DEPARTMENT OF THE NAVY
CRANE DIVISION
NAVAL SURFACE WARFARE CENTER
300 HIGHWAY 361
CRANE, INDIANA 47522-5000

IN REPLY REFER TO:

5090
Ser 095/8098
11 MAY 1998

2-1-1998

U.S. Environmental Protection Agency, Region V
Waste, Pesticides, & Toxics Division
Waste Management Branch
Illinois, Indiana, and Michigan Section
ATTN: Ms. Carol Witt-Smith (DRP-8J)
77 West Jackson Blvd.
Chicago, IL 60604

Dear Ms. Witt-Smith:

Crane Division, Naval Surface Warfare Center (NAVSURFWARCENDIV Crane) submits the final report for the phase II surface water release assessment at the Ammunition Burning Grounds, Solid Waste Management Unit 03/10, as enclosure (1). Enclosure (2) is the required Certification Statement.

NAVSURFWARCENDIV Crane point of contact is Mr. Thomas J. Brent, Code 09510, telephone 812-854-6160.

Sincerely,

James M. Hamil

JAMES M. HAMBLOCKER
Director, Environmental Protection Department
By direction of
the Commander

Encl:
(1) Phase II Release Assessment for Surface Water SWMU 03/10
(2) Certification Statement

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I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

SIGNATURE

DIRECTOR,
ENVIRONMENTAL PROTECTION DEPARTMENT

TITLE

5/11/98

DATE

Enclosure (2)

Technical Report GL-98-2
February 1998

US Army Corps of Engineers
Waterways Experiment Station

Final Report: RCRA Facility Investigation, Phase II Release Assessment for Surface Water SWMU 03/10 Ammunition Burning Ground

by William L. Murphy, Roy Wade

Further dissemination of this document only as directed by Department of the Navy, Southern Division, Naval Facilities Engineering Command, Charleston, South Carolina 29411-0068; February 1998; or Higher DoD Authority.

Prepared for Department of the Navy
Southern Division, Naval Facilities Engineering Command

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Technical Report GL-98-2
February 1998

Final Report: RCRA Facility Investigation, Phase II Release Assessment for Surface Water SWMU 03/10 Ammunition Burning Ground

by William L. Murphy, Roy Wade

U.S. Army Corps of Engineers
Waterways Experiment Station
3909 Halls Ferry Road
Vicksburg, MS 39180-6199

Final report

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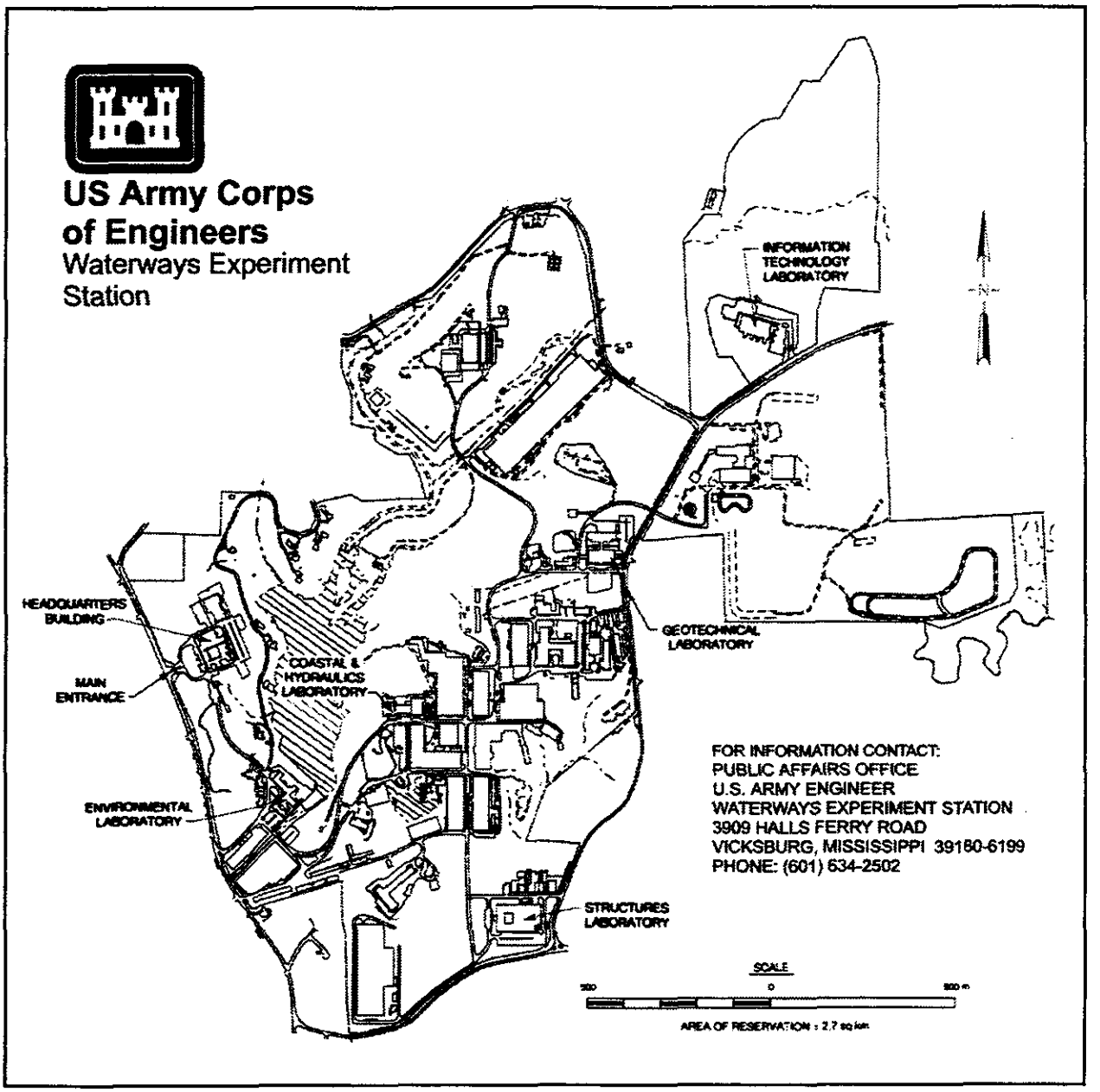
Prepared for Department of the Navy
Southern Division, Naval Facilities Engineering Command
Charleston, SC 29411-0068



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Preface

This investigation began 6 August 1990 with submittal to the U.S. Environmental Protection Agency (USEPA), Region V (Chicago), of a Work Plan for an RCRA[1] Facility Investigation (RFI), Surface Water Release Assessment of Solid Waste Management Unit (SWMU) 03/10, Ammunition Burning Ground (ABG), Naval Surface Warfare Center Crane (NSWCC), Indiana. Surface water sampling was delayed until the spring of 1992 because of drought conditions experienced during the summer of 1991. The work was performed under authority provided in NAVCOMPT documents N62472-90P00006 (27 December 1989), N62472-92MP00007 (5 December 1991), and N62472-92MP000011 (23 January 1992). Funding was made available through the Navy's Installation Restoration Program (IRP), Defense Environmental Restoration Account (DERA).

Surface water and sediment sampling was conducted by Mr. Roy Wade and Mr. Buddy Ragsdale, Environmental Laboratory (EL), U.S. Army Engineer Waterways Experiment Station (WES), under the direction of Ms. Ann Strong. Project management and data analysis were conducted by Mr. William L. Murphy, Geotechnical Laboratory (GL), WES. The original Work Plan for the surface water RFI was prepared by Mr. James May, GL. The report was prepared by Messrs. Murphy and Wade. Mr.Thomas Brent, Environmental Protection Department, NSWCC, provided oversight and field assistance. Mr. James Hunsicker was Environmental Protection Department Manager at NSWCC during the investigation. Ms. Adrienne Townsel-Wilson, Project Engineer, provided oversight for the Environmental Restoration Branch, Southern Division, Naval Facilities Engineering Command. Dr. W.F. Marcuson III was Director, GL, and Dr. John Harrison was Director, EL.

At the time of publication of this report, Dr. Robert W. Whalin was Director of WES. COL Robin R. Cababa, EN, was Commander.

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[1] Resource Conservation and Recovery Act (RCRA). A list of acronyms and abbreviations is provided on page ix.

