRUM NO. 004
 PROJECT NUMBER 809401
 PAGE 1 OF 1

PROJECT LOCATION Site-12 INDIAN HEAD LOGGER JWALKER DATE 10-14-02
 PROJECT CONTACT JWALKER SAMPLER JWALKER TIME 8:42 AM
 PHONE 301-743-3550 WEATHER Clear, Cool, Breezy

DRUM TYPE: FIBER POLY-LINED STEEL POLY STAINLESS STEEL NICKEL
 LID TYPE: RINGTOP CLOSED TOP
 DRUM CONDITION: MEET DOT SPEC. GOOD FAIR POOR
 DRUM SIZE: 110 85 55 42 30 16 10 5 OTHER
 DRUM CONTENTS: VOLUME FULL 3/4 1/2 1/4 <1/4 MT
 OVERPACKED: NO YES Overpack Type: FIBER STEEL POLY

L A Y E R S	PHYS. STATE				COLOR USE STD COLORS	CLARITY			LAYER THICKNESS INCHES	FIELD ANALYSIS				
	L	S	G	S		C	C	O		pH	SU	PID	ppm	
T	<input checked="" type="checkbox"/>			<input checked="" type="checkbox"/>				<input checked="" type="checkbox"/>						
M														
B														

OTHER LEL - 0% O₂ - 20.5%
CO - 0 PPM

MFG NAME _____
 CHEMICAL NAME _____
 ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA
 MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.
 RADIATION: POS NEG _____ mREM/HR
 DRUM CAT: _____
 ANALYSTS: _____
 DATE PERFORMED: _____

L A Y E R S	PHYS. STATE				COLOR USE STD COLORS	CLARITY			WATER SOL SOLUBILITY SPSI DENSITY H OR L	REACT A=AIR W=WATER	pH STD. UNIT	HEX. SOL S OR I	PER OXID + OR -	CN + OR -	SUL + OR -	BIEL- STEIN + OR -	FLASH POINT <60°C + OR -	PCBs (25ppm) + OR -	LAYER CLASS
	L	S	G	S		C	C	O											
T																			
M																			
B																			

COMMENTS: _____
 PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____
 DATA REVIEWER: _____ DATA REVIEW DATE: _____
 FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
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DRUM INVENTORY LOG

DRUM NO. 005
 PROJECT NUMBER 509401
 PAGE 1 OF 1

PROJECT LOCATION Site-12 Indian Head LOGGER J. Walker DATE 10-14-02
 PROJECT CONTACT J Walker SAMPLER J Walker TIME 8:40 AM
 PHONE 301-748-3550 WEATHER Clear, Cool Breezy

DRUM TYPE: FIBER POLY-LINED STEEL POLY STAINLESS STEEL NICKEL
 LID TYPE: RINGTOP CLOSED TOP
 DRUM CONDITION: MEET DOT SPEC. GOOD FAIR POOR
 DRUM SIZE: 110 85 55 42 30 16 10 5 OTHER
 DRUM CONTENTS: VOLUME FULL 3/4 1/2 1/4 <1/4 MT
 OVERPACKED: NO YES Overpack Type: FIBER STEEL POLY

PHYS. STATE					COLOR	CLARITY			LAYER THICKNESS	FIELD ANALYSIS			
L	L	S	G	S	USE STD COLORS	C	C	O	INCHES				
AYERS	QUID	SOLID	GEL	SLUDGE		LEAR	LOUDY	PAQUE		pH	SU	PID	
										DOSIMETER _____			
										OTHER <u>LEL - 0% O₂ 20.4%</u>			
										<u>CO - 0 PPM</u>			
										DRUM LABELS/MARKINGS			
										DOT HAZ _____ UN/NA _____			

MFG NAME _____
 CHEMICAL NAME _____
 ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA

MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

DRUM CAT: _____
 ANALYSTS: _____
 DATE PERFORMED: _____

RADIATION: POS NEG _____ MREM/HR

PHYS. STATE					COLOR	CLARITY			WATER SOL	REACT	pH	HEX. SOL	PER	OXID	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	LAYER CLASS	
L	L	S	G	S	USE STD COLORS	C	C	O	SOLUBILITY SPSI DENSITY H OR L	A=AIR W=WATER	STD. UNIT	S OR I	+	+	+	+	+	<60°C + OR -	+	OR -	
AYERS	QUID	SOLID	GEL	SLUDGE		LEAR	LOUDY	PAQUE													

COMMENTS: _____

PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____

DATA REVIEWER: _____ DATA REVIEW DATE: _____

FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
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3				



DRUM INVENTORY LOG

DRUM NO. 006
 PROJECT NUMBER 809401
 PAGE 1 OF 1

PROJECT LOCATION Site 12 - Indian Head LOGGER J Walker DATE _____
 PROJECT CONTACT J Walker SAMPLER J Walker TIME 8:45 AM
 PHONE 301-743-3550 WEATHER Clear, Cool, Sunny Breezy

DRUM TYPE: FIBER POLY-LINED STEEL POLY STAINLESS STEEL NICKEL
 LID TYPE: RINGTOP CLOSED TOP Crushed
 DRUM CONDITION: MEET DOT SPEC. GOOD FAIR POOR
 DRUM SIZE: 110 85 55 42 30 16 10 5 OTHER _____
 DRUM CONTENTS: VOLUME FULL 3/4 1/2 1/4 <1/4 MT
 OVERPACKED: NO YES Overpack Type: FIBER STEEL POLY

L A Y E R S	PHYS. STATE				COLOR	CLARITY			LAYER THICKNESS INCHES	FIELD ANALYSIS			
	L	S	G	S		C	C	O		pH	SU	PID	ppm
T	<input checked="" type="checkbox"/>				Green							0.0	
M													
B													

OTHER LEL-0% O₂ 20.4%
CO - 0 PPM

MFG NAME _____
 CHEMICAL NAME _____
 ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA
 MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.
 DRUM CAT: _____
 ANALYSTS: _____
 DATE PERFORMED: _____

RADIATION: POS NEG MREM/HR _____

L A Y E R S	PHYS. STATE				COLOR	CLARITY			WATER SOL	REACT	pH	HEX. SOL	PER	OXID	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	LAYER CLASS
	L	S	G	S		C	C	O												
T	<input checked="" type="checkbox"/>				Green															
M																				
B																				

COMMENTS: _____
 PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____
 DATA REVIEWER: _____ DATA REVIEW DATE: _____
 FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
2				
3				



DRUM INVENTORY LOG

DRUM NO. 007
 PROJECT NUMBER 809401
 PAGE 1 OF 1

PROJECT LOCATION Site-12 Indian Head LOGGER J. Walker DATE 10-14-02
 PROJECT CONTACT J. Walker SAMPLER J. Walker TIME 8:45 AM
 PHONE 301-743-3550 WEATHER Clear, Cool, Breezy

DRUM TYPE: FIBER POLY-LINED STEEL POLY STAINLESS STEEL NICKEL
 LID TYPE: RINGTOP CLOSED TOP Crushed
 DRUM CONDITION: MEET DOT SPEC. GOOD FAIR POOR
 DRUM SIZE: 110 85 55 42 30 16 10 5 OTHER
 DRUM CONTENTS: VOLUME FULL 3/4 1/2 1/4 <1/4 MT
 OVERPACKED: NO YES Overpack Type: FIBER STEEL POLY

PHYS. STATE						COLOR			CLARITY			LAYER THICKNESS	FIELD ANALYSIS			
L	A	I	S	G	S	USE STD COLORS	C C C	C L O	O P A	I N C	P H	S U	P I D	O 2	C O	P P M
Y	E	R	O	E	L											
T																
M																
B																

MFG NAME _____
 CHEMICAL NAME _____
 ADDITIONAL INFORMATION _____

LABORATORY COMPATABILITY DATA

MARK IF PHYSICAL STATE AND COLOR MATCHES THE ABOVE INFORMATION. IF NOT, STOP ANALYSIS AND NOTIFY PROJECT CONTACT. FURTHER WORK WILL NOT BE PAID FOR.

RADIATION: POS NEG _____ MREM/HR

DRUM CAT: _____
 ANALYSTS: _____
 DATE PERFORMED: _____

PHYS. STATE						COLOR	CLARITY	WATER SOL	REACT	pH	HEX. SOL	PER	OXID	CN	SUL	BIEL-STEIN	FLASH POINT	PCBs (25ppm)	LAYER CLASS
L	A	I	S	G	S	USE STD COLORS	C C C	O P A	S O L	A = A I R W = W A T E R	S T D. U N I T	S O R	+	+	+	+	+	+	+
Y	E	R	O	E	L														
T																			
M																			
B																			

COMMENTS: _____

 PCB CONC. _____ PPM FLASH POINT _____ °C COMPATABILITY COMP. BULK # _____
 DATA REVIEWER: _____ DATA REVIEW DATE: _____
 FIELD REVIEWER: _____ FIELD REVIEW DATE: _____