Executive Summary

A Phase II RCRA Facility Investigation, Release Assessment for Surface Water, was performed in and near the Ammunition Burning Ground at the NSWCC, Indiana, by the Waterways Experiment Station. Investigators conducted two rounds of sampling of the water and bottom sediments of Little Sulphur Creek in the spring and summer of 1992. Samples were analyzed for selected inorganic and organic constituents to determine the presence or absence of contamination in Little Sulphur Creek resulting from activities at the burning ground. The assessment also determined the physical characteristics of the stream and its tributaries, the degree of hazard, the type and mobility of pollutants, groundwater discharge and recharge areas, and probable source areas. The investigators established 11 sampling stations: one background station and two sampling stations upstream of the burning ground, three stations within the operations area, and five stations downstream (south) of the burning ground, all in Little Sulphur Creek.

Flow in Little Sulphur Creek is seasonal. The upper portion, including the burning ground, flows only during wet periods. The lower 1/2 mile of the Creek, below the burning ground, is fed by springs year-round. Sampling and analysis indicate that operations at the burning ground have released contaminants to the water and sediment of Little Sulphur Creek. Contaminants include metals and other inorganic constituents, certain explosives compounds, and selected volatile and semivolatile organics. Generally, contaminants were detected more frequently in sediments than in the water. Metals, nitrates, and explosives in the surface water occurred somewhat more frequently or at higher levels in the second round (summer) than in the first. Bottom sediments did not show a similar trend.

Specific site-related contaminants present in the surface water include the metals aluminum, barium, manganese, magnesium, chromium, cadmium, copper, lead, and zinc; nitrates; the explosives RDX, HMX, and 2,4-DNT; and the semivolatile organic bis(2-ethylhexyl)phthalate. Site-related contaminants present in the sediments include the above-mentioned metals and antimony, chromium, nickel, mercury, silver, thallium, and vanadium; nitrates and possibly nitrites; the explosives RDX, HMX, TNT, 2,4-DNT, and possibly TNB; possibly some volatile organics; and the pesticides A-BHC and heptachlor.

Contaminants were detected in all of the sampling sites, in the water or sediment, or both, in one or both sampling rounds. Certain sampling sites, especially two immediately downstream of the burning ground, had higher levels or more frequent occurrences of contaminants than other sites.

IN5 170 023 498

Conversion Factors, Non-SI to SI Units of Measurement

Non-SI units of measurement used in this report can be converted to SI units as follows:

Multiply	By	To Obtain
acres	4046.873	square meters
feet	0.3048	meters
feet per mile	0.1894	meters per kilometer
inches	2.54	centimeters
miles (U.S. statute)	1.6093	kilometers

Acronyms and Abbreviations

ABG	Ammunition Burning Ground
A-BHC	alpha-hexachlorocyclohexane
B-BHC	beta-hexachlorocyclohexane
CAP	Corrective Action Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CL	Clay
CMS	Corrective Measures Study
DL	Detection Limit
DOD	Department of Defense
EL	Environmental Laboratory
EPA	Environmental Protection Agency
EPIC	Environmental Photographic Interpretation Center
ft	feet
GL	Geotechnical Laboratory
GM	silty gravels (USCS)
GPS	Global Positioning System
GW	well-graded gravels (USCS)
HMX	octahydro-1,3,5,7-tetrazocine
HSWA	Hazardous and Solid Waste Amendments
IAS	Initial Assessment Study
IRP	Installation Restoration Program
MCL	Maximum Contamination Limit
NACIP	Navy Assessment and Control of Installation Pollutants
NAD	North American Datum
NAVCOMPT	Navy Comptroller
NCP	National Oil and Hazardous Substances Contingency Plan
NEESA	Naval Energy and Environmental Support Activity
NGVD	National Geodetic Vertical Datum
NWSC	Naval Weapons Support Center
NSWC Crane	Crane Division, Naval Surface Warfare Center
PEP	Pyrotechnics, explosives, and propellants

Acronyms and Abbreviations (Concluded)

PPDDE	*p,p'*-DDE (dichlorodiphenyldichloroethylene)
QA/QC	Quality Assurance/Quality Control
RCRA	Resource Conservation and Recovery Act
RDX	hexahydro-1,3,5-trinitro-1,3,5-triazine
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI/FS	Remedial Investigation/Feasibility Study
SARA	Superfund Amendments and Reauthorization Act
SI	International System of Units
SM	Silt (USCS)
SWMU	Solid Waste Management Unit
TCE	trichloroeth(yl)ene
TOC	Top of Casing
TNB	trinitrobenzene
TNT	2,4,6-trinitrotoluene
TSD	Treatment, Storage, or Disposal
USCS	Unified Soil Classification System
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
UST	Underground Storage Tanks
UXO	Unexploded Ordnance
WES	Waterways Experiment Station
2,4-DNT	2,4-dinitrotoluene

1 Introduction

Purpose

This report documents an RFI Phase II Release Assessment for Surface Water at SWMU 03/10 Ammunition Burning Ground, NSWCC, Indiana. The Phase II investigation evaluated the presence or absence of a release of hazardous constituents to surface water bodies, both sediment and water, in the vicinity of the SWMU. This report fulfills Corrective Action requirement, paragraph F.1.c. (RFI Phase II Release Assessment for Surface Water Bodies), page 12, of the joint State and Federal RCRA Storage Permit issued to NSWCC 20 December 1989.

The Phase II assessment addressed the physical characteristics of surface water bodies susceptible to potential contaminant discharges, the degree of hazard, the mobility of pollutants considered, point source discharges within the ABG, flow directions, groundwater discharge and recharge areas, and the presence or absence of contaminants.

Background

A sequence of remedial investigations and remedial actions has been performed at the NSWCC. Investigations began after the initial discovery in early 1981 of a potential hazardous substance release from the Center. The investigations have proceeded since 1981 and continue at the time of this writing. In April 1981, the U.S. Navy implemented Navy Assessment and Control of Installation Pollutants (NACIP), now known as the Installation Restoration Program (IRP), to identify and control environmental contamination from past use, disposal, and treatment of hazardous substances at facilities including the NSWCC.

An Initial Assessment Study (IAS) for the NSWCC began in April 1981 and was completed in May 1983 by the Naval Energy and Environmental Support Activity (NEESA) (Eakes, 1983). Assistance was provided by the Ordnance and Environmental Support Agency and the WES. The IAS recommended site inspections be performed at 14 sites: 9 ordnance sites and 5 non-ordnance sites. The IAS identified the ABG as a site requiring investigation because of past hazardous waste storage and treatment activities. The

ongoing hazardous waste management operations at the ABG also required compliance with Subtitle C of RCRA. On 19 May 1980, the USEPA finalized Phase I of the RCRA hazardous waste regulatory program, which became effective 19 November 1980. By that date the NSWCC had to comply with the codified regulatory sections of the RCRA. In October 1980 the NSWCC filed a RCRA Section 3010 notification and a Part A permit application to operate as a treatment, storage or disposal (TSD) facility. The NSWCC was qualified for and obtained Part A "interim status", which allowed the facility to legally operate as though it had a permit. The ABG then became subject to 40 CFR, Part 265 (interim status standards). Part 265 and Parts 260 through 280 are divided into Subparts which address the general operating requirements for hazardous waste management facilities and the technical standards applicable to specific units.

In August, 1981 the NSWCC notified the USEPA of four surface impoundments (dewatering beds) at the ABG and one waste impoundment. A "groundwater monitoring program" was required at the ABG pursuant to (a) 40 CFR, Part 265, Subpart F, and (b) the IRP. The groundwater monitoring program began at the NSWCC in 1981. Through a Military Interservice Procurement Request, the Navy contracted the WES to conduct hydrogeologic investigations at ten sites, eight identified in the IAS and two new sites. The work was performed under authority provided by NAV-COMPT Document Number N00164-IMP-04575, dated June 1981 and amended October 1981. The WES installed monitoring wells from August to December 1981 at the ABG and provided a report in April 1982 (Dunbar, 1982). Results of the monitoring program suggested the presence of groundwater contamination at the ABG. Pursuant to 40 CFR 265 Subpart F, WES performed six studies at selected sites from June to October 1983. The ABG was one of the sites. The final report for the 1983-84 studies at the ABG was provided in April 1984 (Dunbar 1984).

The Hazardous and Solid Waste Amendments (HSWA) of RCRA (Section 3004) established corrective actions programs (CAP) at TSD facilities. The provision required the NSWCC to address past releases of hazardous waste or hazardous constituents at SWMUs and regulated units. The first step of the CAP required the NSWCC to submit a Hazardous Waste Management Report (known as the SWMU report) to the USEPA. The SWMU report listed the ABG and all of the IAS-identified hazardous waste sites as SWMUs, and was submitted to the USEPA in January 1985 (Hazardous Materials Technical Center, 1985).

A. T. Kearney, a USEPA contractor, conducted a file search of the NSWCC and a site visitation and prepared a report in 1987 which characterized possible releases from 100 SWMUs (A. T. Kearney, 1987). On 22 June 1987, the USEPA promulgated amendments to allow the information related to detailed corrective action planning to be developed by USEPA Regional

Administrators after the issuance of a RCRA permit through the use of compliance schedules included in the permit.

A second phase of the hydrogeological investigation of the ABG and surrounding area was conducted by the WES in 1986-87. Work included emplacement of 66 exploration borings and monitoring wells in three aquifers, geologic and hydrologic field mapping, literature survey, and consultation with geologists at the Indiana Geological Survey, Bloomington. The study area included the area surrounding the ABG, especially that to the south. The Hunt (1988) report identified factors influencing or controlling the flow of potentially contaminated groundwater into and out of the ABG.

The Hunt (1988) hydrogeological investigation and report are partial fulfillment of the (a) *Groundwater Assessment Plan, Ammunition Burning Grounds Hazardous Waste Treatment Site* (Naval Weapons Support Center, 1986) and (b) the 1989 USEPA RCRA Part B Permit's CAP. Hunt (1988) concluded that flow through solution passages in the Beech Creek limestone is the primary conduit for groundwater leaving the ABG and that flow through the conduits can be "rapid."

On 3 April 1989 the Navy submitted three documents to the USEPA Region V: (a) an updated Groundwater Assessment Plan for the ABG (May, 1989); (b) a Dye Tracer Test Proposal; and (c) the Hunt (1988) ABG hydrogeologic investigation report. Technical review comments, dated 22 June 1989, were submitted by the USEPA Region V to the NSWCC for the three documents. A dye trace of the Beech Creek limestone aquifer was conducted and a report submitted in 1990 (Murphy and Ciocco, 1990).

A joint Federal and State RCRA storage permit was issued to the U.S. Navy by the USEPA and the State of Indiana. The Federal portion of the RCRA Permit, dated 20 December 1989, established the HSWA Corrective Action Requirements and Compliance Schedules (RCRA Section 3004). The compliance schedules obligated the NSWCC to perform RFIs at 30 SWMUs and, if contamination were found, to conduct Corrective Measures Studies (CMS) and implement corrective measures if needed. The State of Indiana obtained pre-HSWA authorization and issued the State portion of the permit which authorized the NSWCC to operate the Central Hazardous Waste Storage Facility, Building 2993. The Permit's RFI compliance schedule for the ABG established work plan submittals for the following: (a) Modified RFI Phase III Release Characterization for Groundwater; (b) RFI Phase III Release Characterization for Soil; and (c) RFI Phase II Release Assessment for Surface Water Bodies. Field sampling of surface water sites was accomplished in March (Round 1) and again in July (Round 2) of 1993.

Part 1 of the RFI Phase III Release Characterization for Soil was conducted at the ABG in August, 1990 by the U.S. Army Engineer District Wilmington and WES. A draft report was submitted for comment in

January, 1992 and a revised draft in November, 1992 (U.S. Army Corps of Engineers, 1992). Concentrations of metals and explosives above detection limits and above background levels were detected in soil samples from selected areas within the ABG. Estimated concentrations of volatile and semivolatile organics, pesticides and herbicides below detection limits were reported. The report recommended that a Part 2 study be performed to define the extent of soils contamination. The Part 2 field work was performed in the summer of 1993 and data analysis is in progress. The NSWCC is also pursuing a USEPA, RCRA operating permit for thermal treatment (open burning/open detonation) of pyrotechnics, explosives, and propellants (PEP) at the following Subpart X units: the ABG, the Demolition Area, and the Old Rifle Range, which are also considered SWMUs.

Groundwater quality monitoring at the ABG is being conducted by the Environmental Protection Division, NSWCC, through a private contractor. ABG study area wells have been sampled quarterly for selected compounds since October, 1987. Compounds sampled for are Group 1 drinking water parameters, Group II groundwater quality parameters, Group III groundwater quality indicators, three explosives compounds, and volatile organics. A private contractor evaluated the water quality data for Crane and submitted a report (Comarco, 1992). A draft RFI Phase III Groundwater Release Characterization report for the ABG was prepared by WES and submitted to USEPA by NSWCC on 1 September 1992 (Murphy 1992). The report concluded that a release of contaminants to groundwater has occurred at the ABG. Contaminants released included the explosive compound RDX, the volatile organic trichloroethylene (TCE), and the trace metal, barium.

Scope

The information and discussion in this report pertain to the facility known as the Ammunition Burning Ground, SWMU 03/10 of the NSWCC, Indiana. Field data acquisition methods discussed are applicable to other military facilities requiring similar surface waters evaluation and assessment, with modifications as necessary to meet specific site and regulatory requirements. Laboratory chemical analysis methods discussed generally followed USEPA protocol for RFIs and are applicable to other RFIs with modification for site-specific requirements.

Description of the Study Area

The NSWCC is located in southwest Indiana approximately 75 miles southwest of Indianapolis and 71 miles northwest of Louisville, Kentucky (Figure 1). The NSWCC occupies 62,463 acres (approximately 96 square miles) of the northern portion of Martin County and parts of neighboring Greene, Daviess, and Lawrence Counties. The ABG study area lies in the

eastern part of the NSWCC (Figure 2) and consists of about 50 acres. Topography of the ABG study area is rugged, with steep sided, narrow ridges and valleys formed by erosional incision of gently dipping strata of varying resistance. A major drainage divide extends southwest to northeast through the area and is approximately coincident with NSWCC Road 161 (Plate 1).

The ABG lies near the head of the valley of Little Sulphur Creek (see Plate 1). The site is approximately 2,000 ft long by 1,000 ft wide with the long axis oriented east-west. Surface drainage flows into the site from the west and northwest, and flows out of the site to the east. Little Sulphur Creek turns south at the east end of the site and continues off the NSWC boundary 1-0.5 miles south of the ABG.

Operational History of the ABG

The ABG has been used extensively since the 1940's for the destruction of materials contaminated with explosives, bare explosives, rocket motors, candles, flares, solvents, red phosphorus, small detonators, and fuse materials. The largest quantities were destroyed between 1956 and 1960, when 15,000 lb per day of smokeless powder and 48,000 lb per day of high explosives (H-6 and Composition B) were burned. The area is also used for flashing (burning) of the residue from bombs and projectiles after they have been subjected to melt out or drill out operations to remove the bulk of the explosives. From 1970 to 1981, over 10,000 major weapons were destroyed.

Solid explosives residues not in containers or bombs were formerly spread out on burning pads or in flash pits and ignited, or flashed. Flashing today is done in clay-lined steel pans. Plate 2 is a map showing current operations at the ABG. There are 29 pans currently in operation at the ABG. Bulk propellants typically are poured into the burning pans to a depth of a few inches, primed, and remotely initiated. A summary of pan operations is as follows:

a. Bulk propellant and high explosives are burned (thermally treated) in clay-lined steel pans. Twenty pans are set up for this operation in six excavated areas oriented north-northeast (areas 2, Plate 2). Two pans are dedicated to the burning of production scrap (areas 3, Plate 2).

b. PEP-contaminated solvents and liquids are burned in three unlined steel pans (areas 9, Plate 2). From west to east in Plate 2, one pan is for solvents, one is for fuel oil, and one is for desensitized black powder. Waste red phosphorus is burned in four unlined steel pans (areas 4, Plate 2).

c. Three pans are available for sludge burning (areas 1). The upper pan is for RDX sludge, the lower for phosphorus sludge, and the middle

pan has not yet been used. The pans replace the sludge surface impoundments (areas 6, below) formerly used to remove liquids from combustible sludges.

The primer pit (area 5, Plate 2) and incendiary cage (area 8) are used for thermal treatment of ammunition components (for example, small impact sensitive primers) and pyrotechnic munitions. The burn box (area 11) has been decommissioned.

Plate 2 shows three burn pads for suspected explosives-contaminated material such as paper and wooden boxes (areas 10) and one ash inspection pan (area 7). NSWCC currently uses only two of the three burn pads for suspected contaminated material (the pad near areas 9 is not used). The three burn pads are concrete-lined and are equipped with run-on/run-off controls. The ash inspection pan is used by ABG to cool the ash from the primer pit to allow personnel to segregate metal parts from the ash.