TRANSFER NUMBER	TRANSFERS RELINQUISHED BY	TRANSFERS ACCEPTED BY	DATE	TIME
1				
2				
3				

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR CLEARING AND GRUBBING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Clearing, Grubbing	Struck By/Against Heavy Equipment	<ul style="list-style-type: none"> Isolate equipment swing areas Make eye contact with operators before approaching equipment Understand and review hand signals 	Hard hat, safety glasses, steel toe work boots	
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear walkways, work areas of equipment, tools, vegetation, and debris Clean mud and grease from boots before mounting equipment; watch for slippery/unstable ground when dismounting equipment Exit equipment slowly and maintain three point contact 		
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Use dozer or trackhoe to move logs and brush 		
	UXO	<ul style="list-style-type: none"> UXO avoidance monitoring will be conducted by a UXO specialist prior to beginning activities If UXO is encountered, cease all activities, mark the location, and notify the SS 		
	Eye Injuries	<ul style="list-style-type: none"> Wear face shield, goggles when operating powered clearing/grubbing equipment 	Face shield, goggles	
	Sharp Objects	<ul style="list-style-type: none"> Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Maintain all hand and power tools in a safe condition Keep guards in place during use Close doors, windows on heavy equipment to prevent injuries from tree branches and other vegetation 	Leather gloves	
	Insect/Snake Bites	<ul style="list-style-type: none"> Review injury potential and types of snakes with workers Avoid insect nests areas, likely habitats of snakes outside work areas Emphasize The Buddy System where such injury potential exists Use insect repellent, wear PPE to protect against sting/bite injuries 	Tyvek coveralls, duct tape bottom of coveralls to boots	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR CLEARING AND GRUBBING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Clearing, Grubbing (Cont.)	Contact Dermatitis	<ul style="list-style-type: none"> Wear PPE to avoid skin contact with contaminated soil, plants, or other skin irritants Identify and review poisonous plants with workers Apply protective cream/lotion to exposed skin to prevent poison ivy or similar reactions 	Tyvek coveralls, duct tape bottom of coveralls to boots	
	Operations of Power Clearing Tools (brush saws, weed whackers)	<ul style="list-style-type: none"> Wear eye, face, hand, and hearing protection when operating power clearing equipment Shut-off/idle power tools walking between work areas Store flammable liquids in well ventilated areas, away from work areas Shut off equipment during refueling Prohibit smoking while operating clearing equipment Provide ABC (or equivalent) fire extinguishers for all work 	Face shield, goggles, cloth gloves, ear plugs, steel toe work boots	
	High Noise Levels	<ul style="list-style-type: none"> Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 Provide fluids to prevent worker dehydration 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
	Unstable Ground; Rollover of Equipment	<ul style="list-style-type: none"> Identify path of travel before moving dozer or trackhoe and inspect area for stable ground Clearly mark any unstable areas 		
	Walking on Machine Tracks	<ul style="list-style-type: none"> Avoid walking on machine tracks whenever possible; clean tracks for safe walking/working surfaces Observe track surfaces when walking, move cautiously on uneven, slippery surfaces Avoid sudden awkward motions (pulling/jerking fuel hoses) 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR CLEARING AND GRUBBING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Clearing, Grubbing (Cont.)	Adverse Weather Conditions: - Lightning - High winds - Driving rain	<ul style="list-style-type: none"> • Monitor weather forecast • Shut down operations should severe weather conditions exist 		
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> • Excavator/trackhoe and/or dozer • Power clearing tools (brush saws, weed wackers) 		<ul style="list-style-type: none"> • Daily equipment inspections as per manufacturers' requirements • Inspect all safety equipment (fire extinguishers, first aid kits and eye washes) 	<ul style="list-style-type: none"> • Review AHA with all task personnel • Review any potential site contaminants • Review operations/safety manuals for all equipment utilized • Review potential hazardous plants and insects/animals 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SITE PREPARATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Equipment/ Facility Setup	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways work areas of equipment, tools, vegetation, and debris • Exit equipment slowly and maintain three point contact • Mark, identify, or barricade other obstructions 		
	Spills	<ul style="list-style-type: none"> • Clean up spills before initiating maintenance • Review maintenance procedures for safety practices 		
	Struck By/Against Heavy Equipment	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Isolate equipment swing areas • Make eye contact with operators before approaching equipment • Understand and review hand signals • Follow hand signals of ground workers for equipment manipulation when placing/loading equipment into bucket • Step away from equipment when bucket adjustments are made • Do not attempt verbal communication in high noise backgrounds 	Warning vests, hard hat, safety glasses, steel toe work boots	
	Pinch Points	<ul style="list-style-type: none"> • Review equipment adjustment procedures, identify pinch points • Isolate/block pinch points to limit motion when inserting pins, fasteners, closing tackles 	Leather gloves	
	Equipment failure	<ul style="list-style-type: none"> • Perform daily maintenance inspections on operating equipment 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SITE PREPARATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Equipment/ Facility Setup (Cont.)	Electrical Shock	<ul style="list-style-type: none"> • De-energize or shut off utility lines at their source before work begins • Use double insulated or properly grounded electric power-operated tools • Maintain tools in a safe condition • Provide an equipment-grounding conductor program or employ ground-fault circuit interrupters • Use qualified electricians to hook up electrical circuits • Inspect all extension cords daily for structural integrity, ground continuity, and damaged insulation • Cover or elevate electric wire or flexible cord passing through work areas to protect from damage • Keep all plugs and receptacles out of water • Use approved water-proof, weather-proof type if exposure to moisture is likely • Inspect all electrical power circuits prior to commencing work • Follow Health and Safety SH315, Control of Hazardous Energy and the Site-Specific Lockout/Tagout/Try Plan 	Lockout/Tagout Devices	Voltage meter or 'Tic' tracer
	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads • Avoid carrying heavy objects above shoulder level • Avoid manual lifting/carrying tasks 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SITE PREPARATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Equipment/ Facility Setup (Cont.)	Sharp Objects	<ul style="list-style-type: none"> Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Maintain all hand and power tools in a safe condition 	Leather gloves	
	Ladders	<ul style="list-style-type: none"> Inspect ladders before use for mud buildup on treads Clean mud from boots before climbing on ladders Follow the three point of contact rule 		
	High Noise Levels	<ul style="list-style-type: none"> Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	Burns Associated with Loading/ Unloading Equipment on Trucks	<ul style="list-style-type: none"> Identify heavy objects for loading that may have hot surfaces Allow objects to cool or cover hot surfaces with non-combustible material to protect workers from burns 		
	Walking on Machine Tracks	<ul style="list-style-type: none"> Avoid walking on machine tracks whenever possible; clean tracks for safe walking/working surfaces Observe track surfaces when walking, move cautiously on uneven, slippery surfaces Avoid sudden awkward motions (pulling/jerking fuel hoses) 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Provide fluids to prevent worker dehydration Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Forklifts/hand carts Ladders Hand Tools 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers' requirements Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP Review operations/safety manuals for all equipment utilized 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SITE SURVEY ACTIVITIES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Survey of Site	Struck By/Against Motor Vehicles/ Operating Equipment	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Avoid/isolate survey activities in high traffic areas, warehouse ship/receive areas • Make eye contact with operators before approaching/crossing high traffic areas • Understand and review hand signals • Emphasize The Buddy System where injury potential exists • Do not attempt verbal communication in high noise backgrounds 	Hard hat, safety glasses, steel toe work boots	
	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of equipment and tools • Mark, identify, or barricade other obstructions 		
	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads • Warm up muscles before engaging in manual lifting activities • Avoid actions/activities that contribute to overexertion • Review lifting posture/techniques regularly at safety meetings 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SITE SURVEY ACTIVITIES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Survey of Site (Cont.)	Sharp Objects	<ul style="list-style-type: none"> Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Maintain all hand and power tools in a safe condition Keep guards in place during use Close doors, windows on heavy equipment to prevent injuries from tree branches and other vegetation 	Leather gloves	
	Insect/Animal Bites	<ul style="list-style-type: none"> Review injury potential with workers Avoid insect nests areas, habitats outside work areas Emphasize The Buddy System where such injury potential exists Use insect repellent to protect against sting injuries Wear PPE and tape joints to keep insects away from the skin Use protective insect repellents containing DEET to prevent insect bites Check limbs/body for insects/insect bites during decontamination and/or shower 	Tyvek coveralls, duct tape bottom of coveralls to boots or latex boot covers when there is a potential for insect/animal bite	
	Contact Dermatitis/ Poison Ivy	<ul style="list-style-type: none"> Wear long sleeve shirts/trousers to avoid skin contact with plants, or other skin irritants Identify and review poisonous plants with workers Avoid unnecessary clearing of plant/vegetation areas Cover vegetation with plastic (visqueen) where survey position raises exposure potential Apply protective cream/lotion to exposed skin to prevent poison ivy or similar reactions Identify workers who are known to contract poison ivy 	Tyvek coveralls, duct tape bottom of coveralls to boots or latex boot covers when there is a potential for contact dermatitis/poison ivy	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SITE SURVEY ACTIVITIES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Survey of Site (Cont.)	Horseplay	<ul style="list-style-type: none"> Prohibit horseplay on all project sites Review rules about horseplay with subcontractors Do not respond to horseplay started by others 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Monitor for Heat Stress in accordance with Health and Safety Procedure HS400 Provide fluids to prevent worker dehydration 		Meteorological Equipment
	UXO	<ul style="list-style-type: none"> UXO avoidance monitoring will be conducted by a UXO specialist prior to beginning activities If UXO is encountered, cease all activities, mark the location, and notify the SS 		
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Survey equipment (rod, etc.) Warning vests 		<ul style="list-style-type: none"> Equipment inspections Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review SSHASP Review site-specific AHA with all task personnel 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR INSTALLATION OF EROSION CONTROLS				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Silt Fence Installation	Sharp Objects	<ul style="list-style-type: none"> Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Use shears, opposed to knives, to cut the silt fence 	Leather gloves	
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear walkways, work areas of equipment, tools, and debris Mark, identify, or barricade other obstructions 		
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. Maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads 		
	Eye Injuries	<ul style="list-style-type: none"> Wear face shield, goggles when operating powered clearing/grubbing equipment 	Goggles and face shield	
	Overexertion	<ul style="list-style-type: none"> Use the right tool for the task at hand Avoid actions/activities that produce overexertion 		
	Horseplay	<ul style="list-style-type: none"> Prohibit horseplay at all project sites Review rules about horseplay with subcontractors supervisors and workers Remind workers not to respond/participate in horseplay started by others 		
	Allergic Reaction	<ul style="list-style-type: none"> Review allergy hazards with work crew Identify workers with allergies Review work assignments PPE upgrades 	Tyvek coveralls, duct tape bottom of coveralls to boots; latex gloves, if required	
	Insect Stings	<ul style="list-style-type: none"> Avoid hand mowing/clearing in dense brush areas, suspected areas of stinging insects 	Leather gloves	
	UXO	<ul style="list-style-type: none"> UXO avoidance monitoring will be conducted by a UXO specialist prior to beginning activities If UXO is encountered, cease all activities, mark the location, and notify the SS 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR INSTALLATION OF EROSION CONTROLS				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Silt Fence Installation (Cont.)	Contact with Poison Ivy	<ul style="list-style-type: none"> Identify workers who are known to contract poison ivy Wear PPE and tape joints to keep poison ivy irritants/plant matter away from skin Use protective creams and wash with poison ivy preventing soaps when working in suspected exposure area 	Long sleeve shirts, Tyvek coveralls, leather gloves	
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Monitor for Heat Stress in accordance with Health and Safety Procedure HS400 Provide fluids to prevent worker dehydration 		
Rock Check Dams Installation	Struck By/Against Heavy Equipment	<ul style="list-style-type: none"> Wear reflective warning vests when exposed to vehicular traffic Isolate equipment swing areas Make eye contact with operators before approaching equipment Understand and review hand signals Follow hand signals of ground workers for equipment manipulation when placing/loading equipment into bucket Step away from equipment when bucket adjustments are made Do not attempt verbal communication in high noise backgrounds 	Warning vests, hard hat, safety glasses, steel toe work boots	
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. Maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads Avoid carrying heavy objects above shoulder level Avoid manual lifting/carrying tasks 		
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Silt fence Posts Shovels Heavy equipment 		<ul style="list-style-type: none"> Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR WELL ABANDONMENT				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Equipment	Air Monitoring Devices
Well Abandonment	Sharp Objects	<ul style="list-style-type: none"> • Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects • Maintain all hand and power tools in a safe condition • Keep guards in place during use • Observe work area and location of other personnel before lifting or moving objects with sharp edges 	Leather gloves	
	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads • Warm up muscles before engaging in manual lifting activities • Review lifting posture/techniques regularly at safety meetings 		
	Caught In/ Between Moving Parts of Mixer for Grout	<ul style="list-style-type: none"> • Identify and understand parts of equipment which may cause crushing, pinching, rotating or similar motions • Assure guards are in place to protect from these parts of equipment during operation • Provide and wear proper work gloves when the possibility of crush, pinch, or other injury may be caused by moving/stationary edges or objects • Maintain all equipment in a safe condition • Keep all guards in place during use • De-energize and lockout machinery before maintenance or service 		
	Horseplay	<ul style="list-style-type: none"> • Prohibit horseplay on all project sites • Review rules about horseplay with subcontract supervisors and workers • Remind workers not to respond/participate in horseplay started by others 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR WELL ABANDONMENT				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Equipment	Air Monitoring Devices
Well Abandonment (Cont.)	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of equipment, drilling overburden, debris and other materials • Mark, identify, or barricade other obstructions 		
	Inhalation and Contact with Grout	<ul style="list-style-type: none"> • Provide workers proper skin, eye and respiratory protection based on the exposure hazards present • Review hazardous properties of site contaminants with workers before operations begin 	Nitrile gloves, goggles, face shield	
	Insect Stings	<ul style="list-style-type: none"> • Avoid hand mowing/clearing in dense brush areas, suspected areas of stinging insects 	Leather gloves	
	Contact with Poison Ivy	<ul style="list-style-type: none"> • Identify workers who are known to contract poison ivy • Wear PPE and tape joints to keep poison ivy irritants/plant matter away from skin • Use protective creams and wash with poison ivy preventing soaps when working in suspected exposure area 	Long sleeve shirts, Tyvek coveralls, leather gloves	
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> • Grout mixer • Grout • Hand tools 		<ul style="list-style-type: none"> • Daily equipment inspections as per manufacturers' requirements • Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> • Review AHA with all task personnel • Review SSHASP • Review MSDS for grout 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR EQUIPMENT DECONTAMINATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Equipment Decontamination	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of equipment, vegetation, tools and debris • Mark, identify, or barricade other obstructions • Clean heavy objects of oil/grease or other slippery contamination before attempting to lift/remove • Wear gloves with grip improving surfaces for handling large, slippery objects • Clean up spills or water accumulation in walkways 		
	Struck By/Against Heavy Equipment, Protruding Objects	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Isolate equipment swing areas • Make eye contact with operators before approaching equipment • Understand and review hand signals • Step away from equipment when bucket adjustments are made • Do not attempt verbal communication in high noise backgrounds 	Warning vests, hard hat, safety glasses, goggles and face shield, steel toe work boots	
	Inhalation and Contact with Hazardous Substances and Splashes	<ul style="list-style-type: none"> • Provide workers proper skin, eye and respiratory protection based on the exposure hazards present • Review hazardous properties of site contaminants with workers before operations begin • Wear hard hats, safety glasses with side shields, or goggles with splash shields and steel-toe safety boots 	PVC rain suit or poly-coated Tyvek coveralls, inner sample gloves, outer nitrile gloves, latex boot covers, full face shield and goggles	
	Burns	<ul style="list-style-type: none"> • Wear proper gloves, face shield/safety goggles, shin and toe guards, and splash suits to protect workers from skin burns and injury when operating laser (high pressure washers) • Tape gloves to PPE sleeves to lessen the possibility of hot water entering gloves • Use hand tools to loosen connections and position body to avoid pressure discharge • Wear shin and toe guards to protect from burns, lacerations and similar injuries 	Goggles and face shield, shin and toe guards	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR EQUIPMENT DECONTAMINATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Equipment Decontamination (Cont.)	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads • Avoid actions/activities that contribute to overexertion • Warm up muscles before engaging in manual lifting activities • Review lifting posture/techniques regularly at safety meetings 		
	Sharp Objects/Cuts and Punctures	<ul style="list-style-type: none"> • Wear cut resistant work gloves when the possibility of injury may be caused by sharp edges/objects or working with hand tools • Guard or pad metal edges of objects frequently used (access panels, etc.) or manipulated/ bypassed during maintenance • Position heavy objects to avoid manipulation while cleaning • Get assistance and dry glove surfaces to improve grip during object manipulation while cleaning 	Leather gloves	
	High Noise Levels	<ul style="list-style-type: none"> • Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	Repetitive Strains	<ul style="list-style-type: none"> • Rotate job tasks on high vibration equipment • Report equipment that produces high vibration for inspection and maintenance • Wear vibration reducing gloves 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR EQUIPMENT DECONTAMINATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Equipment Decontamination (Cont.)	Strains and Sprains	<ul style="list-style-type: none"> • Maintain a safe stance and body position operating pressurized equipment • Avoid rushing 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> • Monitor for Heat Stress in accordance with Health and Safety Procedure HS400 • Provide fluids to prevent worker dehydration 		Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> • Pressure washer 		<ul style="list-style-type: none"> • Equipment inspections • Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> • Review SSHASP • Review site-specific AHA with all task personnel • Review operation manuals for the pumps and related equipment 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR DEWATERING ACTIVITIES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Dewatering Activities (Beaver Dam Removal and Weir Operations)	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of equipment, tools, construction debris, and other materials • Mark, identify, or barricade other obstructions 		
	Sprains and Strains	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads • Control pulling, placement of liner cover materials 		
	Struck By/Against Heavy Equipment, Protruding Objects	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Isolate equipment swing areas • Make eye contact with operators before approaching equipment • Barricade or enclose the work area • Restrict entry to the work area to authorized personnel only during construction activities • Wear hard hats, safety glasses with side shields, and steel-toe safety boots • Understand and review hand signals 	Warning vests, hard hat, safety glasses, steel toe work boots	
	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR DEWATERING ACTIVITIES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Dewatering Activities (Beaver Dam Removal and Weir Operations) (Cont.)	High Noise Levels	<ul style="list-style-type: none"> Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 Provide fluids to prevent worker dehydration 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Loader or other heavy equipment to remove beaver dam 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers' requirements Inspect all safety equipment (fire extinguishers, first aid kits and eye washes) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP Review potential hazardous plants and insects/animals 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL EXCAVATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Excavation of Soil	Underground/ Overhead Utilities	<ul style="list-style-type: none"> Identify all utilities around the site before work commences Cease work immediately if unknown utility markers are uncovered Use manual excavation within 3 feet of known utilities Utility clearance shall conform with 29 CFR 1926.955 (high voltage >700 kV) 15 feet phase to ground clearance; 31 feet phase to phase clearance 		
	Inhalation and Contact with Hazardous Substances	<ul style="list-style-type: none"> Provide workers proper skin, eye and respiratory protection based on the exposure hazards present Review hazardous properties of site contaminants with workers before operations begin Wear hard hats, safety glasses with side shields, or goggles with splash shields and steel-toe safety boots Apply water spray to road surfaces to minimize/eliminate fugitive dust 	Tyvek coveralls, latex or rubber overboots, inner cotton glove liners (based on weather) or inner sample gloves and outer nitrile gloves	PID, LEL/O ₂ , and vinyl chloride detector tubes, as necessary
	Struck By/Against Heavy Equipment	<ul style="list-style-type: none"> Wear reflective warning vests when exposed to vehicular traffic Isolate equipment swing areas Make eye contact with operators before approaching equipment Understand and review hand signals Step away from equipment when bucket adjustments are made Do not attempt verbal communication in high noise backgrounds Park equipment in areas where operator can see clearly to dismount equipment 		
	High Noise Levels	<ul style="list-style-type: none"> Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL EXCAVATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Excavation of Soil (Cont.)	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of equipment, vegetation, tools, and debris • Mark, identify, or barricade other obstructions • Exit equipment slowly and maintain three point contact • Clean boot soles before climbing on equipment • Watch footing on the side of the embankment • Exit equipment slowly and maintain three point contact 		
	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Avoid carrying heavy objects above shoulder level • Warm up muscles before engaging in manual lifting 	Warning vests, hard hat, safety glasses, steel toe work boots	
	UXO	<ul style="list-style-type: none"> • UXO avoidance monitoring will be conducted by a UXO specialist prior to beginning activities • If UXO is encountered, cease all activities, mark the location, and notify the SS 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> • Provide fluids to prevent worker dehydration • Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated Clothing (subject to ambient temperature)	Meteorological Equipment
	Struck/Struck By	<ul style="list-style-type: none"> • Use the right tool for the task at hand • Maintain personal balance when performing manual excavation • Concentrate on the work task being performed 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL EXCAVATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Excavation of Soil (Cont.)	Overexertion	<ul style="list-style-type: none"> Use the right tool for the task at hand Avoid actions/activities that produce overexertion 		
	Horseplay	<ul style="list-style-type: none"> Prohibit horseplay on all project sites Review rules about horseplay with subcontract supervisors and workers Remind workers not to respond/participate in horseplay started by others 		
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Excavator Shovels, probes Dump trucks PID LEL/O₂ and vinyl chloride detector tubes, as necessary 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers' requirements Excavation inspection/permit Inspect all safety equipment (fire extinguishers, first aid kits and eye washes) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP Review operations/safety manuals for all equipment utilized Review site-specific chemical hazards 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR DRAINAGE CHANNEL				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Equipment	Air Monitoring Devices
Installation of Drainage Channel	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of vegetation, equipment, tools, debris, excavated material • Mark, identify, or barricade other obstructions • Wear rubber boots in areas of standing water, mud, marsh • Use three point contact when ascending/ descending heavy equipment • Park heavy equipment on level ground to avoid potential sprains/strains when ascending/ descending 		
	Struck By/Against Heavy Equipment, Flying Debris, Protruding Objects	<ul style="list-style-type: none"> • Use reflective warning vests, caution flags when exposed to vehicular traffic • Place barricades to isolate equipment swing areas • Isolate areas under suspended loads • Make eye contact with operators before approaching equipment • Barricade or enclose the work area • Restrict entry to the work area to authorized personnel during work activities • Wear hard hats, safety glasses with side shields, face shields and goggles and steel-toe safety boots at all times • Understand and review hand signals 	Hard hat, goggles and face shield or safety glasses, steel toe work boots	
	Sharp Objects	<ul style="list-style-type: none"> • Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects • Maintain all hand and power tools in a safe condition • Keep guards in place during use 	Leather gloves	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR DRAINAGE CHANNEL				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Equipment	Air Monitoring Devices
Installation of Drainage Channel (Cont.)	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting technique • Avoid sudden movements, jerking motions • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Prohibit running, jumping during geotextile deployment • Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads 		
	High Noise Levels	<ul style="list-style-type: none"> • Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) • Assess noise level with sound level meter if possibility exists that level may exceed 85 dBA TWA 	Ear plugs	Sound Level Meter
	High /Low Ambient Temperature	<ul style="list-style-type: none"> • Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 • Provide fluids to prevent worker dehydration 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
•		•	•	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR LANDFILL REGRADING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Equipment	Air Monitoring Devices
Landfill Regrading	Inhalation and Contact with Hazardous Substances	<ul style="list-style-type: none"> • Provide workers proper skin, eye and respiratory protection based on the exposure hazards present • Review hazardous properties of site contaminants with workers before operations begin • Wear hard hats, safety glasses with side shields, or goggles with splash shields and steel-toe safety boots • Apply water spray to road surfaces to minimize/eliminate fugitive dust 	Tyvek coveralls, latex or rubber overboots, inner cotton glove liners (based on weather) or inner sample gloves and outer nitrile gloves	PID, LEL/O ₂ , and vinyl chloride detector tubes, as necessary
	Struck By/Against Heavy Equipment,	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Isolate equipment swing areas • Make eye contact with operators before approaching equipment • Understand and review hand signals • Step away from equipment when bucket adjustments are made • Do not attempt verbal communication in high noise backgrounds • Park equipment in areas where operator can see clearly to dismount equipment 		
	High Noise Levels	<ul style="list-style-type: none"> • Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways of equipment, vegetation, tools, and debris • Mark, identify, or barricade other obstructions • Exit equipment slowly and maintain three point contact • Clean boot soles before climbing on equipment • Watch footing on the side of the embankment • Exit equipment slowly and maintain three point contact 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR LANDFILL REGRADING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Equipment	Air Monitoring Devices
Landfill Regrading (Cont.)	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Avoid carrying heavy objects above shoulder level • Warm up muscles before engaging in manual lifting 	Warning vests, hard hat, safety glasses, steel toe work boots	
	High /Low Ambient Temperature	<ul style="list-style-type: none"> • Provide fluids to prevent worker dehydration • Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> • Dozer • PID, LEL/O₂ and vinyl chloride detector tubes, as necessary 		<ul style="list-style-type: none"> • Daily equipment inspections as per manufacturers' requirements • Excavation inspection/permit • Inspect all safety equipment (fire extinguishers, first aid kits and eye washes) 	<ul style="list-style-type: none"> • Review AHA with all task personnel • Review SSHASP • Review operations/safety manuals for all equipment utilized • Review site-specific chemical hazards 	

EOD SUPPORT- INDIANHEAD, MD

10/2/02

0700 - MORNING MEETING. REVIEWED WORK PLANS, JOB ASSIGNMENTS AND SAFETY.

0700 - SUPPLIED UXO SUPPORT TO CREW DIGGING AND GRADING. TWO DIFFERENT UNKNOWN ITEMS UNCOVERED. UPON INSPECTION ONE WAS A PIPE, THE OTHER WAS A SECTION OF A HYDRAULIC SYSTEM. DEBRIS UNCOVERED CONSISTED MAINLY OF GLASS, WOOD, CONCRETE, STEEL PIPES AND BARS, TRASH, CLOTHING, TOYS AND FOAM PADDING.

1770 - COMPLETED EOD SUPPORT OPERATIONS FOR THE DAY.

Valerie Sangstaff

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR DECONTAMINATION PAD CONSTRUCTION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Decontamination Pad Construction	Handling Heavy Objects-(i.e. Wood structure)	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads Warm up muscles before engaging in manual lifting activities Avoid actions/activities that contribute to over exertion Review lifting posture/techniques regularly at safety meetings 		
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear walkways, work areas of equipment and tools Mark, identify, or barricade other obstructions Place temporary weights (sand bags) on liner materials if wind conditions are present 		
Decontamination Pad Construction (continued)	Sharp Objects	<ul style="list-style-type: none"> Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Use shears instead of a knife to cut the plastic sheeting. 	Leather gloves	
	Adverse weather conditions	<ul style="list-style-type: none"> Monitor weather forecast Shut down operations should severe weather conditions exist 		
EQUIPMENT REQUIRED		INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	
<ul style="list-style-type: none"> Poly sheeting Wood 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers requirements Inspection of all emergency equipment (i.e.: first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review Site Specific Health and Safety Plan 	

JSA SIGN IN SHEET

TASK Transportation / Disposal Load out

HEALTH & SAFETY OFFICER [Signature]

SUPT: [Signature]

PRINT	SIGN	REPRESENTING	DATE
Mitch Coker	[Signature]	Shaw	10-22-02
Mike Campbell	[Signature]	SHAW	10-22-02
Kelvin L SKIPPER	[Signature]	Shaw	10-22-02
Dennis Gardner	[Signature]	Shaw	10-22-02
MARK Lindsey	[Signature]	SHAW	10-22-02
Ernie Duke	[Signature]	Shaw	10-22-02
Randy Johnson	[Signature]	Shaw	10-22-02
Mitch Coker	[Signature]	Shaw	10-22-02
Kelvin SKIPPER	[Signature]	Shaw	12-12-02
Randy Johnson	[Signature]	Shaw	12-12-02
Ernie Duke	[Signature]	Shaw	12-12-02

Redo
12/12/02
12-12-02



JOB SAFETY ANALYSIS FOR:
TRANSPORTATION AND DISPOSAL

TASK

DATE: 10-22-02 _____ **PAGE 1 OF** _____
NEW X _____
REVISED _____

PROJECT: INDIAN HEAD LANDFILL TOWN GUT LANDFILL

REVIEWED BY: _____ **Joe Walker**

ANALYSIS BY: JOE WALKER

Supervisor _____ **Safety Officer** _____

BREAKDOWN OF BASIC JOB STEPS	POTENTIAL HAZARDS	CRITICAL SAFETY PRACTICES*
Backing up trucks	Hitting other equipment or personnel	use spotter when backing of trucks, use hand signals to stop.. use of mirrors. Wear orange vest.
Material Handling	improper lifting by workers or equip.	Bend knees when lifting, use leg muscle not back muscle if over 60lbs. Get helper
Debri Loadout	Dropping of debri, improper hookup or loading of material.	Wear proper PPE for Loadout, don't stand to close to debri or equipment during lifting to truck bed.
Safe Load	unsecure Load Uneven ground	Make sure that debri is inside truck bed , and tarped before leaving site. Locate truck in flat safe spot. If possible
	Slip, trip, fall Hazards	Check your work area, make sure it is safe to work in.
	Pinch Hazards	Wear proper gloves for job being done.
	Falling debri	Stand away from loadout of material tarp truck before leaving site and drive speed limit at all times
		Depending on loadout size and shape use of tagline mandatory



JOB SAFETY ANALYSIS FOR:
TRANSPORTATION AND DISPOSAL

TASK

DATE: 10-22-02 _____ **PAGE** 1 _____ **OF** _____
NEW X _____
REVISED _____

PROJECT: INDIAN HEAD LANDFILL TOWN GUT LANDFILL

REVIEWED BY: _____ **Joe Walker**

ANALYSIS BY: JOE WALKER

Supervisor _____ **Safety Officer** _____

BREAKDOWN OF BASIC JOB STEPS	POTENTIAL HAZARDS	CRITICAL SAFETY PRACTICES*
Backing up trucks	Hitting other equipment or personnel	use spotter when backing of trucks, use hand signals to stop etc.. use of mirrors. Wear orange vest.
Material Handling	improper lifting by workers or equip.	Bend knees when lifting, use leg muscle not back muscle if over 60lbs. Get helper
Debri Loadout	Dropping of debri, improper hookup or loading of material.	Wear proper PPE for Loadout, don't stand to close to debri or equipment during lifting to truck bed.
Safe Load	unsecure Load Uneven ground	Make sure that debri is inside truck bed , and tarped before leaving site. Locate truck in flat safe spot. If possible
	Slip, trip, fall Hazards	Check your work area, make sure it is safe to work in.
	Pinch Hazards	Wear proper gloves for job being done.
	Falling debri	Stand away from loadout of material tarp truck before leaving site and drive speed limit at all times
		Depending on loadout size and shape use of tagline mandatory

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL COVER SYSTEM INSTALLATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Soil Cover Installation	Inhalation and Contact with Hazardous Substances (first layer only)	<ul style="list-style-type: none"> • Provide workers proper skin, eye and respiratory protection based on the exposure hazards present • Review hazardous properties of site contaminants with workers before operations begin • Wear hard hats, safety glasses with side shields, or goggles with splash shields and steel-toe safety boots • Apply water spray to road surfaces to minimize/eliminate fugitive dust 	Tyvek coveralls, latex or rubber overboots, inner cotton glove liners (based on weather) or inner sample gloves and outer nitrile gloves	PID, LEL/O ₂ , and vinyl chloride detector tubes, as necessary
	Struck By/Against Heavy Equipment	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Isolate equipment swing areas • Make eye contact with operators before approaching equipment • Understand and review hand signals • Step away from equipment when bucket adjustments are made • Do not attempt verbal communication in high noise backgrounds • Park equipment in areas where operator can see clearly to dismount equipment 		
	High Noise Levels	<ul style="list-style-type: none"> • Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways of equipment, vegetation, tools, and debris • Mark, identify, or barricade other obstructions • Exit equipment slowly and maintain three point contact • Clean boot soles before climbing on equipment • Watch footing on the side of the embankment • Exit equipment slowly and maintain three point contact 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SOIL COVER SYSTEM INSTALLATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Soil Cover Installation (Cont.)	Handling Heavy Objects	<ul style="list-style-type: none"> • Observe proper lifting techniques • Obey sensible lifting limits (60 lb. Maximum per person manual lifting) • Avoid carrying heavy objects above shoulder level • Warm up muscles before engaging in manual lifting 	Warning vests, hard hat, safety glasses, steel toe work boots	
	High/Low Ambient Temperature	<ul style="list-style-type: none"> • Provide fluids to prevent worker dehydration • Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> • Dozer • PID, LEL/O₂ and vinyl chloride detector tubes, as necessary 		<ul style="list-style-type: none"> • Daily equipment inspections as per manufacturers' requirements • Excavation inspection/permit • Inspect all safety equipment (fire extinguishers, first aid kits and eye washes) 	<ul style="list-style-type: none"> • Review AHA with all task personnel • Review SSHASP • Review operations/safety manuals for all equipment utilized 	

COLD STRESS

1. Keep body core temperature above 96.8 degrees to avoid hypothermia.
2. Core body temperature below 96.8 degrees will likely result in reduced mental alertness, reduction in decision making, or loss of consciousness with the threat of fatal consequences.
3. Two most prominent effects of exposure to cold temperatures are: frostbite and hypothermia.
4. FROSTBITE- cells of the body freeze restricting blood flow and causing tissue damage.
5. Blood in the fingers or other areas sting, burn itch is because of crystallizing of the blood. Do not rub to try and warm hands or other areas, this can cause tissue damage. Use of lukewarm water is the remedy.
6. SIGNS OF FROSTBITE- slightly flushed skin, then a change to white or grayish blue. Pain is sometimes felt, but is often followed by a cold numb feeling.
7. HYPOTHERMIA- Most severe form of cold stress is a drop of body core temperature, and the body core temperature falls below 95 degrees. When core temperature falls between 89 and 86 degrees consciousness is lost, and below that temperature cardiac arrest can result.
8. SIGNS OF HYPO- shivering, numbness, confusion, weakness, impaired judgement, impaired vision and drowsiness.
9. STAGES ARE: Shivering, apathy lost of consciousness, decreased pulse and breathing and possible death.
10. Shivering is the body trying to warm itself, my making your body shake.