An ash pile consisting of approximately 12,290 lb of burn residue accumulated near the incinerator pit (Plate 2). The ash pile was removed between July 1986 and February 1987. Hazardous waste ash from the burning operations now is stored in two large roll-off boxes (area 12). The ash is stored until sent to the landfill.

Three surface impoundments (ponds) were constructed for the purpose of removing liquids from otherwise combustible sludges resulting from the blending and loading of munitions. In 1982 the impoundments were modified to include a liner and leachate collection system for each one. Each of the impoundments is approximately 40 ft in diameter. The modified, lined and covered impoundments are shown as open circles on Plate 2 (areas 6). The two ponds near well 03-29 held TNT, RDX and breakdown compounds in water from the Rockeye and other locations within NSWCC. The pond in the upper left corner of Plate 2 near well 03C09 held phosphorus compounds. The three ponds have been replaced by the sludge burn pads (areas 1). The ponds are now empty and scheduled for closure. Another tank (area 6a) holds explosives wastes contaminated with pink water. Two empty underground storage tanks (UST), scheduled for closure, were used to store runoff and leachate from the three area 6 ponds. The USTs are near the pink water tanks (area 6a).

An area in the valley of Little Sulphur Creek, approximately one-half mile south of the ABG on the "jeep trail" (see Plate 1), was used in the early 1980s (approximately 1981-83) to burn out bombs and to flash powder. Bombs were tilted up on-end alongside the trail, filled with an initiating powder, and flashed to finish the demil process following washout. A trench reportedly was excavated alongside the trail to flash powder. The area reportedly has not been used for any operations since 1983.

2 Surface Hydrology of the ABG Study Area

Limits of Study Area

Referring to Plate 1, the ABG surface water study area consists of the headwaters of Little Sulphur Creek, west-northwest and southwest of the ABG in the southeast quadrant of section 20 and northeast quadrant of section 29, respectively, of T5N, R3W of the Indian Springs topographic quadrangle and all of Little Sulphur Creek valley through the ABG and south to the reservation boundary in section 33, T5N, R3W of the Indian Springs and Williams quadrangles. Water and sediment samples were obtained from within Little Sulphur Creek. Sources of water entering Little Sulphur Creek include surface runoff from the slopes within its drainage basin, rainfall-activated seeps of groundwater from soil and rock interfaces on the slopes, limited man-made runoff from activities within the ABG, and permanent to ephemeral springs at the valley walls downstream of the ABG.

Physiography and Drainage

The physiographic divisions of the state of Indiana are shown in Figure 3. The NSWCC lies in an unglaciated area of the Crawford Upland, a rugged, dissected plateau bound on the east by the Mitchell Plain and on the west by the Wabash Lowland. The boundary between the Crawford Upland and the Mitchell Plain is a low limestone plateau characterized by sinkhole topography and other karst features. The escarpment trends northwest-southeast and passes just east of the NSWCC. Numerous springs and caves occur along the escarpment and in the eastern part of the Crawford Upland. Some of the solution features are found in the eastern portion of the NSWCC within the valley of Little Sulphur Creek. Elevations on the Crawford Upland at the NSWCC range from less than 500 ft to greater than 850 ft NGVD (National Geodetic Vertical Datum). Relief on the upland varies from about 100 ft to 350 ft, with higher elevations and greater relief occurring generally in the eastern part of the NSWCC. Surface drainage in the upland is to the south and southwest.

Elevations across the study area range from about 500 ft NGVD in Little Sulphur Creek near the reservation boundary to a maximum of 845 ft NGVD along the drainage divide. Elevations in the valley portion of the ABG site range from 620 ft NGVD at the western end to 580 ft NGVD at the eastern end. Elevations on ridges around the site range from 720 to 810 ft NGVD.

The surface drainage along major streams in Indiana is shown in Figure 4. Drainage in all but the extreme northeast corner of the state is to the southwest and south. The major drainage at the NSWCC is divided into five basins (Figure 5). The ABG and Little Sulphur Creek are located in Basin III, east of the divide shown on Plate 1. East of the divide, the area drains to the south through Little Sulphur and Sulphur Creeks. The area west of the divide drains ultimately into Turkey Creek to the west (see Figure 5). Little Sulphur Creek enters Sulphur Creek about 3-0.5 miles south of the ABG. Sulphur Creek is tributary to Indian Creek, which flows southwest into the White River some eight miles below ABG. The White flows southwest and enters the Wabash, which flows south along the Indiana-Illinois state line to the Ohio River (see Plate 1 and Figure 4).

Description of Little Sulphur Creek

Little Sulphur Creek is approximately 4.6 miles long from its northern most headwaters to its intersection of Sulphur Creek south of the NSWCC. The stream consists of a north and a south fork from the headwaters to approximately the center of the ABG where it becomes a single channel (Plates 1 and 2). The slope of the streambed (the stream gradient) ranges from 0.048 or about 251 ft per mile on the south fork west of the ABG to 0.009 or about 50 ft per mile in the valley below the ABG near the NSWCC boundary. Figure 6 is a profile along the south fork and main channel of Little Sulphur Creek from its headwater to the NSWCC boundary. The positions of the ABG and the surface water sampling sites on the south and main forks are also shown. The profile data were compiled from topographic quadrangles and a large-scale topographic map of the ABG. Figure 6 illustrates a break in slope above the center of the ABG. Vertical enhancement of the profile is 40 to 1.

The south fork channel of Little Sulphur Creek was diverted from a position near boring VF-12 (Plate 2) to the northeast to intercept the north fork immediately above the main ABG road near the center of the ABG. The former channel flowed southeast from the diversion point, along the foot of the south slope, to intercept the main channel near surface water sampling site ABG-6 (Plate 2).

The channel of Little Sulphur Creek varies in width from a few feet in the upper reaches to about 25 ft in the valley flats. The stream is intermittent in that its flow varies considerably with the seasons. Some flow is usually

present in the north and south forks above the center of the ABG. Downstream of the vicinity of monitoring well 03C11 (Plate 2), however, the surface flow ceases in the dry months as the surface water is captured by vertical infiltration into the sandstone and limestone aquifer underlying the ABG. The process of stream capture within the ABG has been discussed in previous reports (see Hunt, 1988 and Murphy and Ciocco, 1990). In dry weather, the stream bed remains dry downstream of the capture zone to about three-fourths of a mile below the ABG where Spring C (Plate 1) issues from the Beech Creek limestone on the east valley wall and rejuvenates Little Sulphur Creek. Flow is further augmented downstream by groundwater issuing from the Beech Creek limestone springs A and B on the west valley wall. In the dry season, all of the water flowing in Little Sulphur Creek below the ABG originates in Springs A, B and C. Water issuing from Spring A has been shown by dye tracing to have originated in limestone openings beneath the east-central ABG (Murphy and Ciocco 1990).

Flow occurs in all reaches of the stream during high or extended periods of precipitation (usually winter and spring). Water depths at the time of sampling (spring and mid-summer) were generally only a few inches in the upper and middle reaches to 1-0.5 to 2 ft in pools in the flatter lower reaches. The bed of Little Sulphur Creek is rocky and sandy with a relatively thin alluvial bed load (a few inches to perhaps 2 ft thick). Figure 7 is a vertical profile constructed from data from soil borings emplaced across the valley floor in the west-central ABG. The profile extends from the south fork of Little Sulphur Creek at the south valley wall to the north fork at the north valley wall. The valley fill between the stream channels is clay and silt 5 to 10 ft thick, much of which has been reworked by ABG activities. The streambed, however, is in contact with the underlying rock or on a very thin veneer of bed load. Figure 8, constructed from data from 10 borings across the valley, illustrates the valley profile at the NSWCC boundary, the limit of the study area. Little Sulphur Creek is near the right side of the valley in the figure. The lower valley has a basal gravel fill up to 10 ft thick. The stream bed is in the gravel fill approximately 6 ft above the top of rock, which is the Elwren shale. Vertical enhancement on both profiles (Figures 7 and 8) is about 12 to 1. Figures 7 and 8 were taken from Hunt 1988.