What Adds To Cold Stress:

1. Being very young or old
2. Wet Clothing (sweating) or working in Water
3. Having Wounds or fractures
4. Smoking
5. Alcoholic Beverages
6. fatigue
7. Stress
8. Certain Diseases or Medication
9. Diet

Clothing at 40° Temperature:

1. Insulated suits or Coveralls
2. Wool or Polypropylene socks
3. Insulated gloves and Boots
4. Insulated Head Cover: Such AS - Hard Hat liners, Pull over caps, or Fossil Caps., ear muffs.

Layer of Clothing - Wear thinner lighter clothing next to Body, with heavier clothing layered outside the inner layer.

AVOID OVERDRESSING -

AVOID IN & OUT HEATED ROOMS.

AVOID WET CLOTHES

A TEMP. OF 40° OUTSIDE AIR TEMP. WITH A WIND SPEED OF 10MPH CHANGES THE OUTSIDE CONDITION TO 28° WIND CHILL FACTOR.

Do NOT Touch A metal object if The Air
TEMPERTURE is 20° OR Below, without gloves.

corrected in a timely manner. A variety of physical hazards may be encountered during work activities at this site. Activity Hazard Analyses (AHA) have been developed for each principal activity and identify all major hazards to which employees may be exposed. Hard hats, safety glasses, and steel-toe safety boots are required in all areas where these types of hazards are present. Site-specific hazards and all necessary precautions will be discussed at the daily safety meetings.

4.4.1 Exposure to Cold

With outdoor work in the winter months, the potential exists for hypothermia and frostbite. Several forms of cold stress as well as preventative measures are described in this section of the SSHASP.

4.4.1.1 Cold Stress Conditions and Symptoms

Typical cold weather injuries are included in Table 4-4A, including symptoms and first aid precautions. If cold stress conditions develop, professional medical attention will be sought.

Table 4-4A Cold Weather Injuries		
Cause	Symptoms	First Aid
FROSTBITE		
Freezing of tissue, normally due to exposure below 32 degrees Fahrenheit (°F).	Numbness in affected area. Tingling, blistered, swollen or tender areas. Pale, yellowish waxy-looking skin.	Warm affected area with direct body heat. Consult with medical personnel ASAP. Do not thaw frozen area if treatment will be delayed. Do not massage or rub affected area. Do not wet area or rub with snow or ice.
CHILBLAIN		
Repeated exposure of bare skin for prolonged periods to temperatures 20°F to 60°F (for those not acclimated to cold weather).	Swollen, red skin. Tender, hot skin, usually accompanied by itching.	Warm affected area with direct body heat. Do not massage or rub. Do not wet area or rub with snow or ice. Do not expose affected area to open fire, stove or any other intense heat source.
IMMERSION FOOT (TRENCH FOOT)		
Prolonged exposure of the feet to wet conditions at temperatures between 32°F to 50°F. Inactivity and damp socks (or tightly laced boots that impair circulation) speed onset and severity.	Cold numb feet may progress to hot with shooting pains. Swelling redness and bleeding.	Re-warm feet by exposing them to warm air. Evacuate victim to a medical facility. Do not massage, rub, moisten or expose affected area to extreme heat source.
DEHYDRATION		
Depletion of body fluids.	Dizziness. Weakness.	Replace lost water. Water should be sipped, not gulped. Get medical treatment.
HYPOTHERMIA		
Prolonged cold exposure and body heat loss. May occur at well above freezing, especially when a person is immersed in water.	Lack of shivering. Drowsiness, mental slowness, lack of coordination. Can progress to unconsciousness, irregular heartbeat and death.	Strip off clothing and wrap victim in blankets or a sleeping bag. Get victim to a heated location and medical treatment as soon as possible.

In cold weather, the potential for frostbite exists, especially in body extremities. Personnel will be instructed to pay particular attention to hands, feet, and any exposed skin when dressing. Personnel will be advised to obtain more clothing if they begin to experience loss of sensation due to cold exposure.

4.4.1.2 Monitoring and Preventative Actions

Typical cold stress monitoring and prevention procedures are included in Tables 4-4B and 4-4C, including temperatures to initiate monitoring, protective clothing uses, and administrative practices to prevent or reduce the potential for cold stress related injury/illness. Table 4-4D shows the equivalent chill temperature based on wind speed, as well as the associated danger. For weather conditions below -43 degrees Celsius (°C) or -45°F with no wind and/or similar conditions (Table 4-4E), all work will cease.

Table 4-4B Cold Stress Prevention*		
	Temperature	Preventative Action
1	<61°F	Use thermometer to measure ambient temperature.
2	<40°F	Cold weather protective clothing available; check core body temperature at breaks using oral or ear canal thermometer. Maintain core body temperature above 96.8°F to avoid hypothermia.
3	<30°F	Record ambient temperature and wind speed every 4 hours; compare to wind chill chart when below 19.4°F.
4	<19°F	Provide and use heated warming shelters for work breaks and when cold stress symptoms appear.
5	<10°F	Constant observation of workers, i.e., "buddy system," rest in heated shelters (see work-rest schedule); dry clothing available for change-out; acclimate new workers.
6	<0°F / >5 mile per hour (mph) winds	Obtain medical certification for workers subject to hypothermia risk.
* Based on "1998 ACGIH Threshold Limit Values... for Physical Agents." Note: Refer to wind chill and work/warm-up charts attached.		

Table 4-4C Cold Weather Clothing Cold Weather Clothing Requirements	
1	If wind chill is a factor at a work location, the cooling effect of the wind shall be reduced by shielding the work area or providing employees an outer windbreak layer garment.
2	Extremities, ears, toes, and nose shall be protected from extreme cold by protective clothing.
3	Employees performing light work whose clothing may become wet shall wear an outer layer of clothing which is impermeable to water.
4	Employees performing moderate to heavy work whose clothing may become wet shall wear an outer layer of clothing which is impermeable to water.
5	Outer garments must provide for ventilation to prevent wetting of inner clothing by sweat, or if not possible, a heated shelter for warming/drying clothing, or a change of clothing, shall be provided prior to returning to work in a cold environment.

Protective clothing greatly reduces the possibility of hypothermia in workers. However, personnel will be instructed to wear warm clothing and to stop work to obtain more clothing if they become too cold. Employees will also be advised to change into dry clothes if their clothing becomes wet from perspiration or from exposure to precipitation.

Employees will be instructed to use heated shelters on site, at regular intervals, depending upon the severity of ambient temperatures. Symptoms of cold stress, including heavy shivering, excessive fatigue, drowsiness, irritability, or euphoria necessitate immediate return to the shelter.

Table 4-4D Wind Chill Chart												
Cooling Power of Wind on Exposed Flesh Expressed as Equivalent Temperature (under calm conditions)*												
Estimated Wind Speed (in mph)	Actual Temperature Reading (°F)											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
Calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-24	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-32	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-121
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-51	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
(Wind speeds greater than 40 mph have little additional effect.)	LITTLE DANGER In < hour with dry skin. Maximum danger of false sense of security.				INCREASING DANGER Danger of freezing of exposed flesh within one minute.				GREAT DANGER Flesh may freeze within 30 seconds			
Trenchfoot and immersion foot may occur at any point on this chart												
* Developed by U.S. Army Research Institute of Environmental Medicine, Natick, Massachusetts. (Shaded area) Equivalent chill temperature requiring dry clothing to maintain core body temperature above 36°C (98.6°F) per cold stress TLV.												

Table 4-4E TLVs Work/Warm-up Schedule for Four-Hour Shift*											
Air Temperature Sunny Sky		No Noticeable Wind		5 mph Wind		10 mph Wind		15 mph Wind		20 mph Wind	
°C (appx.)	°F (appx.)	Max. Work Period	No. of Breaks								
-26 to -28	-15 to -19	Normal	1	Normal	1	75 min	2	55 min	3	40 min	4
-29 to -31	-20 to -24	Normal	1	75 min	2	55 min	3	40 min	4	30 min	5
-32 to -34	-25 to -29	75 min	2	55 min	3	40 min	4	30 min	5	Non-emergency work should cease	
-35 to -37	-30 to -34	55 min	3	40 min	4	30 min	5	Non-emergency work should cease			
-38 to -39	-35 to -39	40 min	4	30 min	5	Non-emergency work should cease					
-40 to -42	-40 to -44	30 min	5	Non-emergency work should cease							
≤ -43	≤ -45	Non-emergency work should cease									

* Adapted from Occupational Health and Safety Division, Saskatchewan Department of Labor.



Estimated Wind Speed (in mph)	Actual Temperature Reading (°F)											
	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
	Equivalent Chill Temperature (°F)											
calm	50	40	30	20	10	0	-10	-20	-30	-40	-50	-60
5	48	37	27	16	6	-5	-15	-26	-36	-47	-57	-68
10	40	28	16	4	-9	-24	-33	-46	-58	-70	-83	-95
15	36	22	9	-5	-18	-32	-45	-58	-72	-85	-99	-112
20	32	18	4	-10	-25	-39	-53	-67	-82	-96	-110	-121
25	30	16	0	-15	-29	-44	-59	-74	-88	-104	-118	-133
30	28	13	-2	-18	-33	-48	-63	-79	-94	-109	-125	-140
35	27	11	-4	-20	-35	-51	-67	-82	-98	-113	-129	-145
40	26	10	-6	-21	-37	-53	-69	-85	-100	-116	-132	-148
(Wind speeds greater than 40 mph have little additional effect.)	LITTLE DANGER In < hr with dry skin. Maximum danger of false sense of security			INCREASING DANGER Danger from freezing of exposed flesh within one minute.				GREAT DANGER Flesh may freeze within 30 seconds.				
	Trenchfoot and immersion foot may occur at any point on this chart.											

* Developed by U.S. Army Research Institute of Environmental Medicine, Natick, MA.

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR SITE RESTORATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Site Restoration	Struck By/Against Heavy Equipment, Protruding Objects	<ul style="list-style-type: none"> Wear reflective warning vests when exposed to vehicular traffic Avoid equipment swing areas Make eye contact with operators before approaching equipment Wear hard hats, safety glasses with side shields, or splash/face shields and goggles, and steel-toe safety boots at all times Understand and review hand signals 	Warning vests, hard hat, safety glasses, steel toe work boots	
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear, walkways of equipment, tools, debris, other materials Mark, identify, or barricade other obstructions 		
	High Noise Levels	<ul style="list-style-type: none"> Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) 	Ear plugs	
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. maximum per person for manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Provide fluids to prevent worker dehydration Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 	Insulated clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements		Training Requirements
<ul style="list-style-type: none"> Bobcat or forklift for moving bulky loads Grass seed 		<ul style="list-style-type: none"> Equipment inspections Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 		<ul style="list-style-type: none"> Review SSHASP Review site-specific AHA with all task personnel Review operation manuals for the pumps and related equipment

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR INSTALLATION OF EROSION CONTROL MATTING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Installation of Erosion Control Matting	Sharp Objects	<ul style="list-style-type: none"> Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects Use shears, opposed to knives, to cut the matting (if possible) 	Leather gloves	
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear walkways, work areas of equipment, tools, vegetation and debris Mark, identify, or barricade other obstructions 		
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. Maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads Warm up muscles before engaging in manual lifting activities Avoid actions/activities that contribute to over exertion Review lifting posture/techniques regularly at safety meetings 		
Installation of Erosion Control Matting (continued)	Overexertion	<ul style="list-style-type: none"> Use the right tool for the task at hand Avoid actions/activities that produce overexertion 		
	Allergic Reaction	<ul style="list-style-type: none"> Review allergy hazards with work crew Identify workers with allergies Review work assignments PPE upgrades 	Tyvek coveralls, duct tape bottom of coveralls to boots; latex gloves, if required	
	Insect Stings	<ul style="list-style-type: none"> Avoid hand mowing/clearing in dense brush areas, suspected Areas of stinging insects 	Leather gloves	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR INSTALLATION OF EROSION CONTROL MATTING				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
	Contact with Poison Ivy	<ul style="list-style-type: none"> Identify workers who are known to contract poison ivy Wear PPE and tape joints to keep poison ivy irritants/ plant matter away from skin Use protective creams and wash with poison ivy preventing soaps when working in suspected exposure area 	Long sleeve shirts, Tyvek coveralls, Leather gloves	
Installation of Erosion Control Matting (continued)	High Ambient Temperature	<ul style="list-style-type: none"> Monitor for heat stress in accordance with Health and Safety Procedure # HS400 Provide fluids to prevent worker dehydration 		Meteorological Equipment
EQUIPMENT REQUIRED		INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	
<ul style="list-style-type: none"> Matting 		<ul style="list-style-type: none"> Inspection of all emergency equipment (i.e.: first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review Site Specific Health and Safety Plan 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR ATKINS ROAD EXTENSION MODIFICATION				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Atkins Road Extension Modification	Struck By/Against Heavy Equipment, Protruding Objects	<ul style="list-style-type: none"> Wear reflective warning vests when exposed to vehicular traffic Isolate equipment swing areas Make eye contact with operators before approaching equipment Understand and review hand signals Step away from equipment when bucket adjustments are made Do not attempt verbal communication in high noise backgrounds Park equipment in areas where operator can see clearly to dismount equipment 	Hard hat, goggles and face shield or safety glasses, steel toe work boots	
	Handling Heavy Objects	<ul style="list-style-type: none"> Observe proper lifting techniques Obey sensible lifting limits (60 lb. Maximum per person manual lifting) Use mechanical lifting equipment (hand carts, trucks) to move large, awkward loads 		
	Slips, Trips, Falls	<ul style="list-style-type: none"> Clear walkways, work areas of equipment, tools, debris, and other materials Mark, identify, or barricade other obstructions Use three point contact when ascending/ descending heavy equipment Park heavy equipment on level ground to avoid potential sprains/strains when ascending/ descending 		
	Inhalation and Contact with Dusts	<ul style="list-style-type: none"> Apply water spray to road surfaces to minimize/eliminate fugitive dust 		
	High/Low Ambient Temperature	<ul style="list-style-type: none"> Monitor for Heat/Cold Stress in accordance with Health and Safety Procedures HS400 & HS401 Provide fluids to prevent worker dehydration 	Insulated Clothing (subject to ambient temperature)	Meteorological Equipment
Equipment Required		Inspection Requirements	Training Requirements	
<ul style="list-style-type: none"> Dozer PID, LEL/O₂ and vinyl chloride detector tubes, as necessary 		<ul style="list-style-type: none"> Daily equipment inspections as per manufacturers' requirements Excavation inspection/permit Inspection of all emergency equipment (i.e., first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> Review AHA with all task personnel Review SSHASP Review operations/safety manuals for all equipment utilized 	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR STABILIZED CONSTRUCTION ENTRANCES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Stabilized Construction Entrances	Struck By/ Against Heavy Equipment	<ul style="list-style-type: none"> • Wear reflective warning vests when exposed to vehicular traffic • Obey posted speed limits • Isolate equipment swing areas • Make eye contact with operators before approaching equipment • Understand and review hand signals • Exit equipment slowly and maintain three point contact • Report minor incidents to site supervision • Park equipment in areas where operator can see clearly to dismount equipment • Step away from equipment when bucket adjustments are made • Do not attempt verbal communication in high noise backgrounds • Follow hand signals of ground workers for equipment manipulation when placing/loading equipment into loader bucket. 	Warning vests, Hard hat, Safety glasses, Steel toe work boots	
Stabilized Construction Entrances (continued)	Walking on machine tracks	<ul style="list-style-type: none"> • Avoid walking on machine tracks whenever possible; clean tracks for safe walking/working surfaces • Observe track surfaces when walking, move cautiously on uneven, slippery surfaces • Avoid sudden awkward motions (pulling/jerking fuel hoses) 		
	High Noise Levels	<ul style="list-style-type: none"> • Use hearing protection when exposed to excessive noise levels (greater than 85 dBA over an 8-hour work period) • Assess noise level with sound level meter if possibility exists that level may exceed 85dBA 		

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR STABILIZED CONSTRUCTION ENTRANCES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
		TWA		
	Slips, Trips, Falls	<ul style="list-style-type: none"> • Clear walkways, work areas of equipment and tools • Mark, identify, or barricade other obstructions 		
Stabilized Construction Entrances (continued)	Sharp Objects	<ul style="list-style-type: none"> • Wear cut resistant work gloves when the possibility of lacerations or other injury may be caused by sharp edges or objects • Use shears instead of a knife to cut the plastic sheeting. 	Leather gloves	
	Allergic Reaction	<ul style="list-style-type: none"> • Review allergy hazards with work crew • Identify workers with allergies • Review work assignments PPE upgrades 	Tyvek coveralls, duct tape bottom of coveralls to boots; latex gloves, if required	
	Insect Stings	<ul style="list-style-type: none"> • Avoid hand mowing/clearing in dense brush areas, suspected Areas of stinging insects 	Leather gloves	
	Contact with Poison Ivy	<ul style="list-style-type: none"> • Identify workers who are known to contract poison ivy • Wear PPE and tape joints to keep poison ivy irritants/ plant matter away from skin • Use protective creams and wash with poison ivy preventing soaps when working in suspected exposure area 	Long sleeve shirts, Tyvek coveralls, Leather gloves	

**Attachment B
Activity Hazard Analyses**

ACTIVITY HAZARD ANALYSIS FOR STABILIZED CONSTRUCTION ENTRANCES				
Task Breakdown	Potential Hazards	Critical Safety Practices	Personal Protective Clothing and Equipment	Monitoring Devices
Stabilized Construction Entrances (continued)	Adverse weather conditions	<ul style="list-style-type: none"> • Monitor weather forecast • Shut down operations should severe weather conditions exist 		
EQUIPMENT REQUIRED		INSPECTION REQUIREMENTS	TRAINING REQUIREMENTS	
<ul style="list-style-type: none"> • Loader • Geotextile • Aggregate 		<ul style="list-style-type: none"> • Daily equipment inspections as per manufacturers requirements • Inspection of all emergency equipment (i.e.: first aid kits, fire extinguishers) 	<ul style="list-style-type: none"> • Review AHA with all task personnel • Review Site Specific Health and Safety Plan 	



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ATTACHMENT 2

COPY

PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD TOWN GULL LANDFILL DATE 9-24-02

BUSINESS LINE: D.O.D. PROJECT NAME/NUMBER: 809401
PROGRAM MANAGER: ROLAND MONRAG PROJECT MANAGER: D. PRINGLE
GENERAL PROJECT DESCRIPTION: SITE 12 LANDFILL
SITE ACTIVITIES AT TIME OF INSPECTION: CLEARING, SURVEY
DEWATER POND, SILK FENCE INSTALL

INTERVIEWED EMPLOYEE: RANDY JOHNSON
SAFETY ISSUE: SAFETY VEST FOR ALL WORKERS
CORRECTIVE ACTION: AT TAILGATE BRING UP THAT OPERATORS
GETTING OFF MACHINES MUST HAVE VEST ON.
ASSIGNED TO: RANDY JOHNSON FOLLOW-UP DATE: 9-25-02
CORRECTION VERIFIED BY: STEVE CORRIE DATE: 9-25-02

INTERVIEWED EMPLOYEE: MIKE CAMPBELL
SAFETY ISSUE: LEATHER GLOVES FOR WORKERS
CORRECTIVE ACTION: PURCHASE LEATHER GLOVES FOR WORKERS
ASSIGNED TO: JOEY GUZZARDO FOLLOW-UP DATE: 9-24-02
CORRECTION VERIFIED BY: STEVE CORRIE DATE: 9-24-02

INSPECTION COMPLETED BY: DANIEL W. BRINGLE DATE: 9-26-02

HEALTH AND SAFETY REVIEW BY: Jessiah DATE: 9-25-02



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - site 12 DATE 9-24-02

	YES	NO	N/A
<u>FIRST AID</u>			
1. Are first aid kit locations identified and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are emergency eye wash/safety showers available and inspected monthly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are first aid kits inspected weekly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is a qualified first aid/CPR provider on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>PERSONAL PROTECTIVE EQUIPMENT</u>			
1. Have levels of personnel protection been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are respirators decontaminated, inspected, and stored according to standard procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have employees been fit-tested?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is defective personal protective equipment tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does compressed breathing air meet CGA Grade "D" minimum?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are there sufficient sizes and quantities of protective equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>FIRE PREVENTION</u>			
1. Are employees smoking only in designated outdoor areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are fire lanes established and maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are flammable liquid dispensing systems bonded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are approved safety cans available for storage of flammable liquids?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has the local fire department been contacted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are flammables and combustibles properly stored?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
8. Are flammable storage cabinets available and used when needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<u>AIR MONITORING</u>			
1. Is required air monitoring being conducted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are air monitoring instruments calibrated daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are air monitoring logs up to date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are instrument user manuals available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are instruments being maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are employees notified of personal sampling results within 5 days of receipt?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>WELDING AND CUTTING (HERTZ EQUIP)</u>			
1. Are fire extinguishers present at welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are confined spaces evaluated prior to and during cutting and welding operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have Hot Work Permits been completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are welding machines properly grounded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are only trained personnel permitted to operate welding and cutting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are gas cylinders transported in a secured vertical position with caps in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>HAND AND POWER TOOLS</u>			
1. Are defective hand and power tools tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is eye protection available and used when operating power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are guards and safety devices in place on power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill - Site 12 DATE 9-24-02

- | | YES | NO | N/A |
|--|-------------------------------------|----|-----|
| 4. Are power tools inspected before each use? | <input checked="" type="checkbox"/> | | |
| 5. Are nonsparking tools available when necessary? | <input checked="" type="checkbox"/> | | |
| 6. Is the correct tool being used for the job? | <input checked="" type="checkbox"/> | | |

MOTOR VEHICLES

- | | | | |
|---|-------------------------------------|--|--|
| 1. Are vehicles regularly inspected? | <input checked="" type="checkbox"/> | | |
| 2. Are personnel licensed for the vehicles they operate? | <input checked="" type="checkbox"/> | | |
| 3. Are unsafe vehicles tagged and reported to supervision? | <input checked="" type="checkbox"/> | | |
| 4. Is vehicle's safety equipment operating properly? | <input checked="" type="checkbox"/> | | |
| 5. Are loads secure? | <input checked="" type="checkbox"/> | | |
| 6. Are vehicle occupants using safety belts? | <input checked="" type="checkbox"/> | | |
| 7. Are current insurance cards and blank accident report forms located in vehicles? | <input checked="" type="checkbox"/> | | |

EMERGENCY PLANS

- | | | | |
|---|-------------------------------------|--|--|
| 1. Are emergency telephone numbers posted? | <input checked="" type="checkbox"/> | | |
| 2. Have emergency escape routes been designated? | <input checked="" type="checkbox"/> | | |
| 3. Are employees familiar with the emergency signal? | <input checked="" type="checkbox"/> | | |
| 4. Has the emergency route to the hospital been established and posted? | <input checked="" type="checkbox"/> | | |
| 5. Is a vehicle on site that can transport injured employees to the hospital? | <input checked="" type="checkbox"/> | | |

MATERIALS HANDLING

- | | | | |
|--|-------------------------------------|--|-------------------------------------|
| 1. Are materials stacked and stored to prevent sliding or collapsing? | <input checked="" type="checkbox"/> | | |
| 2. Are tripping hazards identified? | <input checked="" type="checkbox"/> | | |
| 3. Are semi-trailers chocked? | | | <input checked="" type="checkbox"/> |
| 4. Are fixed jacks used under semi-trailers? | | | <input checked="" type="checkbox"/> |
| 5. Are riders prohibited on materials handling equipment? | <input checked="" type="checkbox"/> | | |
| 6. Are approved manlifts provided for the lifting of personnel? | | | <input checked="" type="checkbox"/> |
| 7. Are personnel in manlifts wearing approved fall protection devices? | | | <input checked="" type="checkbox"/> |

FIRE PROTECTION

- | | | | |
|--|-------------------------------------|--|--|
| 1. Has a fire alarm system been established? | <input checked="" type="checkbox"/> | | |
| 2. Do employees know the location and use of all fire extinguishers? | <input checked="" type="checkbox"/> | | |
| 3. Are fire extinguisher locations posted? | <input checked="" type="checkbox"/> | | |
| 4. Are combustible materials segregated from open flames? | <input checked="" type="checkbox"/> | | |
| 5. Have fire extinguishers been professionally inspected during the last year? | <input checked="" type="checkbox"/> | | |
| 6. Are fire extinguishers visually inspected monthly? | <input checked="" type="checkbox"/> | | |

ELECTRICAL

- | | | | |
|--|-------------------------------------|--|-------------------------------------|
| 1. Is electrical equipment and wiring properly guarded and maintained in good condition? | <input checked="" type="checkbox"/> | | |
| 2. Are extension cords kept out of wet areas? | <input checked="" type="checkbox"/> | | |
| 3. Is damaged electrical equipment tagged and taken out of service? | <input checked="" type="checkbox"/> | | |
| 4. Have underground electrical lines been identified by proper authorities? | <input checked="" type="checkbox"/> | | |
| 5. Has a lockout/tagout system been established? | | | <input checked="" type="checkbox"/> |
| 6. Are GFCIs being used on all temporary electrical systems and as needed? | <input checked="" type="checkbox"/> | | |

ELECTRICAL (continued)

- | | | | |
|--|-------------------------------------|--|-------------------------------------|
| 7. Are extension cords being inspected daily (i.e., ground pin in place, no unapproved splices)? | <input checked="" type="checkbox"/> | | |
| 8. Are warning signs exhibited on high voltage equipment (250V or greater)? | | | <input checked="" type="checkbox"/> |



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GALT LANDFILL - SITE 12 DATE 9-24-02

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CRANES AND RIGGING

1. Are cranes inspected daily prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are crane swing areas barricaded or demarked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is all rigging equipment tagged with an identification number and rated capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is rigging equipment inspection documented?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are slings, chains, and rigging inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are damaged slings, chains, and rigging tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are slings padded or protected from sharp corners?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Do employees keep clear of suspended loads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are rated load capacities and special hazard warnings posted on crane?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Are the records of annual crane inspection available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has accessible areas within the swing radius of the rear of the crane been barricaded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Do crane operators have required training/certification?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

COMPRESSED GAS CYLINDERS

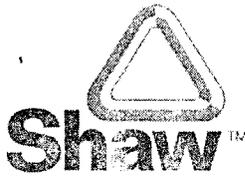
1. Are breathing air cylinders charged only to prescribed pressures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are like cylinders segregated and stored in well ventilated areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is smoking prohibited in cylinder storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are cylinders stored secure and upright?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are cylinders protected from snow, rain, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are cylinder caps in place before cylinders are moved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are propane cylinders stored and used only outside of buildings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are scaffold planks free of mud, ice, grease, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is scaffolding inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are defective scaffold parts taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Have employees completed scaffold user training?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are employees restricted from working on scaffolds during storms and high winds?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are all pins in place and wheels locked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Is required perimeter guarding (top rail, mid rail, and toe board) present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has a competent person been designated to oversee scaffold construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Are all scaffold components manufactured by the same company?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are ladders being used in a safe manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are ladders kept out of passageways, doors, or driveways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - SITE 12

DATE 9-24-02

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service?			✓
6. Are metal ladders prohibited in electrical service?			✓
7. Are stairways and floor openings guarded?	✓		
8. Are safety feet installed on straight and extension ladders?			✓
9. Is general housekeeping being maintained?	✓		
10. Are ladders tied off?			✓
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?	✓		

SITE SAFETY PLAN

1. Is a site safety plan available on site or accessible to all employees?	✓		
2. Does the safety plan accurately reflect site conditions and tasks?	✓		
3. Have potential hazards been described to employees on site?	✓		
4. Is there a designated safety official on site?	✓		
5. Have all employees signed the safety plan acknowledgment form?	✓		

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?			
A. Minimum Wage	✓		
B. OSHA Job Protection	✓		
C. Equal Employment Opportunity	✓		
2. Are all required state-specific posters displayed?		✓	

SITE CONTROL

1. Are work zones clearly marked?	✓		
2. Are support trailers located to minimize exposure from a potential release?	✓		
3. Are support trailers accessible for approach by emergency vehicles?	✓		
4. Is the site properly secured during and after work hours?	✓		
5. Is an exclusion zone sign-in/sign-out log maintained?			✓
6. Are only employees with current training and physicals permitted in exclusion zone?	✓		

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	✓		
2. Is defective heavy equipment tagged and taken out of service?	✓		
3. Are project roads and structures inspected for load capacities and proper clearances?	✓		
4. Is heavy equipment shut down for fueling and maintenance?	✓		
5. Are backup alarms installed and working on mobile equipment?	✓		
6. Have qualified equipment operators been designated?	✓		
7. Are riders prohibited on heavy equipment?	✓		
8. Are guards and safety appliances in place and used?	✓		
9. Are operators using the "three point" system when mounting/dismounting equipment?	✓		

EXCAVATION

1. Has a "competent person" been designated to oversee excavation activities?			✓
2. Prior to opening excavations, are utilities located and marked?			✓
3. Has a professional engineer evaluated all excavations greater than 20 feet deep?			✓
4. Is there rescue equipment on site and accessible to the excavation area?			✓
5. Is excavated material placed a minimum of 24 inches from the excavation?			✓



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill - Site 12 DATE 9-24-02

	YES	NO	N/A
6. Are the sides of excavations sloped or shored to prevent cave ins?			✓
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)?			✓
8. Are ladders or ramps used in excavations over 4 feet deep?			✓
9. Are means of egress available so as to require no more than 25 feet of lateral travel?			✓
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares?			✓
11. Is excavation inspected <u>daily</u> by competent persons and documented?			✓

CONFINED SPACE

1. Have employees been trained in the hazards of confined spaces?			✓
2. Are confined space permits posted at entrance to confined space?			✓
3. Is a copy of the confined space entry procedure available?			✓
4. Has a rescue plan been established?			✓
5. Is an entry supervisor present at each permit-required entry?			✓
6. Are required extraction/fall protection devices being used?			✓

DECONTAMINATION

1. Are decontamination stations set up on site?			✓
2. Is decontamination water properly contained and disposed of?			✓
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	✓		
4. Are shin/metatarsal guards being used during power washing activities?	✓		

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	✓		
2. Are there MSDSs for required materials/chemicals present on site?	✓		
3. Are all containers properly labeled, as to content, hazard?	✓		
4. Have employees been trained in accordance with the HAZCOM procedure?	✓		
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	✓		
6. Have all personnel signed the HAZCOM acknowledgment form?	✓		
7. Is there an updated list of chemicals maintained on site?	✓		

TRAINING

1. Are tailgate safety meetings being conducted daily?	✓		
2. Are current training/medical records maintained on site?	✓		

DOCUMENTATION

1. Is an OSHA 200 Log maintained on site and posted during the month of February?	✓		
2. Are accident report forms available?	✓		
3. Is a copy of health and safety policy and procedures available on site?	✓		



Procedure No.
Revision No.
Date of Revision
Last Review Date
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HS021
0
4/24/02
4/24/02
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PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill - site - 12 DATE 9-24-02

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETE D	VERIFIED BY
Fire Prevention #7, 8	To Buy ① Storage Cabinet	RANDY JOHNSON	9/23/02	9/25/02	W

ordered thru Fisher Sci.

DESCRIBE POSITIVE SAFETY OBSERVATIONS

Employees ARE Following ALL SAFETY Rules.



9/26

Shaw Environmental & Infrastructure, Inc.

Type Address Line One Here
Type Address Line Two Here
XXX-XXX-XXXX
Fax: XXX-XXX-XXXX

Fax

To: BOB BROOKS From: JOE WALKER

Fax: 732-469-7275 Pages: 13

Phone: _____ Date: 9-26-02

RE: _____ CC: _____

- Urgent
- For Review
- Please Comment
- Please Reply
- Please Recycle

Plus Resumes

Confidentiality Notice

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ATTACHMENT 2

PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD TOWN GUT LANDFILL DATE 10-15-02
Site -12

BUSINESS LINE: DOD PROJECT NAME/NUMBER: 809401
 PROGRAM MANAGER: _____ PROJECT MANAGER: DAN PRINGLE
 GENERAL PROJECT DESCRIPTION: SITE RESTORATION & COVER
 SITE ACTIVITIES AT TIME OF INSPECTION: GRADING, SURVEYING
SOIL COVER PREP.

INTERVIEWED EMPLOYEE: MIKE COMBET
 SAFETY ISSUE: USE PROPER PPE
 CORRECTIVE ACTION: HEALTH & SAFETY + PROVIDE PROPER PPE (PURCHASE ORDER)
 ASSIGNED TO: JOE WILK FOLLOW-UP DATE: 10-17-02
 CORRECTION VERIFIED BY: STAN CORRIEN DATE: 10-17-02

INTERVIEWED EMPLOYEE: MARK
 SAFETY ISSUE: BIOLOGICAL HAZARDS
 CORRECTIVE ACTION: USE INSECT SPRAY
 ASSIGNED TO: JOE WILK FOLLOW-UP DATE: 10-17-02
 CORRECTION VERIFIED BY: NANDY JOHNSON DATE: 10-17-02

INSPECTION COMPLETED BY: NANDY JOHNSON DATE: 10-16-02

HEALTH AND SAFETY REVIEW BY: JOE WILK DATE: 10-17-02



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill Site 12 DATE 10-15-02

	YES	NO	N/A
<u>FIRST AID</u>			
1. Are first aid kit locations identified and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are emergency eye wash/safety showers available and inspected monthly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are first aid kits inspected weekly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is a qualified first aid/CPR provider on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>PERSONAL PROTECTIVE EQUIPMENT</u>			
1. Have levels of personnel protection been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are respirators decontaminated, inspected, and stored according to standard procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have employees been fit-tested?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is defective personal protective equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Does compressed breathing air meet CGA Grade "D" minimum?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are there sufficient sizes and quantities of protective equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>FIRE PREVENTION</u>			
1. Are employees smoking only in designated outdoor areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are fire lanes established and maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are flammable liquid dispensing systems bonded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are approved safety cans available for storage of flammable liquids?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has the local fire department been contacted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are flammables and combustibles properly stored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are flammable storage cabinets available and used when needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>AIR MONITORING</u>			
1. Is required air monitoring being conducted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are air monitoring instruments calibrated daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are air monitoring logs up to date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are instrument user manuals available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are instruments being maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are employees notified of personal sampling results within 5 days of receipt?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>WELDING AND CUTTING</u>			
1. Are fire extinguishers present at welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are confined spaces evaluated prior to and during cutting and welding operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have Hot Work Permits been completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are welding machines properly grounded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are only trained personnel permitted to operate welding and cutting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are gas cylinders transported in a secured vertical position with caps in place?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>HAND AND POWER TOOLS</u>			
1. Are defective hand and power tools tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is eye protection available and used when operating power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are guards and safety devices in place on power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD TOWN GUT LANDFILL DATE 10-15-02

	YES	NO	N/A
4. Are power tools inspected before each use?	<input checked="" type="checkbox"/>		
5. Are nonsparking tools available when necessary?	<input checked="" type="checkbox"/>		
6. Is the correct tool being used for the job?	<input checked="" type="checkbox"/>		

MOTOR VEHICLES

1. Are vehicles regularly inspected?	<input checked="" type="checkbox"/>		
2. Are personnel licensed for the vehicles they operate?	<input checked="" type="checkbox"/>		
3. Are unsafe vehicles tagged and reported to supervision?	<input checked="" type="checkbox"/>		
4. Is vehicle's safety equipment operating properly?	<input checked="" type="checkbox"/>		
5. Are loads secure?	<input checked="" type="checkbox"/>		
6. Are vehicle occupants using safety belts?	<input checked="" type="checkbox"/>		
7. Are current insurance cards and blank accident report forms located in vehicles?	<input checked="" type="checkbox"/>		

EMERGENCY PLANS

1. Are emergency telephone numbers posted?	<input checked="" type="checkbox"/>		
2. Have emergency escape routes been designated?	<input checked="" type="checkbox"/>		
3. Are employees familiar with the emergency signal?	<input checked="" type="checkbox"/>		
4. Has the emergency route to the hospital been established and posted?	<input checked="" type="checkbox"/>		
5. Is a vehicle on site that can transport injured employees to the hospital?	<input checked="" type="checkbox"/>		

MATERIALS HANDLING

1. Are materials stacked and stored to prevent sliding or collapsing?	<input checked="" type="checkbox"/>		
2. Are tripping hazards identified?	<input checked="" type="checkbox"/>		
3. Are semi-trailers chocked?			<input checked="" type="checkbox"/>
4. Are fixed jacks used under semi-trailers?			<input checked="" type="checkbox"/>
5. Are riders prohibited on materials handling equipment?	<input checked="" type="checkbox"/>		
6. Are approved manlifts provided for the lifting of personnel?			<input checked="" type="checkbox"/>
7. Are personnel in manlifts wearing approved fall protection devices?			<input checked="" type="checkbox"/>

FIRE PROTECTION

1. Has a fire alarm system been established?	<input checked="" type="checkbox"/>		
2. Do employees know the location and use of all fire extinguishers?	<input checked="" type="checkbox"/>		
3. Are fire extinguisher locations posted?	<input checked="" type="checkbox"/>		
4. Are combustible materials segregated from open flames?	<input checked="" type="checkbox"/>		
5. Have fire extinguishers been professionally inspected during the last year?	<input checked="" type="checkbox"/>		
6. Are fire extinguishers visually inspected monthly?	<input checked="" type="checkbox"/>		

ELECTRICAL

1. Is electrical equipment and wiring properly guarded and maintained in good condition?	<input checked="" type="checkbox"/>		
2. Are extension cords kept out of wet areas?	<input checked="" type="checkbox"/>		
3. Is damaged electrical equipment tagged and taken out of service?	<input checked="" type="checkbox"/>		
4. Have underground electrical lines been identified by proper authorities?	<input checked="" type="checkbox"/>		
5. Has a lockout/tagout system been established?			<input checked="" type="checkbox"/>
6. Are GFCIs being used on all temporary electrical systems and as needed?	<input checked="" type="checkbox"/>		

ELECTRICAL (continued)

7. Are extension cords being inspected daily (i.e., group pin in plate, no unapproved splices)?	<input checked="" type="checkbox"/>		
8. Are warning signs prohibited on high voltage equipment (250V or greater)?	<input checked="" type="checkbox"/>		



PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD TOWN GUT LANDFILL DATE 10-15-02

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CRANES AND RIGGING

1. Are cranes inspected daily prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are crane swing areas barricaded or demarked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is all rigging equipment tagged with an identification number and rated capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is rigging equipment inspection documented?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are slings, chains, and rigging inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are damaged slings, chains, and rigging tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are slings padded or protected from sharp corners?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Do employees keep clear of suspended loads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are rated load capacities and special hazard warnings posted on crane?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Are the records of annual crane inspection available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has accessible areas within the swing radius of the rear of the crane been barricaded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Do crane operators have required training/certification?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

COMPRESSED GAS CYLINDERS

1. Are breathing air cylinders charged only to prescribed pressures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are like cylinders segregated and stored in well ventilated areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is smoking prohibited in cylinder storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are cylinders stored secure and upright?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are cylinders protected from snow, rain, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are cylinder caps in place before cylinders are moved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are propane cylinders stored and used only outside of buildings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are scaffold planks free of mud, ice, grease, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is scaffolding inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are defective scaffold parts taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Have employees completed scaffold user training?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are employees restricted from working on scaffolds during storms and high winds?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are all pins in place and wheels locked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Is required perimeter guarding (top rail, mid rail, and toe board) present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has a competent person been designated to oversee scaffold construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Are all scaffold components manufactured by the same company?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are ladders being used in a safe manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are ladders kept out of passageways, doors, or driveways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL Site 12 DATE 10-15-02

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are metal ladders prohibited in electrical service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are stairways and floor openings guarded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are safety feet installed on straight and extension ladders?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Is general housekeeping being maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are ladders tied off?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SITE SAFETY PLANS

1. Is a site safety plan available on site or accessible to all employees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the safety plan accurately reflect site conditions and tasks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have potential hazards been described to employees on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there a designated safety official on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have all employees signed the safety plan acknowledgment form?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?			
A. Minimum Wage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. OSHA Job Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Equal Employment Opportunity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are all required state-specific posters displayed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SITE CONTROL

1. Are work zones clearly marked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are support trailers located to minimize exposure from a potential release?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are support trailers accessible for approach by emergency vehicles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the site properly secured during and after work hours?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is an exclusion zone sign-in/sign-out log maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are only employees with current training and physicals permitted in exclusion zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is defective heavy equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are project roads and structures inspected for load capacities and proper clearances?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is heavy equipment shut down for fueling and maintenance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are backup alarms installed and working on mobile equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have qualified equipment operators been designated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are riders prohibited on heavy equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are guards and safety appliances in place and used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are operators using the "three point" system when mounting/dismounting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXCAVATION

1. Has a "competent person" been designated to oversee excavation activities?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Prior to opening excavations, are utilities located and marked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Has a professional engineer evaluated all excavations greater than 10 feet deep?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is there rescue equipment on site and accessible to the excavation area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is excavated material placed a minimum of 24 inches from the excavation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD TOWN GUT LANDFILL DATE 10-15-02

	YES	NO	N/A
6. Are the sides of excavations sloped or shored to prevent cave ins?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are ladders or ramps used in excavations over 4 feet deep?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are means of egress available so as to require no more than 25 feet of lateral travel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Is excavation inspected <u>daily</u> by competent persons and documented?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CONFINED SPACES

1. Have employees been trained in the hazards of confined spaces?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are confined space permits posted at entrance to confined space?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is a copy of the confined space entry procedure available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Has a rescue plan been established?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is an entry supervisor present at each permit-required entry?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are required extraction/fall protection devices being used?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

DECONTAMINATION

1. Are decontamination stations set up on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is decontamination water properly contained and disposed of?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are shin/metatarsal guards being used during power washing activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are there MSDS for required materials/chemicals present on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are all containers properly labeled, as to content, hazard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have employees been trained in accordance with the HAZCOM procedure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have all personnel signed the HAZCOM acknowledgment form?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is there an updated list of chemicals maintained on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TRAINING

1. Are tailgate safety meetings being conducted daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are current training/medical records maintained on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DOCUMENTATION

1. Is an OSHA 200 Log maintained on site and posted during the month of February?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are accident report forms available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is a copy of health and safety policy and procedures available on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



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PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD TOWN GUT LANDFILL DATE 10-15-02
Site-12

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETED	VERIFIED BY

DESCRIBE POSITIVE SAFETY OBSERVATIONS

Since Conception of Job There has been no First Aid Cases or injuries, or Resulting in Lost Work Days.