3 Field Investigation Methods

Sampling Rational

Site selection

The surface water and sediment of Little Sulphur Creek were sampled in the drainageways west and northwest of the ABG to establish background (upgradient) water and bottom sediment quality. Three background sample locations, one on the south fork and two on the north fork above the ABG, were initially selected. Initial background sites were ABG-1, -2, and -3 (Plate 1). Sites ABG-2 and ABG-3 were subsequently rejected as background sites because of elevated contaminant levels in samples. Three sites (ABG-4, -5 and -6) were selected within the ABG proper to establish contaminant levels near potential sources (Plate 2). Sites ABG-4 and -5 were located near the center of the ABG on the north and south forks, respectively, of Little Sulphur Creek immediately downstream of the burn pans, the largest area of thermal treatment within the ABG. Site ABG-6 was located near the south-east corner of the ABG downstream and downslope of most of the ABG operational areas (Plate 2). Sites ABG-7 through ABG-11 were located in Little Sulphur Creek downstream of the ABG (Plate 1). ABG-7 and -8 were sampled for that portion of the stream that is intermittent; i.e., the stream there flows only during the wet season. Site ABG-9 was sampled for that part of the permanent stream that is rejuvenated by water issuing from Spring C on the east valley wall. Site ABG-10 was sampled for the segment of stream between Spring C and Spring A on the west valley wall. Site ABG-11 was sampled for the stream near the south NSWCC boundary in a reach that is rejuvenated by groundwater issuing from Springs A and B. The sampling site locations were chosen to provide a high probability of correlating analytical results with potential contaminant and water discharge sources.

There were two rounds of sampling performed. Round 1 was conducted between 28 and 31 March 1992. Round 2 was conducted on 18 July 1992.

Water/sediment sampling parameters

Water and sediment quality parameters were selected by evaluation of results of several quarters of groundwater sampling and analysis within and in the vicinity of the ABG. Two rounds of surface water/sediment sampling were conducted. The parameter groups of volatile organics, semivolatile organics, metals, explosives and nitrogen compounds were monitored in the surface water and sediment study because groundwater sampling of ABG monitoring wells and selected springs indicated the presence of or potential for those parameters. Pesticides and herbicides were originally scheduled to be sampled and analyzed only for bottom sediments, because that parameter group had not been detected in the groundwater sampling program at the ABG. Surface water samples were taken in the second round, however, and subsequently analyzed. Data for pesticides/herbicides are reported only for sediment in the first round and for water and sediment in the second round.

Sampling Methods

Surface water samples

Sampling was performed by personnel of the EL, WES. Surface water was sampled by taking grab samples, taking care not to disturb sediments at the sampling point. All surface water samples were placed in certified-clean containers. Surface water samples were not filtered. The appropriate preservative was added to each collected sample and the sample was cooled to 4°C. Samples were labeled and placed in an ice chest for shipment to the laboratory. Surface water samples were collected midway between the stream banks at the top of the water column (water depths were generally less than 1 ft). Samples for organics analysis, including semivolatiles, explosives, and pesticides/herbicides, were collected in 4-liter amber glass jars. Volatile organics samples were collected in special septum-sealed glass vials. Samples for inorganic analytes were collected in 250 and 500 ml polypropylene bottles. Quality assurance/quality control (QA/QC) samples were collected as follows. Equipment rinsates (designated ABGR1, ABGR2, etc.) were collected at the end of each day's sampling. A field blank representing the water used to decontaminate equipment between sites and before and after sampling was collected for each event. Trip blanks, samples of analyte-free water originating at the analytical laboratory, accompanied the sample storage coolers from the lab to the sampling site and back to the lab for the volatile organics samples.

The parameters pH, conductivity, and temperature of the surface water were measured during each sampling event. Results of the field measurements are presented in Table 1. Figure 9 provides a graphical comparison of Round 1 and Round 2 values of the three field parameters at the 11 sampling sites. The pH of the surface water did not change consistently from Round 1

to Round 2. Seven of the 11 sites had higher pH in Round 2 than in Round 1. The mean pH at the 11 sites was 7.3 (with a coefficient of variation[2] (v) of 0.073) in Round 1 and 7.7 (v=0.070) in Round 2. Conductivity increased at all but one site in Round 2. The mean conductivity for the 11 sites was 104 μmhos/cm (v=0.22) in Round 1 and 128 μmhos/cm (v=0.18) in Round 2. Water temperature increased dramatically at all sites in Round 2 (mid-summer). The mean water temperature at the 11 sites was 7.5° C (v=0.18) in Round 1 and 20.9°C (v=0.03) in Round 2. The potential impact of the three field parameters on measured levels of other chemical parameters is discussed later in this report.

Sediment samples

Sediment samples were taken using a stainless steel bowl and scoop inserted beneath the sediment-water interface. Care was taken to retain the fine-grained sediments, which often contain the highest concentrations of chemical constituents. Sediment that was in direct contact with the sampling utensil was discarded. The remainder of the sample was placed in the appropriate containers for shipment. Bottom sediment samples were collected near the middle of the streambed. Sediment samples for nonvolatile analytes were placed in wide-mouth glass jars. Samples for volatile analytes were placed in vials. After samples had been collected at a sampling site, the sampling equipment was scrubbed and thoroughly rinsed with distilled water to prevent cross-contamination between sites. The sampling equipment was rinsed at a location removed from the actual sampling site.

Sample disposition

Samples were placed in insulated poly coolers with ice to maintain a temperature of 4°C during storage. Coolers were sealed, labeled with appropriate chain of custody receipts, and shipped by Federal Express to the analytical laboratory at the WES.

Descriptions of Sampling Sites

This section describes the sampling sites. Figures 10 through 21 are site photographs made by the authors in April, 1993. Refer to Plates 1 and 2 for general locations. The sites were marked in the field with 0.5-in. steel rebar driven into the streambank. The site vicinity is marked by orange flagging.

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[2] Coefficient of variation measures the amount of variation of values in a data set, independent of the scale of measurement. A lower coefficient reflects less variation from the mean. A "v" of greater than 1 is evidence that the data are not normally distributed (USEPA, 1992).

ABG-1 -- A background site. The site is in the south fork of Little Sulphur Creek upslope of the ABG to the southwest, 119 ft north-northwest of monitoring well 03C18. Stream flow was in a 6 to 12 ft wide, poorly developed channel running off of the steep slope west of the ABG. The stream water was 6 in. or less in depth with pools up to 2 ft in depth. The stream bed consisted of in-place rock and well-graded, angular silty-sandy gravel to gravelly sand alluvium with boulders up to 2 ft in diameter. The sediment was field classified as a Unified Soil Classification System (USCS) GW to GM (gravel to silty gravel). Two views of the site are provided by Figure 10. The bottom photo looks upstream and upslope to the northwest.

ABG-2 -- The site is in the north fork of Little Sulphur Creek upslope of the ABG to the northwest, 125 ft northeast of monitoring well 03-30. Flow was in a 10 ft wide channel with 2 to 5 ft-high banks. Water in the stream was 8 to 12 in. deep. Sediment was angular gravel, sand, and broken rock, in boulder to silt and clay sizes. The sediment was field classified as a GW to GM. Two views of the site are provided by Figure 11. The two photos look upstream to the west.

ABG-3 -- The site is in the north fork of Little Sulphur Creek upslope of the ABG to the northwest, 186 ft north of well 03-30 and about 200 ft upstream of ABG-2. The flow and sediment were as described for ABG-2. The channel was 15 ft wide with 4 ft high banks. Two views of the site are provided by Figure 12. The top photo looks upstream to the northwest.

ABG-4 -- The site is near the center of the ABG in the north fork of Little Sulphur Creek about 150 ft upstream of the confluence of the north and south forks. The site was downstream of the burn pads, 126 ft northeast of monitoring well 03C03. The channel was about 10 ft wide and flowed along the foot of the steep north slope of the ABG. Sediment was a GW to GM. Two views of the site are provided by Figure 13. The bottom photo looks upstream to the northwest.

ABG-5 -- The site is near the center of the ABG in the south fork of Little Sulphur Creek approximately 110 ft upstream of the confluence of the north and south forks, 67 ft southeast of well 03C03. The channel, a man-made diversion of the former course of Little Sulphur Creek, was approximately 4 ft wide at the base of the slope, with 12 ft high banks. The bottom sediment was a GW to GM. Two views of the site are provided by Figure 14. Both views look upstream to the west-northwest. Monitoring well cluster 03C03 is visible in the upper right of the bottom photo.

Little Sulphur Creek at the ABG -- Figure 15 provides two views of the areas of sites ABG-4, ABG-5 (top photo) and Little Sulphur Creek downstream of the two sites, toward ABG-6 (bottom photo). The top photo looks upstream to the northwest. The confluence of the north and south forks is at the bottom center. Site ABG-4 is to the right; site ABG-5 is hidden beneath the slope to the left. The burn pad area is the light-colored area in the center

of the photo. Well cluster 03C03 is to the upper left (yellow casing). The bottom photo looks downstream from the vantage point of the upper photo. Sampling site ABG-6 is hidden from view immediately beyond the bend in the stream near the upper center. The cluster of wells near the upper left, by the automobile, is 03C11.

ABG-6 -- The site is in the southeast area of the ABG in Little Sulphur Creek, 188 ft southeast of well 03C11 and approximately 48 ft northwest of well 03-35. The channel was 8 ft wide, on a gentle slope (see stream profile in Figure 6). The water was about 6 in. deep. Bottom sediment was a GW to GM. Two views of the site are provided by Figure 16. Both views look to the south.

ABG-7 -- The site is in Little Sulphur Creek downstream of the ABG approximately 280 ft south of well 03C05. The sediment in the channel was a GW to GM. Figure 17 provides two views of the site. The top view looks upstream toward the ABG. The bottom photo is a closeup of the sampling area.

ABG-8 -- The site is in Little Sulphur Creek approximately 1/4 mile downstream of the ABG, 69 ft west-northwest of monitoring well 03-16 and about 1,200 ft downstream of site ABG-7. The bottom sediment was GW to GM. A view of the site is provided in Figure 18. The photo looks upstream to the north.

ABG-9 -- The site is in Little Sulphur Creek approximately 3/4 mile downstream of the ABG at the first steel and timber bridge over the creek. The sampling site was about 15 ft west (upstream) of the bridge. The sediment was a GW to GM. Two views of the site are provided by Figure 19. The top view looks southeast (downstream). The bottom photo is a closeup of the sampling site.

ABG-10 -- The site is in Little Sulphur Creek approximately one mile downstream of the ABG near the second steel and timber bridge. The site was about 20 ft east (upstream) of the bridge. Two views of the site are provided by Figure 20. The top view looks southwest (downstream). The bottom photo is a closeup of the sampling area.

ABG-11 -- The site is in Little Sulphur Creek approximately 1-1/4 miles downstream of the ABG and about 150 ft upstream of the NSWCC boundary fence. The site was a pool 1 to 2-0.5 ft deep. Bottom sediment was sand and silt with rock fragments, field classification SM to GM. Two views of the site are provided by Figure 21. The top view looks to the east and the bottom view to the northeast.

4 Nature and Distribution of Surface Water Contamination

Laboratory Analytical Methods

Table 2 lists the analytical parameter groups monitored for the surface water and bottom sediment investigation and the analytical methods used. The analytical methods were those described in USEPA Test Methods for Evaluating Solid Waste, Laboratory Manual, Physical/Chemical Methods, SW-846, including the HPLC Method 8330 for explosives analysis. A quality control program was instituted to ensure that the data generated from analyses of soil and water samples were scientifically sound, defensible, continuously precise and accurate, and that the data were representative of the site from which they were acquired.

A sample tracking procedure was a key part of the QA/QC program. Sample tracking started in the field with chain of custody procedures and sample isolation and preservation. The tracking procedures were continued in the laboratory. A complete laboratory QA/QC plan was followed. Document management was started upon receipt of the samples. Log books, bench sheets and reports were kept. All data were checked by the analyst, the inorganic or the organic team leader, and the laboratory chief before the data were released. The data were checked for completeness to ensure that (a) all samples and analyses had been processed; (b) complete records including chain of custody for each analysis and associated QC samples were used; (c) procedures specified in project planning were followed, and (d) all calibrations were performed. The following items were checked:

a. Completeness.

b. Duplicate values for precision.

c. Recovery of spikes for accuracy.

d. Method blanks for contamination.

e. Surrogate recoveries for organic analysis.

f. Data for QA check samples.

g. Reasonableness and trends.

If data fell outside of acceptable limits as described in the analytical methods, the sample was rerun if the required amount of sample was available. If the rerun results continued to fall outside acceptable limits and the QA check sample data was good, or if the required amount of sample was not available to rerun, then data were reported with qualifying explanations.

Results of Laboratory Analysis

Appendix A, a printout of database manager (DBASE III+) data, lists detected parameters, including those with estimated levels below instrument detection limits (referred to as "J" values). The column "WELLNUMBER" of Appendix A lists the surface water or sediment sampling sites. An "ABGS-[XX]" represents a sediment (soil) sample; an "ABGW-[XX]" represents a water sample. Sediment samples are reported in "UNIT"s of milligram per kilogram (MG/KG); water samples are reported in "UNIT"s of milligrams per liter (MG/L). The column "AMTDET_A" lists the numeric value of the detected compound. The column "VALUE_A" lists qualifiers for reported values (see legend on Appendix A title page). A "B" qualifier accompanying a record for an organic compound (volatiles, semivolatiles, pesticides/herbicides and explosives) indicates that the detected compound was also detected in a QC blank. Volatile organics, other than methylene chloride and acetone, that were detected in samples at levels of < 5 times the levels detected in the associated QC blanks were interpreted to be artifacts (attributable to laboratory or sampling contamination). Methylene chloride and acetone, common laboratory contaminants, were labeled artifacts if they occurred in samples at levels of < 10 times the QC levels. The following paragraphs evaluate the analytical data, first for surface water samples and then for bottom sediment samples. A full suite of metals was monitored but only metals listed for primary Maximum Contaminant Levels (MCL) for drinking water, and magnesium, were evaluated. Appendices B and C present laboratory printouts of the analytical results for both rounds for all constituents and for QC samples. Appendices A, B, and C include data for all monitored metals.

Three sites, ABGW/S-1, -2, and -3, were originally selected as background sites. Levels of many inorganic and explosives compounds were sufficiently high in ABGS-2 and -3, however, that sites 2 and 3 were rejected as background sites. The detected levels of monitored parameters for downstream sites, tabulated in Tables 3a and 3b and 6a through 6d, were subsequently compared to the levels at sites ABGW-1/ABGS-1 to determine whether the detected levels represented contaminants contributed by operations at the ABG. Site ABGS-1 was selected as the only site suitable for

background comparisons. Contamination of surface water background sites (ABGW-[XX]) was less a problem than that of the sediment background sites (ABGS-[XX]), but for consistency in the evaluation, both sediment and surface water sites -2 and -3 were rejected as background.

Surface water

Several metals, other inorganics, and explosives were detected frequently in the two rounds of sampling of the surface water of Little Sulphur Creek. Tables 3a and 3b present detected values for the two rounds.

A few of the metals and other inorganics were detected in QC samples (field and/or laboratory). Parameters detected at levels similar to levels detected in the corresponding QC samples are interpreted to be artifacts, i.e., not the result of contamination by activities at the SWMU. Table 4 tabulates those parameters that were detected in any of the QC samples and their corresponding QC levels. Organic compounds other than explosives were detected less often. Table 5 lists the detected levels of organics in both rounds and compares them to the corresponding QC levels. Table 5 also tabulates QC levels of explosives. A discussion of the results for surface water follows.

Metals. The heavy metals antimony, arsenic, beryllium, selenium, silver, thallium, vanadium, mercury, and nickel were not detected in surface water samples. Only three of the tabulated metals, chromium, copper, and lead, were detected in QC samples. Seven of the nine detected metals tabulated in Table 3a had levels higher in Round 2 than in Round 1.

Aluminum, barium, magnesium, and manganese were detected at every sampling site in Round 2 and at most sites in Round 1 (Table 3a and Appendix A). No other tabulated metals were detected at the background site, ABGW-1. Sites ABGW-1, -2, and -3 had detectable levels of aluminum and barium in at least one round. All of the downstream sites had Round 1 levels of aluminum higher than ABGW-1 (background) except ABGW-4, ABGW-8, and ABGW-9 (all non-detected). All of the downstream sites had Round 2 levels of aluminum higher than ABGW-1, and all Round 2 levels were higher than Round 1 levels. Sites ABGW-7 and -8 had Round 2 levels of aluminum on the order of 13 to 20 times background (0.777 and 0.447 mg/l, resp).

All of the downstream sites had levels of barium as high as or higher than that of background site ABGW-1 (Table 3a). The highest level of barium detected was 0.124 mg/l at site ABGW-7, in Round 2. Round 2 levels were generally slightly higher than Round 1 levels.

Cadmium (detection limit (DL) = 0.0002 mg/l) was detected at only one site, ABGW-7, at a level of 0.0003 mg/l in Round 2.