Good Verbal Tailgate Discussion.



ATTACHMENT 2

PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - Site 12 DATE 10-24-02

BUSINESS LINE: D.O.D PROJECT NAME/NUMBER: 809401
PROGRAM MANAGER: Roland Mowles PROJECT MANAGER: DAN PRINGLE
GENERAL PROJECT DESCRIPTION: Site Restoration & CAP
SITE ACTIVITIES AT TIME OF INSPECTION: HAULING SOIL TO LANDFILL
GRADING, ROLLING, COMPACTING, TESTING.

INTERVIEWED EMPLOYEE: MARK LINDSEY
SAFETY ISSUE: TRUCKS HAULING SOIL TO SITE
CORRECTIVE ACTION: WARN TRUCK DRIVERS ABOUT SPEED
AND THE BASE FINES FOR SPEEDING
ASSIGNED TO: Joe WALKER FOLLOW-UP DATE: 10-24-02
CORRECTION VERIFIED BY: STEVE CARRERA DATE: 10-24-02
Joe Walker

INTERVIEWED EMPLOYEE: _____
SAFETY ISSUE: _____
CORRECTIVE ACTION: _____

ASSIGNED TO: _____ FOLLOW-UP DATE: _____
CORRECTION VERIFIED BY: _____ DATE: _____

INSPECTION COMPLETED BY: Pandy Johnson DATE: 10-24-02

HEALTH AND SAFETY REVIEW BY: [Signature] DATE: 10-25-02



PROJECT SAFETY INSPECTION REPORT

PROJECT Final Out LANDFILL SITE-12 DATE 10-24-02

	YES	NO	N/A
<u>FIRST AID</u>			
1. Are first aid kit locations identified and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are emergency eye wash/safety showers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are first aid kits inspected weekly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is a qualified first aid/CPR provider on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>PERSONAL PROTECTIVE EQUIPMENT</u>			
1. Have levels of personnel protection been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are respirators decontaminated, inspected, and stored according to standard procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have employees been fit-tested?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is defective personal protective equipment tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does compressed breathing air meet CGA Grade "D" minimum?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are there sufficient sizes and quantities of protective equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>FIRE PREVENTION</u>			
1. Are employees smoking only in designated outdoor areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are fire lanes established and maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are flammable liquid dispensing systems bonded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are approved safety cans available for storage of flammable liquids?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has the local fire department been contacted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are flammables and combustibles properly stored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are flammable storage cabinets available and used when needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>AIR MONITORING</u>			
1. Is required air monitoring being conducted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are air monitoring instruments calibrated daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are air monitoring logs up to date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are instrument user manuals available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are instruments being maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are employees notified of personal sampling results within 5 days of receipt?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

<u>WELDING AND CUTTING</u>			
1. Are fire extinguishers present at welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are confined spaces evaluated prior to and during cutting and welding operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have Hot Work Permits been completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are welding machines properly grounded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are only trained personnel permitted to operate welding and cutting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are gas cylinders transported in a secured vertical position with caps in place?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>HAND AND POWER TOOLS</u>			
1. Are defective hand and power tools tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is eye protection available and used when operating power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are guards and safety devices in place on power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town/Cut Landfill Site 12 DATE 10-24-02

	YES	NO	N/A
4. Are power tools inspected before each use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are nonsparking tools available when necessary?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the correct tool being used for the job?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MOTOR VEHICLES

1. Are vehicles regularly inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are personnel licensed for the vehicles they operate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are unsafe vehicles tagged and reported to supervision?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is vehicle's safety equipment operating properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are loads secure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are vehicle occupants using safety belts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are current insurance cards and blank accident report forms located in vehicles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EMERGENCY PLANS

1. Are emergency telephone numbers posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have emergency escape routes been designated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are employees familiar with the emergency signal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has the emergency route to the hospital been established and posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is a vehicle on site that can transport injured employees to the hospital?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MATERIALS HANDLING

1. Are materials stacked and stored to prevent sliding or collapsing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are tripping hazards identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are semi-trailers chocked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are fixed jacks used under semi-trailers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are riders prohibited on materials handling equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are approved manlifts provided for the lifting of personnel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are personnel in manlifts wearing approved fall protection devices?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

FIRE PROTECTION

1. Has a fire alarm system been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do employees know the location and use of all fire extinguishers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are fire extinguisher locations posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are combustible materials segregated from open flames?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have fire extinguishers been professionally inspected during the last year?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers visually inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ELECTRICAL

1. Is electrical equipment and wiring properly guarded and maintained in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are extension cords kept out of wet areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is damaged electrical equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have underground electrical lines been identified by proper authorities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has a lockout/tagout system been established?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are GFCIs being used on all temporary electrical systems and as needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ELECTRICAL (continued)

7. Are extension cords being inspected daily (i.e., group pin in place, no unapproved splices)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are warning signs exhibited on high voltage equipment (250V or greater)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT TOXIC GUT LANDFILL - site 12 DATE 10-24-02

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?	<input checked="" type="checkbox"/>		
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?			<input checked="" type="checkbox"/>

CRANES AND RIGGING

1. Are cranes inspected daily prior to use?			<input checked="" type="checkbox"/>
2. Are crane swing areas barricaded or demarked?			<input checked="" type="checkbox"/>
3. Is all rigging equipment tagged with an identification number and rated capacity?			<input checked="" type="checkbox"/>
4. Is rigging equipment inspection documented?			<input checked="" type="checkbox"/>
5. Are slings, chains, and rigging inspected before each use?			<input checked="" type="checkbox"/>
6. Are damaged slings, chains, and rigging tagged and taken out of service?			<input checked="" type="checkbox"/>
7. Are slings padded or protected from sharp corners?			<input checked="" type="checkbox"/>
8. Do employees keep clear of suspended loads?			<input checked="" type="checkbox"/>
9. Are rated load capacities and special hazard warnings posted on crane?			<input checked="" type="checkbox"/>
10. Are the records of annual crane inspection available?			<input checked="" type="checkbox"/>
11. Has accessible areas within the swing radius of the rear of the crane been barricaded?			<input checked="" type="checkbox"/>
12. Do crane operators have required training/certification?			<input checked="" type="checkbox"/>

COMPRESSED GAS CYLINDERS

1. Are breathing air cylinders charged only to prescribed pressures?			<input checked="" type="checkbox"/>
2. Are like cylinders segregated and stored in well ventilated areas?			<input checked="" type="checkbox"/>
3. Is smoking prohibited in cylinder storage areas?			<input checked="" type="checkbox"/>
4. Are cylinders stored secure and upright?			<input checked="" type="checkbox"/>
5. Are cylinders protected from snow, rain, etc.?			<input checked="" type="checkbox"/>
6. Are cylinder caps in place before cylinders are moved?			<input checked="" type="checkbox"/>
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?			<input checked="" type="checkbox"/>
8. Are propane cylinders stored and used only outside of buildings?			<input checked="" type="checkbox"/>

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface?			<input checked="" type="checkbox"/>
2. Are scaffold planks free of mud, ice, grease, etc.?			<input checked="" type="checkbox"/>
3. Is scaffolding inspected before each use?			<input checked="" type="checkbox"/>
4. Are defective scaffold parts taken out of service?			<input checked="" type="checkbox"/>
5. Have employees completed scaffold user training?			<input checked="" type="checkbox"/>
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?			<input checked="" type="checkbox"/>
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?			<input checked="" type="checkbox"/>
8. Are employees restricted from working on scaffolds during storms and high winds?			<input checked="" type="checkbox"/>
9. Are all pins in place and wheels locked?			<input checked="" type="checkbox"/>
10. Is required perimeter guarding (top rail, mid rail, and toe board) present?			<input checked="" type="checkbox"/>
11. Has a competent person been designated to oversee scaffold construction?			<input checked="" type="checkbox"/>
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?			<input checked="" type="checkbox"/>
13. Are all scaffold components manufactured by the same company?			<input checked="" type="checkbox"/>

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?			<input checked="" type="checkbox"/>
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?			<input checked="" type="checkbox"/>
3. Are ladders being used in a safe manner?			<input checked="" type="checkbox"/>
4. Are ladders kept out of passageways, doors, or driveways?			<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill - Site - 12 DATE 10-24-02

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are metal ladders prohibited in electrical service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are stairways and floor openings guarded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are safety feet installed on straight and extension ladders?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Is general housekeeping being maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Are ladders tied off?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SITE SAFETY PLAN

1. Is a site safety plan available on site or accessible to all employees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the safety plan accurately reflect site conditions and tasks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have potential hazards been described to employees on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there a designated safety official on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have all employees signed the safety plan acknowledgment form?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
A. Minimum Wage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. OSHA Job Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Equal Employment Opportunity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are all required state-specific posters displayed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SITE CONTROL

1. Are work zones clearly marked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are support trailers located to minimize exposure from a potential release?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are support trailers accessible for approach by emergency vehicles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the site properly secured during and after work hours?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is an exclusion zone sign-in/sign-out log maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are only employees with current training and physicals permitted in exclusion zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is defective heavy equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are project roads and structures inspected for load capacities and proper clearances?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is heavy equipment shut down for fueling and maintenance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are backup alarms installed and working on mobile equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have qualified equipment operators been designated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are riders prohibited on heavy equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are guards and safety appliances in place and used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are operators using the "three point" system when mounting/dismounting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXCAVATION

1. Has a "competent person" been designated to oversee excavation activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Prior to opening excavations, are utilities located and marked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has a professional engineer evaluated all excavations greater than 20 feet deep?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is there rescue equipment on site and accessible to the excavation area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is excavated material placed a minimum of 24 inches from the excavation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUL LANDFILL - SITE - 12

DATE 10-24-02

	<u>YES</u>	<u>NO</u>	<u>N/A</u>
6. Are the sides of excavations sloped or shored to prevent cave ins?	_____	_____	✓
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)?	_____	_____	✓
8. Are ladders or ramps used in excavations over 4 feet deep?	_____	_____	✓
9. Are means of egress available so as to require no more than 25 feet of lateral travel?	_____	_____	✓
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares?	✓	_____	_____
11. Is excavation inspected <u>daily</u> by competent persons and documented?	_____	_____	✓

CONFINED SPACES

1. Have employees been trained in the hazards of confined spaces?	_____	_____	✓
2. Are confined space permits posted at entrance to confined space?	_____	_____	✓
3. Is a copy of the confined space entry procedure available?	_____	_____	✓
4. Has a rescue plan been established?	_____	_____	✓
5. Is an entry supervisor present at each permit-required entry?	_____	_____	✓
6. Are required extraction/fall protection devices being used?	_____	_____	✓

DECONTAMINATION

1. Are decontamination stations set up on site?	✓	_____	_____
2. Is decontamination water properly contained and disposed of?	✓	_____	_____
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	✓	_____	_____
4. Are shin/metatarsal guards being used during power washing activities?	✓	_____	_____

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	✓	_____	_____
2. Are there MSDSs for required materials/chemicals present on site?	✓	_____	_____
3. Are all containers properly labeled, as to content, hazard?	✓	_____	_____
4. Have employees been trained in accordance with the HAZCOM procedure?	✓	_____	_____
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	✓	_____	_____
6. Have all personnel signed the HAZCOM acknowledgment form?	✓	_____	_____
7. Is there an updated list of chemicals maintained on site?	✓	_____	_____

TRAINING

1. Are tailgate safety meetings being conducted daily?	✓	_____	_____
2. Are current training/medical records maintained on site?	✓	_____	_____

DOCUMENTATION

1. Is an OSHA 200 Log maintained on site and posted during the month of February?	✓	_____	_____
2. Are accident report forms available?	✓	_____	_____
3. Is a copy of health and safety policy and procedures available on site?	✓	_____	_____



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PROJECT Town Out Landfill - Site-12

DATE 10-24-02

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETED	VERIFIED BY
TRUCKS SPEEDING ON SITE	PLACE 5 M.P.H. SIGN UP. AND TALK TO DRIVERS	Joe W.	10/24/02	10/24/02	JW / S.C.

DESCRIBE POSITIVE SAFETY OBSERVATIONS



ATTACHMENT 2

PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - SITE 12 DATE 11-7-02

BUSINESS LINE: D.O.D. PROJECT NAME/NUMBER: 809401
PROGRAM MANAGER: Roland Monera PROJECT MANAGER: DAN PRINGLE
GENERAL PROJECT DESCRIPTION: SITE RESTORATION & CAP
SITE ACTIVITIES AT TIME OF INSPECTION: GRADING SOIL COVER OVER AREA #1 LANDFILL - REPAIR EROSION SILK FENCE.

INTERVIEWED EMPLOYEE: Kelvin Skipper
SAFETY ISSUE: Dump Trucks in soft & uneven ground
CORRECTIVE ACTION: Dump Trucks on Level & Hard Ground using spoter
ASSIGNED TO: Mark Lindsey FOLLOW-UP DATE: 11-8-02
CORRECTION VERIFIED BY: Nandy Johnson DATE: 11-8-02

INTERVIEWED EMPLOYEE: Eddie Duke
SAFETY ISSUE: Slippery surface
CORRECTIVE ACTION: watch your footing
ASSIGNED TO: Tail Gate safety meeting FOLLOW-UP DATE: 11-8-02
CORRECTION VERIFIED BY: Joe Walker DATE: 11-8-02

INSPECTION COMPLETED BY: Daniel W Bringle DATE: 11-7-02

HEALTH AND SAFETY REVIEW BY: [Signature] DATE: 11-8-02



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill Site-12

DATE 11-7-02

	YES	NO	N/A
<u>FIRST AID</u>			
1. Are first aid kit locations identified and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are emergency eye wash/safety showers available and inspected monthly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are first aid kits inspected weekly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is a qualified first aid/CPR provider on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>PERSONAL PROTECTIVE EQUIPMENT</u>			
1. Have levels of personnel protection been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are respirators decontaminated, inspected, and stored according to standard procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have employees been fit-tested?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is defective personal protective equipment tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Does compressed breathing air meet CGA Grade "D" minimum?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are there sufficient sizes and quantities of protective equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>FIRE PREVENTION</u>			
1. Are employees smoking only in designated outdoor areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are fire lanes established and maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are flammable liquid dispensing systems bonded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are approved safety cans available for storage of flammable liquids?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has the local fire department been contacted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are flammables and combustibles properly stored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are flammable storage cabinets available and used when needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>AIR MONITORING</u>			
1. Is required air monitoring being conducted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are air monitoring instruments calibrated daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are air monitoring logs up to date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are instrument user manuals available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are instruments being maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are employees notified of personal sampling results within 5 days of receipt?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<u>WELDING AND CUTTING</u>			
1. Are fire extinguishers present at welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are confined spaces evaluated prior to and during cutting and welding operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have Hot Work Permits been completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are welding machines properly grounded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are only trained personnel permitted to operate welding and cutting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are gas cylinders transported in a secured vertical position with caps in place?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>HAND AND POWER TOOLS</u>			
1. Are defective hand and power tools tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is eye protection available and used when operating power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are guards and safety devices in place on power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill - Site 12 DATE 11-7-02

	YES	NO	N/A
4. Are power tools inspected before each use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are nonsparking tools available when necessary?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the correct tool being used for the job?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MOTOR VEHICLES

1. Are vehicles regularly inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are personnel licensed for the vehicles they operate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are unsafe vehicles tagged and reported to supervision?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is vehicle's safety equipment operating properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are loads secure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are vehicle occupants using safety belts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are current insurance cards and blank accident report forms located in vehicles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EMERGENCY PLANS

1. Are emergency telephone numbers posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have emergency escape routes been designated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are employees familiar with the emergency signal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has the emergency route to the hospital been established and posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is a vehicle on site that can transport injured employees to the hospital?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MATERIALS HANDLING

1. Are materials stacked and stored to prevent sliding or collapsing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are tripping hazards identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are semi-trailers chocked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are fixed jacks used under semi-trailers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are riders prohibited on materials handling equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are approved manlifts provided for the lifting of personnel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are personnel in manlifts wearing approved fall protection devices?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

FIRE PROTECTION

1. Has a fire alarm system been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do employees know the location and use of all fire extinguishers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are fire extinguisher locations posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are combustible materials segregated from open flames?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have fire extinguishers been professionally inspected during the last year?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers visually inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ELECTRICAL

1. Is electrical equipment and wiring properly guarded and maintained in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are extension cords kept out of wet areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is damaged electrical equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have underground electrical lines been identified by proper authorities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has a lockout/tagout system been established?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are GFCIs being used on all temporary electrical systems and as needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ELECTRICAL (continued)

7. Are extension cords being inspected daily (i.e., group pin in place, no unapproved splices)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are warning signs exhibited on high voltage equipment (250V or greater)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Out Landfill - Site 12 DATE 11-7-02

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CRANES AND RIGGING

1. Are cranes inspected daily prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are crane swing areas barricaded or demarked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is all rigging equipment tagged with an identification number and rated capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is rigging equipment inspection documented?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are slings, chains, and rigging inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are damaged slings, chains, and rigging tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are slings padded or protected from sharp corners?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Do employees keep clear of suspended loads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are rated load capacities and special hazard warnings posted on crane?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Are the records of annual crane inspection available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has accessible areas within the swing radius of the rear of the crane been barricaded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Do crane operators have required training/certification?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

COMPRESSED GAS CYLINDERS

1. Are breathing air cylinders charged only to prescribed pressures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are like cylinders segregated and stored in well ventilated areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is smoking prohibited in cylinder storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are cylinders stored secure and upright?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are cylinders protected from snow, rain, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are cylinder caps in place before cylinders are moved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are propane cylinders stored and used only outside of buildings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are scaffold planks free of mud, ice, grease, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is scaffolding inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are defective scaffold parts taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Have employees completed scaffold user training?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are employees restricted from working on scaffolds during storms and high winds?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are all pins in place and wheels locked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Is required perimeter guarding (top rail, mid rail, and toe board) present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has a competent person been designated to oversee scaffold construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Are all scaffold components manufactured by the same company?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are ladders being used in a safe manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are ladders kept out of passageways, doors, or driveways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Cut Landfill Site-12 DATE 11-7-02

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are metal ladders prohibited in electrical service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are stairways and floor openings guarded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are safety feet installed on straight and extension ladders?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Is general housekeeping being maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Are ladders tied off?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SITE SAFETY PLAN

1. Is a site safety plan available on site or accessible to all employees?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Does the safety plan accurately reflect site conditions and tasks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have potential hazards been described to employees on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is there a designated safety official on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have all employees signed the safety plan acknowledgment form?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?			
A. Minimum Wage	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. OSHA Job Protection	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Equal Employment Opportunity	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are all required state-specific posters displayed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

SITE CONTROL

1. Are work zones clearly marked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are support trailers located to minimize exposure from a potential release?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are support trailers accessible for approach by emergency vehicles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is the site properly secured during and after work hours?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is an exclusion zone sign-in/sign-out log maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are only employees with current training and physicals permitted in exclusion zone?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is defective heavy equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are project roads and structures inspected for load capacities and proper clearances?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is heavy equipment shut down for fueling and maintenance?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are backup alarms installed and working on mobile equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have qualified equipment operators been designated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are riders prohibited on heavy equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are guards and safety appliances in place and used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are operators using the "three point" system when mounting/dismounting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EXCAVATION

1. Has a "competent person" been designated to oversee excavation activities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Prior to opening excavations, are utilities located and marked?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Has a professional engineer evaluated all excavations greater than 20 feet deep?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is there rescue equipment on site and accessible to the excavation area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Is excavated material placed a minimum of 24 inches from the excavation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - site 12 DATE 11-7-02

	YES	NO	N/A
6. Are the sides of excavations sloped or shored to prevent cave ins?			✓
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)?			✓
8. Are ladders or ramps used in excavations over 4 feet deep?			✓
9. Are means of egress available so as to require no more than 25 feet of lateral travel?			✓
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares?	✓		
11. Is excavation inspected <u>daily</u> by competent persons and documented?			✓

CONFINED SPACES

1. Have employees been trained in the hazards of confined spaces?			✓
2. Are confined space permits posted at entrance to confined space?			✓
3. Is a copy of the confined space entry procedure available?			✓
4. Has a rescue plan been established?			✓
5. Is an entry supervisor present at each permit-required entry?			✓
6. Are required extraction/fall protection devices being used?			✓

DECONTAMINATION

1. Are decontamination stations set up on site?	✓		
2. Is decontamination water properly contained and disposed of?	✓		
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	✓		
4. Are shin/metatarsal guards being used during power washing activities?	✓		

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	✓		
2. Are there MSDSs for required materials/chemicals present on site?	✓		
3. Are all containers properly labeled, as to content, hazard?	✓		
4. Have employees been trained in accordance with the HAZCOM procedure?	✓		
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	✓		
6. Have all personnel signed the HAZCOM acknowledgment form?	✓		
7. Is there an updated list of chemicals maintained on site?	✓		

TRAINING

1. Are tailgate safety meetings being conducted daily?	✓		
2. Are current training/medical records maintained on site?	✓		

DOCUMENTATION

1. Is an OSHA 27 Log maintained on site and posted during the month of February?	✓		
2. Are accident report forms available?	✓		
3. Is a copy of health and safety policy and procedures available on site?	✓		



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PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill Site 12

DATE 11-7-02

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETED	VERIFIED BY

DESCRIBE POSITIVE SAFETY OBSERVATIONS
<p>USE OF JSA'S USE OF SAFETY OBSERVER ALL WORKERS TAKE PART IN SAFETY MEETING</p>



ATTACHMENT 2

PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - SITE 12 DATE 11-20-02

BUSINESS LINE: D.O.D. PROJECT NAME/NUMBER: 809401
PROGRAM MANAGER: ROLAND MOWENHA PROJECT MANAGER: DAN DRINGIER
GENERAL PROJECT DESCRIPTION: LANDFILL CAP
SITE ACTIVITIES AT TIME OF INSPECTION: PLACING SELECT FILL
ON LANDFILL CAP

INTERVIEWED EMPLOYEE: RANDY JOHNSON
SAFETY ISSUE: SLIPPERY SURFACES
CORRECTIVE ACTION: KEEP ICEMANS ON SITE WITH 3 point
contact on equipment
ASSIGNED TO: ALL PERSONNEL FOLLOW-UP DATE: 11-28-02
CORRECTION VERIFIED BY: STEVE WALKER DATE: 11-20-02

INTERVIEWED EMPLOYEE: MARK LINDSEY
SAFETY ISSUE: FOG IN MORNINGS
CORRECTIVE ACTION: SAFETY VEST MUST BE WORN
ASSIGNED TO: ALL SITE PERSONNEL FOLLOW-UP DATE: 11-20-02
CORRECTION VERIFIED BY: STEVE CARRIERE DATE: 11-20-02

INSPECTION COMPLETED BY: STEVE CARRIERE DATE: 11-20-02

HEALTH AND SAFETY REVIEW BY: [Signature] DATE: 11-21-02



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill - Site 12 DATE 11-20-02

	YES	NO	N/A
<u>FIRST AID</u>			
1. Are first aid kit locations identified and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are emergency eye wash/safety showers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are first aid kits inspected weekly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is a qualified first aid/CPR provider on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO	N/A
<u>PERSONAL PROTECTIVE EQUIPMENT</u>			
1. Have levels of personnel protection been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are respirators decontaminated, inspected, and stored according to standard procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have employees been fit-tested?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is defective personal protective equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Does compressed breathing air meet CGA Grade "D" minimum?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are there sufficient sizes and quantities of protective equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO	N/A
<u>FIRE PREVENTION</u>			
1. Are employees smoking only in designated outdoor areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are fire lanes established and maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are flammable liquid dispensing systems bonded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are approved safety cans available for storage of flammable liquids?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has the local fire department been contacted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are flammables and combustibles properly stored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are flammable storage cabinets available and used when needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	YES	NO	N/A
<u>AIR MONITORING</u>			
1. Is required air monitoring being conducted?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are air monitoring instruments calibrated daily?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are air monitoring logs up to date?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are instrument user manuals available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are instruments being maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are employees notified of personal sampling results within 5 days of receipt?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO	N/A
<u>WELDING AND CUTTING</u>			
1. Are fire extinguishers present at welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are confined spaces evaluated prior to and during cutting and welding operations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Have Hot Work Permits been completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are welding machines properly grounded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are only trained personnel permitted to operate welding and cutting equipment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are gas cylinders transported in a secured vertical position with caps in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

	YES	NO	N/A
<u>HAND AND POWER TOOLS</u>			
1. Are defective hand and power tools tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is eye protection available and used when operating power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are guards and safety devices in place on power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Toward East Landfill - Site 12

DATE 11-20-02

	YES	NO	N/A
4. Are power tools inspected before each use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are nonsparking tools available when necessary?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is the correct tool being used for the job?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MOTOR VEHICLES

1. Are vehicles regularly inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are personnel licensed for the vehicles they operate?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are unsafe vehicles tagged and reported to supervision?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is vehicle's safety equipment operating properly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are loads secure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are vehicle occupants using safety belts?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are current insurance cards and blank accident report forms located in vehicles?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

EMERGENCY PLANS

1. Are emergency telephone numbers posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Have emergency escape routes been designated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are employees familiar with the emergency signal?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has the emergency route to the hospital been established and posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is a vehicle on site that can transport injured employees to the hospital?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

MATERIALS HANDLING

1. Are materials stacked and stored to prevent sliding or collapsing?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are tripping hazards identified?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are semi-trailers chocked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are fixed jacks used under semi-trailers?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are riders prohibited on materials handling equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are approved manlifts provided for the lifting of personnel?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are personnel in manlifts wearing approved fall protection devices?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

FIRE PROTECTION

1. Has a fire alarm system been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Do employees know the location and use of all fire extinguishers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are fire extinguisher locations posted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are combustible materials segregated from open flames?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have fire extinguishers been professionally inspected during the last year?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers visually inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ELECTRICAL

1. Is electrical equipment and wiring properly guarded and maintained in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are extension cords kept out of wet areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is damaged electrical equipment tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have underground electrical lines been identified by proper authorities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has a lockout/tagout system been established?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are GFCIs being used on all temporary electrical systems and as needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

ELECTRICAL (continued)

7. Are extension cords being inspected daily (i.e., group pin in place, no unapproved splices)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are warning signs exhibited on high voltage equipment (250V or greater)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Cut / no Fill - site 12 DATE 11-20-02

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

CRANES AND RIGGING

1. Are cranes inspected daily prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are crane swing areas barricaded or demarked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is all rigging equipment tagged with an identification number and rated capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Is rigging equipment inspection documented?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are slings, chains, and rigging inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are damaged slings, chains, and rigging tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are slings padded or protected from sharp corners?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Do employees keep clear of suspended loads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are rated load capacities and special hazard warnings posted on crane?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Are the records of annual crane inspection available?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has accessible areas within the swing radius of the rear of the crane been barricaded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Do crane operators have required training/certification?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

COMPRESSED GAS CYLINDERS

1. Are breathing air cylinders charged only to prescribed pressures?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are like cylinders segregated and stored in well ventilated areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is smoking prohibited in cylinder storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are cylinders stored secure and upright?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Are cylinders protected from snow, rain, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. Are cylinder caps in place before cylinders are moved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are propane cylinders stored and used only outside of buildings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are scaffold planks free of mud, ice, grease, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Is scaffolding inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are defective scaffold parts taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
5. Have employees completed scaffold user training?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8. Are employees restricted from working on scaffolds during storms and high winds?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9. Are all pins in place and wheels locked?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10. Is required perimeter guarding (top rail, mid rail, and toe board) present?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11. Has a competent person been designated to oversee scaffold construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13. Are all scaffold components manufactured by the same company?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
3. Are ladders being used in a safe manner?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4. Are ladders kept out of passageways, doors, or driveways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN OUT LANDFILL - SITE 12

DATE 11-20-02

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service?			<input checked="" type="checkbox"/>
6. Are metal ladders prohibited in electrical service?			<input checked="" type="checkbox"/>
7. Are stairways and floor openings guarded?			<input checked="" type="checkbox"/>
8. Are safety feet installed on straight and extension ladders?			<input checked="" type="checkbox"/>
9. Is general housekeeping being maintained?	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>
10. Are ladders tied off?			<input checked="" type="checkbox"/>
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?			<input checked="" type="checkbox"/>

SITE SAFETY PLAN

1. Is a site safety plan available on site or accessible to all employees?	<input checked="" type="checkbox"/>		
2. Does the safety plan accurately reflect site conditions and tasks?	<input checked="" type="checkbox"/>		
3. Have potential hazards been described to employees on site?	<input checked="" type="checkbox"/>		
4. Is there a designated safety official on site?	<input checked="" type="checkbox"/>		
5. Have all employees signed the safety plan acknowledgment form?	<input checked="" type="checkbox"/>		

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?			
A. Minimum Wage	<input checked="" type="checkbox"/>		
B. OSHA Job Protection	<input checked="" type="checkbox"/>		
C. Equal Employment Opportunity	<input checked="" type="checkbox"/>		
2. Are all required state-specific posters displayed?	<input checked="" type="checkbox"/>		

SITE CONTROL

1. Are work zones clearly marked?	<input checked="" type="checkbox"/>		
2. Are support trailers located to minimize exposure from a potential release?	<input checked="" type="checkbox"/>		
3. Are support trailers accessible for approach by emergency vehicles?	<input checked="" type="checkbox"/>		
4. Is the site properly secured during and after work hours?	<input checked="" type="checkbox"/>		
5. Is an exclusion zone sign-in/sign-out log maintained?	<input checked="" type="checkbox"/>		
6. Are only employees with current training and physicals permitted in exclusion zone?	<input checked="" type="checkbox"/>		

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	<input checked="" type="checkbox"/>		
2. Is defective heavy equipment tagged and taken out of service?	<input checked="" type="checkbox"/>		
3. Are project roads and structures inspected for load capacities and proper clearances?	<input checked="" type="checkbox"/>		
4. Is heavy equipment shut down for fueling and maintenance?	<input checked="" type="checkbox"/>		
5. Are backup alarms installed and working on mobile equipment?	<input checked="" type="checkbox"/>		
6. Have qualified equipment operators been designated?	<input checked="" type="checkbox"/>		
7. Are riders prohibited on heavy equipment?	<input checked="" type="checkbox"/>		
8. Are guards and safety appliances in place and used?	<input checked="" type="checkbox"/>		
9. Are operators using the "three point" system when mounting/dismounting equipment?	<input checked="" type="checkbox"/>		

EXCAVATION

1. Has a "competent person" been designated to oversee excavation activities?			<input checked="" type="checkbox"/>
2. Prior to opening excavations, are utilities located and marked?			<input checked="" type="checkbox"/>
3. Has a professional engineer evaluated all excavations greater than 20 feet deep?			<input checked="" type="checkbox"/>
4. Is there rescue equipment on site and accessible to the excavation area?			<input checked="" type="checkbox"/>
5. Is excavated material placed a minimum of 24 inches from the excavation?			<input checked="" type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gate Landfill - Site 12 DATE 11-20-02

	YES	NO	N/A
6. Are the sides of excavations sloped or shored to prevent cave ins?			<input checked="" type="checkbox"/>
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)?			<input checked="" type="checkbox"/>
8. Are ladders or ramps used in excavations over 4 feet deep?			<input checked="" type="checkbox"/>
9. Are means of egress available so as to require no more than 25 feet of lateral travel?			<input checked="" type="checkbox"/>
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares?			<input checked="" type="checkbox"/>
11. Is excavation inspected <u>daily</u> by competent persons and documented?			<input checked="" type="checkbox"/>

CONFINED SPACES

1. Have employees been trained in the hazards of confined spaces?			<input checked="" type="checkbox"/>
2. Are confined space permits posted at entrance to confined space?			<input checked="" type="checkbox"/>
3. Is a copy of the confined space entry procedure available?			<input checked="" type="checkbox"/>
4. Has a rescue plan been established?			<input checked="" type="checkbox"/>
5. Is an entry supervisor present at each permit-required entry?			<input checked="" type="checkbox"/>
6. Are required extraction/fall protection devices being used?			<input checked="" type="checkbox"/>

DECONTAMINATION

1. Are decontamination stations set up on site?	<input checked="" type="checkbox"/>		
2. Is decontamination water properly contained and disposed of?	<input checked="" type="checkbox"/>		
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	<input checked="" type="checkbox"/>		
4. Are shin/metatarsal guards being used during power washing activities?	<input checked="" type="checkbox"/>		

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	<input checked="" type="checkbox"/>		
2. Are there MSDSs for required materials/chemicals present on site?	<input checked="" type="checkbox"/>		
3. Are all containers properly labeled, as to content, hazard?	<input checked="" type="checkbox"/>		
4. Have employees been trained in accordance with the HAZCOM procedure?	<input checked="" type="checkbox"/>		
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	<input checked="" type="checkbox"/>		
6. Have all personnel signed the HAZCOM acknowledgment form?	<input checked="" type="checkbox"/>		
7. Is there an updated list of chemicals maintained on site?	<input checked="" type="checkbox"/>		

TRAINING

1. Are tailgate safety meetings being conducted daily?	<input checked="" type="checkbox"/>		
2. Are current training/medical records maintained on site?	<input checked="" type="checkbox"/>		

DOCUMENTATION

1. Is an OSHA 200 Log maintained on site and posted during the month of February?	<input checked="" type="checkbox"/>		
2. Are accident report forms available?	<input checked="" type="checkbox"/>		
3. Is a copy of health and safety policy and procedures available on site?	<input checked="" type="checkbox"/>		



Procedure No. HS021
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Last Review Date 4/24/02
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PROJECT SAFETY INSPECTION REPORT

PROJECT Town and Landfill - Site - 12 DATE 11-20-02

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETED	VERIFIED BY

DESCRIBE POSITIVE SAFETY OBSERVATIONS

Safety Award presented to 1 employee for Employee of the Month at Tailgate Safety Meeting.



ATTACHMENT 2

PROJECT SAFETY INSPECTION REPORT

COPY

PROJECT TOWN GUT LANDFILL site 12 DATE 12-12-02

BUSINESS LINE: D.O.D. PROJECT NAME/NUMBER: INDIAN HEAD - site 12
 PROGRAM MANAGER: ROLAND MONEGAN PROJECT MANAGER: DAN PRINGLE
 GENERAL PROJECT DESCRIPTION: _____
 SITE ACTIVITIES AT TIME OF INSPECTION: LOAD OUT Debris, DRUMS
REPAIR WORK - EROSION CONTROL

INTERVIEWED EMPLOYEE: ERNIE DUKE
 SAFETY ISSUE: TRAILER STEPS ARE ICY & TRAILER FLOOR WET / SLIPPY
 CORRECTIVE ACTION: GET SAND FOR STEPS AND MAT FOR TRAILERS
 ASSIGNED TO: JOEY G. & JOE WALKER FOLLOW-UP DATE: 12-12-02
 CORRECTION VERIFIED BY: [Signature] DATE: 12/12/02
got sand & mats for trailers

INTERVIEWED EMPLOYEE: RANDY JOHNSON
 SAFETY ISSUE: DELIVERY TRUCKS TRAVELING ON SITE TOO FAST
 CORRECTIVE ACTION: SPEED LIMITS WERE CLEARLY POSTED, DRIVERS WERE WARNED SEVERAL TIMES AND 3 DRIVERS WERE KICKED OFF SITE
 ASSIGNED TO: JOE WALKER, ERNIE DUKE, RANDY J. FOLLOW-UP DATE: ON-GOING
 CORRECTION VERIFIED BY: Daniel W. Pringle DATE: 12-12-02
Put Slow Down Signs out for Truckers to see

INSPECTION COMPLETED BY: Daniel W. Pringle DATE: 12-12-02

HEALTH AND SAFETY REVIEW BY: [Signature] DATE: 12-13-02



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL Site 12 DATE 12-12-02

	YES	NO	N/A
<u>FIRST AID</u>			
1. Are first aid kit locations identified and accessible?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are emergency eye wash/safety showers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are first aid kits inspected weekly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Is a qualified first aid/CPR provider on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>PERSONAL PROTECTIVE EQUIPMENT</u>			
1. Have levels of personnel protection been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are respirators decontaminated, inspected, and stored according to standard procedures?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have employees been fit-tested?	<u>PREVIOUSLY</u>	<input type="checkbox"/>	<u>N/A</u>
4. Is defective personal protective equipment tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
5. Does compressed breathing air meet CGA Grade "D" minimum?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
6. Are there sufficient sizes and quantities of protective equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>FIRE PREVENTION</u>			
1. Are employees smoking only in designated outdoor areas?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are fire lanes established and maintained?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are flammable liquid dispensing systems bonded?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are approved safety cans available for storage of flammable liquids?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Has the local fire department been contacted?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are fire extinguishers available and inspected monthly?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are flammables and combustibles properly stored?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are flammable storage cabinets available and used when needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<u>AIR MONITORING</u> * <u>NO LONGER PERFORMED - CLEAN WORK</u>			
1. Is required air monitoring being conducted?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
2. Are air monitoring instruments calibrated daily?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
3. Are air monitoring logs up to date?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
4. Are instrument user manuals available?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
5. Are instruments being maintained?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
6. Are employees notified of personal sampling results within 5 days of receipt?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>

<u>WELDING AND CUTTING</u>			
1. Are fire extinguishers present at welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are confined spaces evaluated prior to and during cutting and welding operations?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
3. Have Hot Work Permits been completed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are welding machines properly grounded?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
7. Are only trained personnel permitted to operate welding and cutting equipment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are gas cylinders transported in a secured vertical position with caps in place?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>

<u>HAND AND POWER TOOLS</u>			
1. Are defective hand and power tools tagged and taken out of service?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is eye protection available and used when operating power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are guards and safety devices in place on power tools?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut LANDFILL site 12 DATE 12-12-02

	YES	NO	N/A
4. Are power tools inspected before each use?	✓		
5. Are nonsparking tools available when necessary?	✓		
6. Is the correct tool being used for the job?	✓		

MOTOR VEHICLES

1. Are vehicles regularly inspected?	✓		
2. Are personnel licensed for the vehicles they operate?	✓		
3. Are unsafe vehicles tagged and reported to supervision?	✓		
4. Is vehicle's safety equipment operating properly?	✓		
5. Are loads secure?	✓		
6. Are vehicle occupants using safety belts?	✓		
7. Are current insurance cards and blank accident report forms located in vehicles?	✓		

EMERGENCY PLANS

1. Are emergency telephone numbers posted?	✓		
2. Have emergency escape routes been designated?	✓		
3. Are employees familiar with the emergency signal?	✓		
4. Has the emergency route to the hospital been established and posted?	✓		
5. Is a vehicle on site that can transport injured employees to the hospital?	✓		

MATERIALS HANDLING

1. Are materials stacked and stored to prevent sliding or collapsing?	✓		
2. Are tripping hazards identified?	✓		
3. Are semi-trailers chocked?			N/A
4. Are fixed jacks used under semi-trailers?			N/A
5. Are riders prohibited on materials handling equipment?	✓		
6. Are approved manlifts provided for the lifting of personnel?			N/A
7. Are personnel in manlifts wearing approved fall protection devices?			N/A

FIRE PROTECTION

1. Has a fire alarm system been established?	✓		
2. Do employees know the location and use of all fire extinguishers?	✓		
3. Are fire extinguisher locations posted?	✓		
4. Are combustible materials segregated from open flames?	✓		
5. Have fire extinguishers been professionally inspected during the last year?	✓		
6. Are fire extinguishers visually inspected monthly?	✓		

ELECTRICAL

1. Is electrical equipment and wiring properly guarded and maintained in good condition?	✓		
2. Are extension cords kept out of wet areas?	✓		
3. Is damaged electrical equipment tagged and taken out of service?			N/A
4. Have underground electrical lines been identified by proper authorities?	✓		
5. Has a lockout/tagout system been established?	✓		
6. Are GFCIs being used on all temporary electrical systems and as needed?	✓		

ELECTRICAL (continued)

7. Are extension cords being inspected daily (i.e., ground pin in place, no unapproved splices)?	✓		
8. Are warning signs exhibited on high voltage equipment (250V or greater)?	✓		



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - site 12 DATE 12-12-02

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CRANES AND RIGGING

1. Are cranes inspected daily prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
2. Are crane swing areas barricaded or demarked?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
3. Is all rigging equipment tagged with an identification number and rated capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
4. Is rigging equipment inspection documented?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
5. Are slings, chains, and rigging inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
6. Are damaged slings, chains, and rigging tagged and taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
7. Are slings padded or protected from sharp corners?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
8. Do employees keep clear of suspended loads?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
9. Are rated load capacities and special hazard warnings posted on crane?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
10. Are the records of annual crane inspection available?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
11. Has accessible areas within the swing radius of the rear of the crane been barricaded?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
12. Do crane operators have required training/certification?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>

COMPRESSED GAS CYLINDERS

1. Are breathing air cylinders charged only to prescribed pressures?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
2. Are like cylinders segregated and stored in well ventilated areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is smoking prohibited in cylinder storage areas?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are cylinders stored secure and upright?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are cylinders protected from snow, rain, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are cylinder caps in place before cylinders are moved?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are propane cylinders stored and used only outside of buildings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
2. Are scaffold planks free of mud, ice, grease, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is scaffolding inspected before each use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are defective scaffold parts taken out of service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Have employees completed scaffold user training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are employees restricted from working on scaffolds during storms and high winds?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are all pins in place and wheels locked?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Is required perimeter guarding (top rail, mid rail, and toe board) present?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Has a competent person been designated to oversee scaffold construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
13. Are all scaffold components manufactured by the same company?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are ladders being used in a safe manner?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>
4. Are ladders kept out of passageways, doors, or driveways?	<input type="checkbox"/>	<input type="checkbox"/>	<u>N/A</u>