Chromium (DL = 0.005 mg/l) was detected at five sites, including upstream site ABGW-2 (Table 3a), and only in Round 1. Chromium was detected in the rinsate for site ABGW-8, and that measurement was interpreted to be an artifact[3] (see Tables 3a and 4). Chromium is presumed to be present at sites ABGW-2, ABGW-7, ABGW-10, and ABGW-11. Detected levels of chromium were only slightly higher than the DL. Detected levels were 0.005 mg/l at ABGW-2, 0.008 mg/l at ABGW-7, 0.010 mg/l at ABGW-10, and 0.006 mg/l at ABGW-11.

Copper (DL = 0.005 mg/l) was detected at only one site, ABGW-7, and only in Round 2, at a level of 0.012 mg/l. Copper was not detected in QC samples for ABGW-7.

Lead (DL = 0.001 mg/l) was detected only in Round 2 at sites ABGW-7 through ABGW-11 (Table 3a). Lead was detected in the rinsate samples for ABGW-9 and -10 at a level similar to the site levels (Table 4). Detected levels of lead at ABGW-9 and -10 are interpreted to be artifacts. Lead was not detected at sites upstream of ABGW-7. Lead is presumed to be present in Round 2 at sites ABGW-7, -8, and -11. The levels at sites ABGW-7 and -8 are considered significant at 0.034 mg/l and 0.016 mg/l, respectively. The level of lead at ABGW-11 was at the DL.

Magnesium was detected at every water sampling site in both rounds (Table 3a). All detected levels of magnesium were greater than the DL by a factor of at least 35 and all were slightly higher than ABGW-1 (background) levels. Magnesium was higher in Round 1 than in Round 2 at all downstream sites except ABGW-7. Round 1 and Round 2 levels differed only by a factor of about 1.1 to 1.8.

Manganese (DL = 0.005 mg/l) was detected at all sampling sites in Round 2 and in 6 of 11 sites in Round 1. Round 1 levels were gener-ally near DL. Round 2 levels were considerably higher than DL. Sites ABGW-7 and -8 had levels significantly higher than the background level of 0.005 mg/l (0.133 and 0.076 mg/l, respectively.)

Zinc (DL = 0.01 mg/l) was detected at only two sites, ABGW-7 and -8, and only in Round 2. Zinc was not detected in background. Detected levels of zinc were 6 to 12 times the DL.

Nitrites, nitrates. Nitrites and nitrates, monitored because of their common association with explosives, were detected in most samples but only nitrates are believed to be real contaminants because of the presence of nitrites in the quality control samples, as explained below (Table 3b). Nitrites were detected in samples from all but three sites in Round 1 but were not detected at all in Round 2. Nitrites were detected in the rinsates and field

[3] Detected levels interpreted to be artifacts of sampling or analysis are underlined.

blanks at levels as high as site levels. All detected levels of nitrites in the water are presumed to be artifacts (see Table 3b).

Nitrates were detected at all sites in both rounds (except at site ABGW-1, Round 1). Round 1 levels in all sites were higher than background. Nitrates were detected in the background site (ABGW-1) at a level of 0.139 mg/l in Round 2. Sites ABGW-2, -7, and -8 were the only sites in Round 2 with levels higher than that of ABGW-1.

Explosives. Detected levels of explosives in water for the two sampling rounds are included in Table 3b. Explosives were not detected in QC samples (see Table 5). RDX, HMX, and 2,4-DNT (DLs = 0.02 mg/l) were the only explosives detected in the surface water. The three explosives were detected at levels above DL at sites ABGW-7 and -8, in Round 2 only. HMX was also detected at ABGW-9 in Round 1 and at ABGW-11 at a "J" level in Round 2. The highest level of explosives detected was of HMX at ABGW-9 at 0.045 mg/l. RDX and HMX are presumed to be present at detectable levels in the surface water at sites ABGW-7 and -8 and HMX in ABGW-7, -8, and -9. HMX may be present at ABGW-11 at an estimated level below DL. The explosive 2,4-DNT is presumed to be present at estimated levels below DL at ABGW-7 and -8.

Other organics. Monitored organic compounds other than explosives included volatiles, semivolatiles, and pesticides and herbicides. Table 5 lists detected or estimated levels of organic compounds and compares them to corresponding QC sample levels. Most of the detected volatile compounds were attributable to QC sample contamination and were interpreted to be artifacts. Two volatile compounds, 1,2-dichloroethane and 4-methyl-2-pentanone, were detected only in Round 1 at sites ABGW-2 and ABGW-10, respectively, and only at "J" levels.

Two of the three semivolatiles detected in the surface water, di-N-octylphthalate and dibutylphthalate, were interpreted to be artifacts (Table 5). Bis(2-ethylhexyl)phthalate was not detected in QC samples at sufficiently high levels to be rejected as an artifact. It was detected in both rounds at site ABGW-6, at a "J" level in the first round and at a level of 0.013 mg/l in the second round (DL = 0.010 mg/l). Bis(2-ethylhexyl)phthalate was also detected in the first round at ABGW-7 at a "J" level.

Three pesticides/herbicides (B-BHC, heptachlor, and a-chlordane) were detected in the surface water but all three were attributable to QC sample contamination and are interpreted to be artifacts (Table 5). Pesticides were sampled in the surface water in Round 2 only.

Consensus of surface water contamination. Certain metals, three explosives, nitrates, and a semivolatile organic were present at measurable levels in the surface water of Little Sulphur Creek in at least one of the two rounds of sampling conducted in 1992. All of the detected metals were

above background levels at at least one sampling site. Sampling sites ABGW-7 and ABGW-8, located immediately below and about 1/4 mile downstream of the ABG, respectively, showed higher levels or more frequent occurrences of aluminum, barium, lead, manganese, zinc, nitrates, and explosives than the other sampling sites. Site ABGW-7 also had occurrences of cadmium, chromium, and copper. All sampling sites had detected levels of nitrates in at least one sampling round. No site had detectable levels of nitrites that were not attributable to sampling artifacts. Explosives present in the surface water included HMX, RDX, and 2,4-DNT. The semivolatile compound bis(2-ethylhexyl)phthalate was the only organic other than explosives present in the surface water, and was limited essentially to one site.

Metals, nitrates, and explosives occurred somewhat more frequently or at higher levels in the water in Round 2 than in Round 1. Several factors were considered to explain the apparent increase from the spring (Round 1) to the summer (Round 2) sampling periods.

A major precipitation event, or a prolonged period of precipitation, prior to the July (Round 2) sampling event could have flushed contaminants into the stream and temporarily elevated levels in the water. Precipitation data are not available for the period in question.

Another potential factor was the effect of higher values of field-measured water properties during the Round 2 event. The discussion of field measurements of pH, conductivity, and temperature presented earlier in this report showed that both conductivity and temperature increased in Round 2 (see Table 1). Temperature increased dramatically, between 2 and 3 times the Round 1 value, which would be expected in the mid-summer conditions of Round 2. Warmer water increases the solubility of some compounds, particularly the explosives monitored in this investigation. For example, HMX has a reported solubility of 1.2 mg/l at 10°C and 2.6 mg/l at 20°C (ALG 1994). Reported solubilities of RDX double with a temperature increase from 10°C to 20°C. TNT solubility increases somewhat less dramatically with temperature. Solubilities of metals depend on the formulation of the particular metal compound and are difficult to generalize. The much greater water temperatures experienced in Round 2 compared to Round 1 may have influenced the measured levels of some monitored parameters.

A third factor is random occurrence. Only two rounds of sampling were conducted, and it is possible that the apparent general increase in levels in Round 2 is purely coincidental.

Bottom sediment

Monitored parameters were generally detected more frequently in the bottom sediments of Little Sulphur Creek than in the surface water. More metals and many more organic compounds were detected in the sediments than in the water. Tables 6a through 6d list the detected levels of metals, nutrients, and explosives for the two sampling rounds. Detected levels of inorganic compounds were many times higher than QC sample levels except in the case of the metal, silver. Most inorganics were not detected in QC samples at all. Therefore, only reported levels of silver in sites other than ABGS-6 and -7 could be attributed to field or laboratory contamination. All other reported levels are presumed to represent site conditions. No table was prepared comparing detected levels of inorganics to their corresponding QC levels.

The detected levels of monitored parameters for downstream sites, tabulated in Tables 6a through 6d, were compared to the levels at site ABGS-1 to determine whether the detected levels represented contaminants contributed by operations at the ABG. Site ABGS-1 was selected as the only reliable site for background comparisons.