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL - SITE 12 DATE 12-12-02

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service?			N/A
6. Are metal ladders prohibited in electrical service?			N/A
7. Are stairways and floor openings guarded?	✓		
8. Are safety feet installed on straight and extension ladders?			N/A
9. Is general housekeeping being maintained?	✓		
10. Are ladders tied off?	✓		N/A
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?	✓		

SITE SAFETY PLAN

1. Is a site safety plan available on site or accessible to all employees?	✓		
2. Does the safety plan accurately reflect site conditions and tasks?	✓		
3. Have potential hazards been described to employees on site?	✓		
4. Is there a designated safety official on site?	✓		
5. Have all employees signed the safety plan acknowledgment form?	✓		

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?			
A. Minimum Wage	✓		
B. OSHA Job Protection	✓		
C. Equal Employment Opportunity	✓		
2. Are all required state-specific posters displayed?	✓		

SITE CONTROL

1. Are work zones clearly marked?	✓		
2. Are support trailers located to minimize exposure from a potential release?	✓		
3. Are support trailers accessible for approach by emergency vehicles?	✓		
4. Is the site properly secured during and after work hours?	✓		
5. Is an exclusion zone sign-in/sign-out log maintained?	✓		
6. Are only employees with current training and physicals permitted in exclusion zone?	✓		

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	✓		
2. Is defective heavy equipment tagged and taken out of service?	✓		
3. Are project roads and structures inspected for load capacities and proper clearances?	✓		
4. Is heavy equipment shut down for fueling and maintenance?	✓		
5. Are backup alarms installed and working on mobile equipment?	✓		
6. Have qualified equipment operators been designated?	✓		
7. Are riders prohibited on heavy equipment?	✓		
8. Are guards and safety appliances in place and used?	✓		
9. Are operators using the "three point" system when mounting/dismounting equipment?	✓		

EXCAVATION

1. Has a "competent person" been designated to oversee excavation activities?	✓		
2. Prior to opening excavations, are utilities located and marked?	✓		
3. Has a professional engineer evaluated all excavations greater than 20 feet deep?			N/A
4. Is there rescue equipment on site and accessible to the excavation area?	✓		
5. Is excavated material placed a minimum of 24 inches from the excavation?			N/A



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PROJECT TOWN GUT LANDFILL - SITE 12 DATE 12-12-02

	YES	NO	N/A
6. Are the sides of excavations sloped or shored to prevent cave ins?			N/A
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)?			N/A
8. Are ladders or ramps used in excavations over 4 feet deep?			N/A
9. Are means of egress available so as to require no more than 25 feet of lateral travel?			N/A
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares?	✓		
11. Is excavation inspected <u>daily</u> by competent persons and documented?			N/A

CONFINED SPACES

1. Have employees been trained in the hazards of confined spaces?	✓		
2. Are confined space permits posted at entrance to confined space?			N/A
3. Is a copy of the confined space entry procedure available?	✓		
4. Has a rescue plan been established?			N/A
5. Is an entry supervisor present at each permit-required entry?			N/A
6. Are required extraction/fall protection devices being used?			N/A

DECONTAMINATION

1. Are decontamination stations set up on site?	✓		
2. Is decontamination water properly contained and disposed of?	✓		
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	✓		
4. Are shin/metatarsal guards being used during power washing activities?			N/A

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	✓		
2. Are there MSDSs for required materials/chemicals present on site?	✓		
3. Are all containers properly labeled, as to content, hazard?	✓		
4. Have employees been trained in accordance with the HAZCOM procedure?	✓		
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	✓		
6. Have all personnel signed the HAZCOM acknowledgment form?	✓		
7. Is there an updated list of chemicals maintained on site?	✓		

TRAINING

1. Are tailgate safety meetings being conducted daily?	✓		
2. Are current training/medical records maintained on site?	✓		

DOCUMENTATION

1. Is an OSHA 200 Log maintained on site and posted during the month of February?	✓		
2. Are accident report forms available?	✓		
3. Is a copy of health and safety policy and procedures available on site?	✓		



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PROJECT SAFETY INSPECTION REPORT

PROJECT Town Gut Landfill Site 12

DATE 12-12-02

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETE D	VERIFIED BY
NONE	N/A	N/A	N/A	N/A	N/A

DESCRIBE POSITIVE SAFETY OBSERVATIONS
TRAILER WAS CLEARLY MARKED INSIDE WILL HAS FORMS & PROCEDURES & SITE DOCUMENTATION LOOKED UP TO DATE.



ATTACHMENT 2

PROJECT SAFETY INSPECTION REPORT

PROJECT SITE 12 - TOWN GUT LANDFILL DATE 01-16-03

BUSINESS LINE: DOD PROJECT NAME/NUMBER: SITE 12 -#809401
PROGRAM MANAGER: BOLAND MOREAU PROJECT MANAGER: DANIEL PRINGLE
GENERAL PROJECT DESCRIPTION: SOIL COVER INSTALLATION
SITE ACTIVITIES AT TIME OF INSPECTION: TOPSOIL DELIVERY/PLACEMENT, HYDRO-SEEDING, EROSION CONTROL MAINTENANCE, & SURVEYING

INTERVIEWED EMPLOYEE: RANDY JOHNSON
SAFETY ISSUE: COLD WEATHER STRESS
CORRECTIVE ACTION: WEAR MULTIPLE LAYERS & DRINK WARM/HOT FLUIDS
ASSIGNED TO: FULL CREW FOLLOW-UP DATE: 01-16-03
CORRECTION VERIFIED BY: Fairgate Safety Inspection DATE: 1/16/03

INTERVIEWED EMPLOYEE: KELVIN SKIPPER
SAFETY ISSUE: OVERHEAD UTILITY LINES NEAR DUMPING AREA
CORRECTIVE ACTION: HAUL TRUCKS NEED TO LOWER BEDS PRIOR TO MOVING
ASSIGNED TO: DRIVERS, SPOTTER, AND CREW FOLLOW-UP DATE: 01-16-03
CORRECTION VERIFIED BY: Spotter Mike Campbell DATE: 1/16/03

INSPECTION COMPLETED BY: Daniel W Pringle DATE: 01-16-03

HEALTH AND SAFETY REVIEW BY: Joe Walker DATE: 1-16-03



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL

DATE 1-16-03

	YES	NO	N/A
--	-----	----	-----

FIRST AID

- | | | | |
|---|-------------------------------------|--------------------------|--------------------------|
| 1. Are first aid kit locations identified and accessible? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are emergency eye wash/safety showers available and inspected monthly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are first aid kits inspected weekly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is a qualified first aid/CPR provider on site? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

PERSONAL PROTECTIVE EQUIPMENT

- | | | | |
|---|-------------------------------------|--------------------------|--------------------------|
| 1. Have levels of personnel protection been established? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are respirators decontaminated, inspected, and stored according to standard procedures? - NO RESPIRATORS ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Have employees been fit-tested? OFF-SITE | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is defective personal protective equipment tagged and taken out of service? NONE ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does compressed breathing air meet CGA Grade "D" minimum? NONE ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are there sufficient sizes and quantities of protective equipment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

FIRE PREVENTION

- | | | | |
|---|-------------------------------------|--------------------------|--------------------------|
| 1. Are employees smoking only in designated outdoor areas? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are fire lanes established and maintained? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are flammable liquid dispensing systems bonded? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are approved safety cans available for storage of flammable liquids? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Has the local fire department been contacted? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are fire extinguishers available and inspected monthly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are flammables and combustibles properly stored? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are flammable storage cabinets available and used when needed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

AIR MONITORING

- | | | | |
|--|-------------------------------------|--------------------------|--------------------------|
| 1. Is required air monitoring being conducted? NO LONGER CONDUCTED | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are air monitoring instruments calibrated daily? " " " | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are air monitoring logs up to date? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are instrument user manuals available? NO AIR MONITORING EQ. ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Are instruments being maintained? " " " " " " | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are employees notified of personal sampling results within 5 days of receipt? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

WELDING AND CUTTING

- | | | | |
|---|-------------------------------------|--------------------------|--------------------------|
| 1. Are fire extinguishers present at welding and cutting operations? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Are confined spaces evaluated prior to and during cutting and welding operations? NONE CONDUCTED | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Have Hot Work Permits been completed? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Are welding machines properly grounded? NO WELDING ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart? NONE ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 7. Are only trained personnel permitted to operate welding and cutting equipment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 8. Are gas cylinders transported in a secured vertical position with caps in place? NONE ON SITE | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

HAND AND POWER TOOLS

- | | | | |
|--|-------------------------------------|--------------------------|--------------------------|
| 1. Are defective hand and power tools tagged and taken out of service? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is eye protection available and used when operating power tools? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are guards and safety devices in place on power tools? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWNS GUT LANDFILL

DATE 1-16-03

	YES	NO	N/A
4. Are power tools inspected before each use?	✓		
5. Are nonsparking tools available when necessary?	✓		
6. Is the correct tool being used for the job?	✓		

MOTOR VEHICLES

1. Are vehicles regularly inspected?	✓		
2. Are personnel licensed for the vehicles they operate?	✓		
3. Are unsafe vehicles tagged and reported to supervision?	✓		
4. Is vehicle's safety equipment operating properly?	✓		
5. Are loads secure?	✓		
6. Are vehicle occupants using safety belts?	✓		
7. Are current insurance cards and blank accident report forms located in vehicles?	✓		

EMERGENCY PLANS

1. Are emergency telephone numbers posted?	✓		
2. Have emergency escape routes been designated?	✓		
3. Are employees familiar with the emergency signal?	✓		
4. Has the emergency route to the hospital been established and posted?	✓		
5. Is a vehicle on site that can transport injured employees to the hospital?	✓		

MATERIALS HANDLING

1. Are materials stacked and stored to prevent sliding or collapsing?	✓		
2. Are tripping hazards identified?	✓		
3. Are semi-trailers chocked? NO SEMI'S ON SITE			
4. Are fixed jacks used under semi-trailers? NO SEMI'S ON SITE			
5. Are riders prohibited on materials handling equipment?	✓		
6. Are approved manlifts provided for the lifting of personnel? NO NEED			
7. Are personnel in manlifts wearing approved fall protection devices? NONE ON SITE			

FIRE PROTECTION

1. Has a fire alarm system been established?	✓		
2. Do employees know the location and use of all fire extinguishers?	✓		
3. Are fire extinguisher locations posted?	✓		
4. Are combustible materials segregated from open flames?	✓		
5. Have fire extinguishers been professionally inspected during the last year?	✓		
6. Are fire extinguishers visually inspected monthly?	✓		

ELECTRICAL

1. Is electrical equipment and wiring properly guarded and maintained in good condition?	✓		
2. Are extension cords kept out of wet areas?	✓		
3. Is damaged electrical equipment tagged and taken out of service? NONE CURRENTLY ON SITE			
4. Have underground electrical lines been identified by proper authorities?	✓		
5. Has a lockout/tagout system been established?	✓		
6. Are GFCIs being used on all temporary electrical systems and as needed?	✓		

ELECTRICAL (continued)

7. Are extension cords being inspected daily (i.e., group pin in place, no unapproved splices)?	✓		
8. Are warning signs exhibited on high voltage equipment (250V or greater)?	✓		



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL

DATE 01-16-03

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?			
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?			

CRANES AND RIGGING

1. Are cranes inspected daily prior to use? NO NEED FOR CRANES			
2. Are crane swing areas barricaded or demarked? ''			
3. Is all rigging equipment tagged with an identification number and rated capacity?	✓		
4. Is rigging equipment inspection documented?	✓		
5. Are slings, chains, and rigging inspected before each use?	✓		
6. Are damaged slings, chains, and rigging tagged and taken out of service?	✓		
7. Are slings padded or protected from sharp corners?	✓		
8. Do employees keep clear of suspended loads?	✓		
9. Are rated load capacities and special hazard warnings posted on cranes? NO CRANES			
10. Are the records of annual crane inspection available? ''			
11. Has accessible areas within the swing radius of the rear of the crane been barricaded? ''			
12. Do crane operators have required training/certification? ''			

COMPRESSED GAS CYLINDERS

1. Are breathing air cylinders charged only to prescribed pressures? NONE ON SITE			
2. Are like cylinders segregated and stored in well ventilated areas? ''			
3. Is smoking prohibited in cylinder storage areas?			
4. Are cylinders stored secure and upright?	✓		
5. Are cylinders protected from snow, rain, etc.? NONE ON SITE			
6. Are cylinder caps in place before cylinders are moved?	✓		
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart? ''			
8. Are propane cylinders stored and used only outside of buildings? ''			

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface? NO NEED FOR SCAFFOLDING			
2. Are scaffold planks free of mud, ice, grease, etc.? ''			
3. Is scaffolding inspected before each use?	✓		
4. Are defective scaffold parts taken out of service? ''	✓		
5. Have employees completed scaffold user training? ''			
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches? ''			
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)? ''			
8. Are employees restricted from working on scaffolds during storms and high winds?	✓		
9. Are all pins in place and wheels locked? NONE ON SITE			
10. Is required perimeter guarding (top rail, mid rail, and toe board) present? ''			
11. Has a competent person been designated to oversee scaffold construction? ''			
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?	✓		
13. Are all scaffold components manufactured by the same company? NONE ON SITE			

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?	✓		
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?	✓		
3. Are ladders being used in a safe manner? NONE ON SITE			
4. Are ladders kept out of passageways, doors, or driveways? ''			



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWNSHIP GUT LANDFILL

DATE 01-16-03

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service? <u>NONE ON SITE</u>			
6. Are metal ladders prohibited in electrical service?	✓		
7. Are stairways and floor openings guarded?	✓		
8. Are safety feet installed on straight and extension ladders? <u>NONE ON SITE</u>			
9. Is general housekeeping being maintained?			
10. Are ladders tied off? <u>NONE ON SITE</u>			
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?	✓		

SITE SAFETY PLAN

1. Is a site safety plan available on site or accessible to all employees?	✓		
2. Does the safety plan accurately reflect site conditions and tasks?	✓		
3. Have potential hazards been described to employees on site?	✓		
4. Is there a designated safety official on site?	✓		
5. Have all employees signed the safety plan acknowledgment form?	✓		

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?			
A. Minimum Wage	✓		
B. OSHA Job Protection	✓		
C. Equal Employment Opportunity	✓		
2. Are all required state-specific posters displayed?	✓		

SITE CONTROL

1. Are work zones clearly marked?	✓		
2. Are support trailers located to minimize exposure from a potential release?	✓		
3. Are support trailers accessible for approach by emergency vehicles?	✓		
4. Is the site properly secured during and after work hours?	✓		
5. Is an exclusion zone sign-in/sign-out log maintained?	✓		
6. Are only employees with current training and physicals permitted in exclusion zone?	✓		

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	✓		
2. Is defective heavy equipment tagged and taken out of service?	✓		
3. Are project roads and structures inspected for load capacities and proper clearances?	✓		
4. Is heavy equipment shut down for fueling and maintenance?	✓		
5. Are backup alarms installed and working on mobile equipment?	✓		
6. Have qualified equipment operators been designated?	✓		
7. Are riders prohibited on heavy equipment?	✓		
8. Are guards and safety appliances in place and used?	✓		
9. Are operators using the "three point" system when mounting/dismounting equipment?	✓		

EXCAVATION → NO EXCAVATIONS BEING PERFORMED

1. Has a "competent person" been designated to oversee excavation activities?	✓		
2. Prior to opening excavations, are utilities located and marked?	✓		
3. Has a professional engineer evaluated all excavations greater than 20 feet deep? <u>NO EXCAVATIONS</u>			
4. Is there rescue equipment on site and accessible to the excavation area? "			
5. Is excavated material placed a minimum of 24 inches from the excavation? "			



PROJECT SAFETY INSPECTION REPORT

PROJECT TOWN GUT LANDFILL DATE 01-16-03

	YES	NO	N/A
6. Are the sides of excavations sloped or shored to prevent cave ins? <u>NOISE ON SITE</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)? <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Are ladders or ramps used in excavations over 4 feet deep? <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Are means of egress available so as to require no more than 25 feet of lateral travel? <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares? <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11. Is excavation inspected <u>daily</u> by competent persons and documented? <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

CONFINED SPACES

1. Have employees been trained in the hazards of confined spaces?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are confined space permits posted at entrance to confined space? <u>NO CONFINED SPACE WORK BEING DONE</u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is a copy of the confined space entry procedure available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has a rescue plan been established?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Is an entry supervisor present at each permit-required entry? <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Are required extraction/fall protection devices being used? <u> </u>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DECONTAMINATION

1. Are decontamination stations set up on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Is decontamination water properly contained and disposed of?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Are shin/metatarsal guards being used during power washing activities? <u>DO NOT USING HIGH PRESSURE WASHER ON SITE</u>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are there MSDSs for required materials/chemicals present on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Are all containers properly labeled, as to content, hazard?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Have employees been trained in accordance with the HAZCOM procedure?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Have all personnel signed the HAZCOM acknowledgment form?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Is there an updated list of chemicals maintained on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TRAINING

1. Are tailgate safety meetings being conducted daily?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are current training/medical records maintained on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

DOCUMENTATION

1. Is an OSHA 200 Log maintained on site and posted during the month of February?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are accident report forms available?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Is a copy of health and safety policy and procedures available on site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD TOWN GALT

DATE 1-16-03

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETED	VERIFIED BY
SHIN/METAL GUARDS NOT USED	NO HIGH PRESSURE WASHING BEING PERFORMED	N/A	N/A	N/A	—

DESCRIBE POSITIVE SAFETY OBSERVATIONS

SITE IS WELL ORGANIZED. TRAILER IS CLEAN AND THE REQUIRED DOCUMENTS & POSTINGS ARE CLEARLY VISIBLE.



ATTACHMENT 2

PROJECT SAFETY INSPECTION REPORT

PROJECT INDIAN HEAD - SITE 12 DATE 1-28-03

BUSINESS LINE: D.O.Z. PROJECT NAME/NUMBER: 809401
 PROGRAM MANAGER: JIM BLANK PROJECT MANAGER: D. PRINGLE
 GENERAL PROJECT DESCRIPTION: LANDFILL CAP & RESTORATION
 SITE ACTIVITIES AT TIME OF INSPECTION: Hydroseeding
SITE RESTORATION

INTERVIEWED EMPLOYEE: RANDY JOHNSON
 SAFETY ISSUE: COLD WEATHER WORK
 CORRECTIVE ACTION: WEAR MULTIPLE LAYERS
 ASSIGNED TO: FULL CREW FOLLOW-UP DATE: EVERY DAY
 CORRECTION VERIFIED BY: SUPERVISOR THOMPSON DATE: 1/28/03

INTERVIEWED EMPLOYEE: STEVE CARRIERE
 SAFETY ISSUE: NO FLUIDS INTAKE IN COLD WEATHER
 CORRECTIVE ACTION: CONTINUE TO DRINK FLUIDS
 ASSIGNED TO: FULL CREW FOLLOW-UP DATE: 1-29-03
 CORRECTION VERIFIED BY: SUPERVISOR THOMPSON DATE: 1-28-03

INSPECTION COMPLETED BY: Daniel W Pringle DATE: 1-28-03

HEALTH AND SAFETY REVIEW BY: Joseph Walker DATE: 1-28-03



PROJECT SAFETY INSPECTION REPORT

PROJECT Mount Hill - Site 12 DATE 1-28-03

	YES	NO	N/A
--	-----	----	-----

FIRST AID

- | | | | |
|---|---|--|--|
| 1. Are first aid kit locations identified and accessible? | ✓ | | |
| 2. Are emergency eye wash/safety showers available and inspected monthly? | ✓ | | |
| 3. Are first aid kits inspected weekly? | ✓ | | |
| 4. Is a qualified first aid/CPR provider on site? | ✓ | | |

PERSONAL PROTECTIVE EQUIPMENT

- | | | | |
|--|---|--|--|
| 1. Have levels of personnel protection been established? | ✓ | | |
| 2. Are respirators decontaminated, inspected, and stored according to standard procedures? NONE ON SITE | - | | |
| 3. Have employees been fit-tested? | ✓ | | |
| 4. Is defective personal protective equipment tagged and taken out of service? | - | | |
| 5. Does compressed breathing air meet CGA Grade "D" minimum? | - | | |
| 6. Are there sufficient sizes and quantities of protective equipment? | ✓ | | |
| 7. At a minimum, are employees utilizing safety glasses, hard hats, and steel toe boots? | ✓ | | |

FIRE PREVENTION

- | | | | |
|---|---|--|--|
| 1. Are employees smoking only in designated outdoor areas? | ✓ | | |
| 2. Are fire lanes established and maintained? | ✓ | | |
| 3. Are flammable liquid dispensing systems bonded? | ✓ | | |
| 4. Are approved safety cans available for storage of flammable liquids? | ✓ | | |
| 5. Has the local fire department been contacted? | ✓ | | |
| 6. Are fire extinguishers available and inspected monthly? | ✓ | | |
| 7. Are flammables and combustibles properly stored? | ✓ | | |
| 8. Are flammable storage cabinets available and used when needed? | ✓ | | |

AIR MONITORING

- | | | | |
|--|---|--|--|
| 1. Is required air monitoring being conducted? NO LONGER CONDUCTED | - | | |
| 2. Are air monitoring instruments calibrated daily? | - | | |
| 3. Are air monitoring logs up to date? | ✓ | | |
| 4. Are instrument user manuals available? | - | | |
| 5. Are instruments being maintained? | - | | |
| 6. Are employees notified of personal sampling results within 5 days of receipt? | ✓ | | |

WELDING AND CUTTING

- | | | | |
|--|---|--|--|
| 1. Are fire extinguishers present at welding and cutting operations? | ✓ | | |
| 2. Are confined spaces evaluated prior to and during cutting and welding operations? NONE CONDUCTED | - | | |
| 3. Have Hot Work Permits been completed? | ✓ | | |
| 4. Are proper helmets, goggles, aprons, and gloves available for welding and cutting operations? | ✓ | | |
| 5. Are welding machines properly grounded? NO WELDING | - | | |
| 6. Are oxygen and fuel gas cylinders stored a minimum of 20 feet apart? | - | | |
| 7. Are only trained personnel permitted to operate welding and cutting equipment? | ✓ | | |
| 8. Are gas cylinders transported in a secured vertical position with caps in place? NONE | - | | |

HAND AND POWER TOOLS

- | | | | |
|--|---|--|--|
| 1. Are defective hand and power tools tagged and taken out of service? | ✓ | | |
| 2. Is eye protection available and used when operating power tools? | ✓ | | |
| 3. Are guards and safety devices in place on power tools? | ✓ | | |



PROJECT SAFETY INSPECTION REPORT

PROJECT Indian Head - S. CC. 12 DATE 1-28-03

	YES	NO	N/A
4. Are power tools inspected before each use?	✓		
5. Are nonsparking tools available when necessary?	✓		
6. Is the correct tool being used for the job?	✓		

MOTOR VEHICLES

1. Are vehicles regularly inspected?	✓		
2. Are personnel licensed for the vehicles they operate?	✓		
3. Are unsafe vehicles tagged and reported to supervision?	✓		
4. Is vehicle's safety equipment operating properly?	✓		
5. Are loads secure?	✓		
6. Are vehicle occupants using safety belts?	✓		
7. Are current insurance cards and blank accident report forms located in vehicles?	✓		

EMERGENCY PLANS

1. Are emergency telephone numbers posted?	✓		
2. Have emergency escape routes been designated?	✓		
3. Are employees familiar with the emergency signal?	✓		
4. Has the emergency route to the hospital been established and posted?	✓		
5. Is a vehicle on site that can transport injured employees to the hospital?	✓		

MATERIALS HANDLING

1. Are materials stacked and stored to prevent sliding or collapsing?	✓		
2. Are tripping hazards identified?	-		
3. Are semi-trailers chocked? NONE ON SITE	-		
4. Are fixed jacks used under semi-trailers?	-		
5. Are riders prohibited on materials handling equipment?	✓		
6. Are approved manlifts provided for the lifting of personnel? NO NEED	-		
7. Are personnel in manlifts wearing approved fall protection devices?	-		

FIRE PROTECTION

1. Has a fire alarm system been established?	✓		
2. Do employees know the location and use of all fire extinguishers?	✓		
3. Are fire extinguisher locations posted?	✓		
4. Are combustible materials segregated from open flames?	✓		
5. Have fire extinguishers been professionally inspected during the last year?	✓		
6. Are fire extinguishers visually inspected monthly?	✓		

ELECTRICAL

1. Is electrical equipment and wiring properly guarded and maintained in good condition?	✓		
2. Are extension cords kept out of wet areas?	-		
3. Is damaged electrical equipment tagged and taken out of service?	-		
4. Have underground electrical lines been identified by proper authorities?	✓		
5. Has a lockout/tagout system been established?	✓		
6. Are GFCIs being used on all temporary electrical systems and as needed?	✓		

ELECTRICAL (continued)

7. Are extension cords being inspected daily (i.e., group pin in place, no unapproved splices)?	✓		
8. Are warning signs exhibited on high voltage equipment (250V or greater)?	✓		



PROJECT SAFETY INSPECTION REPORT

PROJECT 2nd on H&A - 5/02/12

DATE 1-28-03

	YES	NO	N/A
9. Is adequate distance maintained from overhead electrical lines?	<input checked="" type="checkbox"/>		
10. Are switches, circuit breakers, and switchboards installed in wet locations enclosed in weatherproof enclosures?	<input checked="" type="checkbox"/>		

CRANES AND RIGGING

1. Are cranes inspected daily prior to use?	<u>NO NEED FOR CRANES</u>		
2. Are crane swing areas barricaded or demarked?	<u>NO</u>		
3. Is all rigging equipment tagged with an identification number and rated capacity?	<input checked="" type="checkbox"/>		
4. Is rigging equipment inspection documented?	<input checked="" type="checkbox"/>		
5. Are slings, chains, and rigging inspected before each use?	<input checked="" type="checkbox"/>		
6. Are damaged slings, chains, and rigging tagged and taken out of service?	<input checked="" type="checkbox"/>		
7. Are slings padded or protected from sharp corners?	<input checked="" type="checkbox"/>		
8. Do employees keep clear of suspended loads?	<input checked="" type="checkbox"/>		
9. Are rated load capacities and special hazard warnings posted on crane?	<u>NO</u>		
10. Are the records of annual crane inspection available?	<u>NO</u>		
11. Has accessible areas within the swing radius of the rear of the crane been barricaded?	<u>NO</u>		
12. Do crane operators have required training/certification?	<u>NO</u>		

COMPRESSED GAS CYLINDERS

1. Are breathing air cylinders charged only to prescribed pressures?	<u>NONE ON SITE</u>		
2. Are like cylinders segregated and stored in well ventilated areas?	<u>NO</u>		
3. Is smoking prohibited in cylinder storage areas?	<input checked="" type="checkbox"/>		
4. Are cylinders stored secure and upright?	<input checked="" type="checkbox"/>		
5. Are cylinders protected from snow, rain, etc.?	<input checked="" type="checkbox"/>		
6. Are cylinder caps in place before cylinders are moved?	<input checked="" type="checkbox"/>		
7. Are fuel gas and oxygen cylinders stored a minimum of 20 feet apart?	<u>NO</u>		
8. Are propane cylinders stored and used only outside of buildings?	<u>NO</u>		

SCAFFOLDING

1. Is scaffolding placed on a flat, firm surface?	<u>NO NEED</u>		
2. Are scaffold planks free of mud, ice, grease, etc.?	<u>NO</u>		
3. Is scaffolding inspected before each use?	<input checked="" type="checkbox"/>		
4. Are defective scaffold parts taken out of service?	<input checked="" type="checkbox"/>		
5. Have employees completed scaffold user training?	<u>NO</u>		
6. On scaffolds where platforms are overlapped, is planking overlapped a minimum of 12 inches?	<u>NO</u>		
7. Does scaffold planking extend over end supports between 6 to 18 inches (dependent upon platform length)?	<u>NO</u>		
8. Are employees restricted from working on scaffolds during storms and high winds?	<input checked="" type="checkbox"/>		
9. Are all pins in place and wheels locked?	<input checked="" type="checkbox"/>		
10. Is required perimeter guarding (top rail, mid rail, and toe board) present?	<input checked="" type="checkbox"/>		
11. Has a competent person been designated to oversee scaffold construction?	<u>NO</u>		
12. Are employees prohibited from moving mobile scaffold horizontally while employees are on them?	<input checked="" type="checkbox"/>		
13. Are all scaffold components manufactured by the same company?	<u>NO</u>		

WALKING AND WORKING SURFACES

1. Are ladders regularly inspected?	<input checked="" type="checkbox"/>		
2. Are accessways, stairways, ramps, and ladders clean of ice, mud, snow, or debris?	<input checked="" type="checkbox"/>		
3. Are ladders being used in a safe manner?	<u>NONE ON SITE</u>		
4. Are ladders kept out of passageways, doors, or driveways?	<u>NO</u>		



PROJECT SAFETY INSPECTION REPORT

PROJECT SHAW HAW - 310012

DATE 1-27-03

	YES	NO	N/A
5. Are broken or damaged ladders tagged and taken out of service? <i>NONE ON SITE</i>	<input checked="" type="checkbox"/>		
6. Are metal ladders prohibited in electrical service?	<input checked="" type="checkbox"/>		
7. Are stairways and floor openings guarded?	<input checked="" type="checkbox"/>		
8. Are safety feet installed on straight and extension ladders?	<input type="checkbox"/>		
9. Is general housekeeping being maintained?	<input type="checkbox"/>		
10. Are ladders tied off?	<input type="checkbox"/>		
11. Are handrails and siderails installed along the unprotected sides of stairways having 4 or more risers or rising more than 30 inches?	<input checked="" type="checkbox"/>		

SITE SAFETY PLAN

1. Is a site safety plan available on site or accessible to all employees?	<input checked="" type="checkbox"/>		
2. Does the safety plan accurately reflect site conditions and tasks?	<input checked="" type="checkbox"/>		
3. Have potential hazards been described to employees on site?	<input checked="" type="checkbox"/>		
4. Is there a designated safety official on site?	<input checked="" type="checkbox"/>		
5. Have all employees signed the safety plan acknowledgment form?	<input checked="" type="checkbox"/>		

SITE POSTERS

1. Are the following posters displayed in a prominent and accessible area?			
A. Minimum Wage	<input checked="" type="checkbox"/>		
B. OSHA Job Protection	<input checked="" type="checkbox"/>		
C. Equal Employment Opportunity	<input checked="" type="checkbox"/>		
2. Are all required state-specific posters displayed?	<input checked="" type="checkbox"/>		

SITE CONTROL

1. Are work zones clearly marked?	<input checked="" type="checkbox"/>		
2. Are support trailers located to minimize exposure from a potential release?	<input checked="" type="checkbox"/>		
3. Are support trailers accessible for approach by emergency vehicles?	<input checked="" type="checkbox"/>		
4. Is the site properly secured during and after work hours?	<input checked="" type="checkbox"/>		
5. Is an exclusion zone sign-in/sign-out log maintained?	<input checked="" type="checkbox"/>		
6. Are only employees with current training and physicals permitted in exclusion zone?	<input checked="" type="checkbox"/>		

HEAVY EQUIPMENT

1. Is heavy equipment inspected as prescribed by the manufacturer?	<input checked="" type="checkbox"/>		
2. Is defective heavy equipment tagged and taken out of service?	<input checked="" type="checkbox"/>		
3. Are project roads and structures inspected for load capacities and proper clearances?	<input checked="" type="checkbox"/>		
4. Is heavy equipment shut down for fueling and maintenance?	<input checked="" type="checkbox"/>		
5. Are backup alarms installed and working on mobile equipment?	<input checked="" type="checkbox"/>		
6. Have qualified equipment operators been designated?	<input checked="" type="checkbox"/>		
7. Are riders prohibited on heavy equipment?	<input checked="" type="checkbox"/>		
8. Are guards and safety appliances in place and used?	<input checked="" type="checkbox"/>		
9. Are operators using the "three point" system when mounting/dismounting equipment?	<input checked="" type="checkbox"/>		

EXCAVATION

1. Has a "competent person" been designated to oversee excavation activities?	<input checked="" type="checkbox"/>		
2. Prior to opening excavations, are utilities located and marked?	<input checked="" type="checkbox"/>		
3. Has a professional engineer evaluated all excavations greater than 20 feet deep? <i>NO EXCAVATION</i>	<input type="checkbox"/>		
4. Is there rescue equipment on site and accessible to the excavation area?	<input type="checkbox"/>		
5. Is excavated material placed a minimum of 24 inches from the excavation?	<input type="checkbox"/>		



PROJECT SAFETY INSPECTION REPORT

PROJECT Industrial Hazard - 5/26/12 DATE 1-28-03

	YES	NO	N/A
6. Are the sides of excavations sloped or shored to prevent cave ins? <i>NONE ON SITE</i>	—	—	—
7. Have excavations greater than 4 feet deep been monitored for hazardous atmospheres (i.e., LEL/O ₂ deficiency)?	—	—	—
8. Are ladders or ramps used in excavations over 4 feet deep?	—	—	—
9. Are means of egress available so as to require no more than 25 feet of lateral travel?	—	—	—
10. Are barriers, i.e., guardrails or fences, placed around excavations near pedestrian or vehicle thoroughfares?	—	—	—
11. Is excavation inspected <u>daily</u> by competent persons and documented?	—	—	—

CONFINED SPACES

1. Have employees been trained in the hazards of confined spaces?	✓	—	—
2. Are confined space permits posted at entrance to confined space? <i>NONE</i>	—	—	—
3. Is a copy of the confined space entry procedure available?	✓	—	—
4. Has a rescue plan been established?	✓	—	—
5. Is an entry supervisor present at each permit-required entry?	—	—	—
6. Are required extraction/fall protection devices being used?	—	—	—

DECONTAMINATION

1. Are decontamination stations set up on site?	✓	—	—
2. Is decontamination water properly contained and disposed of?	✓	—	—
3. Are all pieces of equipment inspected for proper decontamination before leaving the site?	✓	—	—
4. Are shin/metatarsal guards being used during power washing activities? <i>NONE</i>	—	—	—

HAZARD COMMUNICATION

1. Is there a copy of the HAZCOM procedure on site?	✓	—	—
2. Are there MSDSs for required materials/chemicals present on site?	✓	—	—
3. Are all containers properly labeled, as to content, hazard?	✓	—	—
4. Have employees been trained in accordance with the HAZCOM procedure?	✓	—	—
5. Do employees (including subcontractors) know and understand the effects of exposure from the chemicals on site?	✓	—	—
6. Have all personnel signed the HAZCOM acknowledgment form?	✓	—	—
7. Is there an updated list of chemicals maintained on site?	✓	—	—

TRAINING

1. Are tailgate safety meetings being conducted daily?	✓	—	—
2. Are current training/medical records maintained on site?	✓	—	—

DOCUMENTATION

1. Is an OSHA 200 Log maintained on site and posted during the month of February?	✓	—	—
2. Are accident report forms available?	✓	—	—
3. Is a copy of health and safety policy and procedures available on site?	✓	—	—



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PROJECT SAFETY INSPECTION REPORT

PROJECT Indian Head - S. DC. 12

DATE 1-22-03

ALL NEGATIVE RESPONSES	CORRECTIVE ACTION	ASSIGNED TO	DATE ASSIGNED	DATE COMPLETED	VERIFIED BY
NONE	—	—	—	—	—

DESCRIBE POSITIVE SAFETY OBSERVATIONS

WELL DOCUMENTED SITE - POSSIBLE DEMOBILIZATION
MIDDLE OF NEXT WEEK - ACTIVITY COMPLETION



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ATTACHMENT 2
HOT WORK PERMIT

Project Name TOWN GUT LANDFILL SITE-12 Project No. 809401
 Good for This Date Only 09/17/02 Time: From 8:00 AM AM/PM To 16:30 AM/PM
 Hot Work Area WEIR at WATER PIPE
 Specific Work to be Done Cut Plate out of Weir
 Personal Protective Equipment Required: SEE PPE
Gloves, SHADE 5 Hood

Emergency Equipment Required: FIRE EXTINGUISHER, FIRE WATCH
RADIO

CHECKLIST	INITIAL:	
	YES	DOES NOT APPLY
Area personnel have been informed of work to be performed.	✓	
All tanks, lines, valves are disconnected, blinded, or blocked out.	✓	
Electrical service has been locked out and tagged.		✓
Equipment and all attached piping has been cleaned and purged with (check blank): Water <input checked="" type="checkbox"/> Steam <input type="checkbox"/> Inert Gas <input type="checkbox"/> Air <input checked="" type="checkbox"/>	✓	
All grounding/bonding wire in place.		✓
Surrounding equipment and operations are safe for hot work.	✓	
No open vessels, lines, or combustible items within 35 feet of hot work area.		✓
Fully charged and appropriate fire extinguisher easily accessible.	✓	
Fire watch has been provided.	✓	
No flammable gases greater than 10% LEL in hot work area.	✓	
Compressed gas cylinders kept upright and secured.		✓
Air monitoring required.		✓

AIR MONITORING (If Required)						
EXACT LOCATION OF TEST	TIME	% LOWER EXPLOSIVE LIMIT	% OXYGEN	OTHER TEST	OTHER TEST	INITIAL

Special Instructions: MAKE SURE FIRE WATCH
SHUT DOWN 30 MIN. PRIOR TO LEAVING AREA
FIRE EXTINGUISHER PRESENT

Completed By: JOE WALKER Printed Name [Signature] Signature Date 9-17-02

POST PERMIT ON WORKSITE
SAFETY WORK PERMIT FOR EXPLOSIVE AREA
INDIAN HEAD DIVISION, NAVAL SURFACE WARFARE CENTER

DATE: 09/14/02
BLDG/AREA: Town Hut

EXPIRES: 09/20/02

WORK PERFORMED BY: ACTIVITY FORCES-CODE () / CONTRACTOR-NAME: Shawn Emv ADHERE TO SPECS OF CONTRACT # 97-D-5000

YES NO RE-INSPECTION OF AREA BY SAFETY INSPECTOR REQUIRED PRIOR TO BEGINNING WORK CODE/INITIAL/DATE _____
DESCRIPTION OF WORK AUTHORIZED: Hot work to repair excavator (teeth on bucket) and to cut weir attached to drain line.

1. DECONTAMINATION OF AREA REQUIRED AS FOLLOWS:

- YES NO PRIOR TO START CLEAR WORK THROUGH BLDG/AREA SUPERVISOR DAILY
- A. REMOVE ALL EXPLOSIVES FROM (SPECIFY) _____
 - B. REMOVE HAZARDOUS MATERIALS (SPECIFY) _____
 - C. WASH AREA DOWN (SPECIFY) _____
 - D. TREAT WITH DESENSITIZING AGENT (SPECIFY) _____
 - E. SECURE EXPLOSIVE OPERATIONS IN _____
 - F. OTHER (SPECIFY) _____

4. PERSONAL PROTECTIVE EQUIPMENT REQUIRED

- YES NO
- EYE PROTECTION (SAFETY GLASSES, GOGGLES, FACE SHIELD)
 - HEARING PROTECTION
 - POWDER UNIFORM (COVERALLS & CAP)
 - CONDUCTIVE SHOES OR NO-STATS
 - RESPIRATORY PROTECTION (SPECIFY) _____
 - HAND/FOOT/HEAD PROTECTION (SPECIFY) as required
 - FALL PROTECTION REQUIRED (SPECIFY) _____
 - OTHER (SPECIFY) _____

2. OPEN FLAME (HOT) OR SPARK-PRODUCING WORK (WELDING, TORCH, SOLDERING, GRINDING, ETC.) AUTHORIZED NOT AUTHORIZED _____

- YES NO
- A. HAVE FIRE EXTING. ON-SITE DURING HOT WORK (TYPE: ABC)
 - B. HAVE FIRE WATCH ON-SITE DURING HOT WORK
 - C. STAY ON-SITE 30 MINUTES AFTER HOT WORK IS COMPLETE
 - D. REMOVE FLAMM./COMBUST. MATERIAL FROM HOT-WORK SITE
 - E. BUFFER BAY(S) REQUIRED (SPECIFY) _____
 - F. HOT WORK AREA TO REMAIN WET DURING WORK
 - G. OTHER (SPECIFY) _____

5. ADDITIONAL REQUIREMENTS

- YES NO
- NOTIFY BLDG/AREA SUPERVISOR WHEN WORK IS COMPLETE
 - EXPLOSIVES TRANSFERS ALLOWED IN AREA DURING WORK
 - NOTIFY FIRE DEPT / PUBLIC WORKS UTILITIES OF WORK
 - LOCKOUT/TAGOUT HAZARDOUS ENERGY SOURCES (SPECIFY) _____
 - RE-INSP OF AREA REQ'D BY SAFETY INSP UPON COMPLETION OF WORK
 - OTHER (SPECIFY) _____

3. EQUIPMENT AUTHORIZED FOR USE

- YES NO
- A. TORCH/WELDER
 - B. POWER TOOLS (GRINDER, DRILL, SKILSAW, BACKHOE, GENERATOR, AIR COMPRESSOR)/POWER EQUIPMENT (SPECIFY) _____
 - C. HAND TOOLS
 - D. NON-SPARKING TOOLS
 - E. OTHER (SPECIFY) _____

6. OTHER:

SUPERVISOR IN IMMEDIATE AREA/DATE

SAFETY DEPARTMENT OFFICIAL/DATE

CONTRACT REPRESENTATIVE/DATE

PUBLIC WORKS REPRESENTATIVE/DATE

This permit is issued for the protection of all workers and equipment. No deviation from requirements of this permit is authorized without permission of the issuing agent. If method of work, or conditions of immediate area change, or other hazardous conditions arise during work, work will be stopped immediately and the Safety Department and/or the Fire Department will be notified. Notify the Safety Department when job is completed. All permits issued are good ONLY for the day issued and new permits will be issued daily if work is to continue over a period of time unless otherwise stated.