Laboratory detection limits for some metals were higher in Round 2 than in Round 1 (Tables 6a, 6b, and 6c), a result of the use of different analytical methods in the two rounds. Different analytical methods were used because levels of some metals, for example, copper and lead, were many times higher in Round 1 than the DL of the analytical instrument, necessitating excessive dilution of the samples. A different instrument with higher DL was subsequently used in Round 2 to facilitate the analysis. For example, detected levels of lead in Round 1 were about 20 to 70 mg/kg, but the analytical DL used was only 0.1 mg/kg. Round 2 samples were subsequently analyzed using a DL of 4.00 mg/kg. Problems were encountered with the analysis for silver, where Round 1 levels between 0.1 and 0.8 mg/kg were reported using a DL of 0.1, but no detected levels were reported for Round 2 for which a DL of 1.00 was used. Similar problems were met with antimony, with DLs of 0.3 and 1.2 mg/kg. In all other metals analyses, detected levels were much higher than the DL used.

Many organic compounds including explosives, volatiles, semivolatiles, and pesticides/herbicides were detected in bottom sediments, generally at levels above QC sample levels. Table 7 presents detected levels of organics and their corresponding QC sample levels. A discussion of the results of laboratory analysis of bottom sediments follows.

Metals. Thallium was detected at only one site. Antimony was detected at four sites in only one round at each site. All other monitored heavy metals were detected at most sites in both rounds. All detected metals except antimony, mercury, and thallium occurred at the background site (ABGS-1) in at

least one round. Eleven of the 18 detected metals tabulated in Tables 6a-6c had levels higher in Round 2 than in Round 1.

Aluminum (DL=4.0 mg/kg) was detected at high levels (>4600 mg/kg) in every sediment sample, including the background sample from site ABGS 1 (Table 6a). The background levels of aluminum were 8730 and 6590 mg/kg in Rounds 1 and 2, respectively. Levels of aluminum were above 10;000 mg/kg (a 1 percent concentration) at sites ABGS-3, -9, and -10 in Round 2. Four sites in each round were higher than the background site.

Antimony (DL=0.3 mg/kg) was detected only at sites ABGS-6, -7, -9, and -10, only in Round 1, and at levels just above the DL. Antimony was not detected in the background site, ABGS-1.

Arsenic (DL=0.2 mg/kg) was detected at all sampling sites in both rounds at levels of 5.45 to 27.4 mg/kg. Background levels of arsenic at site ABGS-1 were 24.4 and 17.5 mg/kg in Rounds 1 and 2, respectively. There was no site higher than background in Round 1. Sites ABGS-5, -9, -10, and -11 were higher than background in Round 2.

Barium (DL=2.0 mg/kg) was detected at every site in both rounds at levels of 72. to 329 mg/kg. Sites ABGS-3, -6, -9, -10, and -11 reported levels higher than 300 mg/kg. Eight downstream sites were higher than background in both sampling rounds. All downstream sites were higher than background in at least one round.

Beryllium (DL=0.1 mg/kg) was detected at all sites at levels of 0.3 to 1.6 mg/kg. The background level at site ABGS-1 (1.5 mg/kg) was as high or higher than all downstream sites in both rounds except ABGS-5, which was slightly higher in Round 2 (at 1.6 mg/kg). Beryllium does not appear to be a site-related contaminant.

Cadmium (DL=0.02 mg/kg) was detected at all sites at levels of 0.19 to 3.18 mg/kg. The highest level of cadmium was at site ABGS-6 in Round 1. All downstream sites except ABGS-2 were higher than background in Round 1 and all downstream sites were higher than background in Round 2.

Chromium, copper, and nickel, with similar DLs, were detected at all sites in both rounds at similar levels (see Tables 6a and 6b). Levels were on the order of 20 to 100 times the DLs for the three metals. Detected levels were generally higher in Round 2 than in Round 1. Four sites, ABGS-2, -9, -10, and -11, were higher in chromium than background in at least one of two rounds. Most downstream sites were higher in copper than the background site in both rounds. Four downstream sites were higher in nickel than background in at least one round. Chromium and nickel were relatively high (when compared to downstream sites) in the background site, ABGS-1.

Lead had a maximum DL of 4.0 mg/kg. Lead was detected at all sites at levels of 15 to 113 mg/kg. Site ABGS-3 had the highest detected level of lead (in Round 2), which was a third higher than the highest level detected at other sites in either round. All downstream sites except ABGS-2 had detected levels of lead higher than the background of 23.2 mg/kg in Round 1, and all but site ABGS-4 had levels higher than the background of 26.1 mg/kg in Round 2.

Magnesium (DL=20 mg/kg) was detected at high levels at every site in both rounds (Table 6b). Detected levels were 352 to 4430 mg/kg. The highest level was detected at site ABGS-3 in Round 2. All but sites ABGS-3 and -11 were higher than background in Round 1. All but sites ABGS-4, -5, and -11 were higher than background in Round 2.

Manganese (DL=0.5 and 0.6 mg/kg) was detected at all sites at levels above 500 mg/kg. The highest level detected was at site ABGS-11, at 3080 mg/kg. Levels at the background site, ABGS-1, were higher than many downstream sites (1600 and 1670 mg/kg in Rounds 1 and 2, respectively). Only ABGS-3 was higher than background in Round 1, and only ABGS-5 and -11 were higher than background in Round 2.

Mercury (DL=0.1 mg/kg) was detected in the sediment at one site, ABGS-5, in Round 1 at a level of 0.428 mg/kg, and at five sites in Round 2 at levels between 0.121 and 0.361 mg/kg (Table 6b). Mercury was not detected at the background site. The highest Round 2 levels were 0.361 mg/kg at site ABGS-2 and 0.135 mg/kg at site ABGS-1.

Selenium (DL=0.2 mg/kg) was detected most often in Round 1, at levels only slightly above the DL. The highest level (0.59 mg/kg) was detected in Round 1 at the background site ABGS-1 and at ABGS-3. No downstream sites were higher than the background level in either round. Selenium does not appear to be a site-related contaminant.

Silver was detected only in Round 1, but at every site. The use of a higher detection limit for silver in Round 2 may have hidden possible occurrences in Round 2, as discussed above at the beginning of this section. However, the Round 1 method blank for silver analysis contained silver at a level of 0.20 mg/kg, which is similar to levels measured at all other sites except the contiguous sites ABGS-6 and -7. ABGS-6 had a detected level of 0.58 mg/kg and ABGS-7 a level of 0.77 mg/kg. The silver analyses are inconclusive. Nevertheless, silver is considered to be a site contaminant at sites ABGS-6 and -7. A later section of this report emphasizes the distribution and magnitude of contaminants, including silver, with additional graphical displays.

Thallium was detected only at site ABGS-9 and only in Round 1, at a level of 0.22 mg/kg, which is only 0.02 mg/kg above the DL.

Vanadium (DL= 1.0 mg/kg) was detected at all sites, including the background site ABGS-1, at levels from 9.4 to 42 mg/kg. Vanadium was higher than background in downstream sites only in Round 2 and only at sites ABGS-5 and -11.

Zinc (DL=1 mg/kg) was detected in every sample at levels of 50 to 276 mg/kg. Round 2 levels were generally higher than Round 1 levels, but the highest level was detected at site ABGS-6 in Round 1. All downstream sites had levels higher than background in at least one round.

Of the metals listed above, antimony, arsenic, beryllium, mercury, selenium, silver, thallium, and nickel were not detected in the surface water of any of the sampling sites.

Nitrites and nitrates. The detection limits for nitrites and nitrates varied with sample size. Nitrite DL was approximately 1 mg/kg. Nitrate DL was approximately 3 mg/kg. Nitrites were reported at all sediment sampling sites in the first round but only at site ABGS-6 in the second round (Table 6c). Nitrites detected in the surface water were interpreted from QC sample data to be artifacts. QC data were not available for comparison to reported levels of nitrites in the sediment. The analytical data for occurrences of nitrites in the sediments is inconclusive, but nitrites must conservatively be considered potential site contaminants for the present.

Nitrates were detected at all sites except ABGS-1, in both rounds. Detected levels of nitrates in downstream sites ranged from 6 to 21 mg/kg. Sites ABGS-8 and ABGS-9 had the highest nitrate levels at about 21 mg/kg each. Levels were higher in Round 2 than in Round 1 at every site. Nitrates were detected in the surface water samples, but there was no site-to-site correlation of levels of nitrate in the water to levels in the sediments.

Explosives. Five explosives compounds were detected in the sediments of Little Sulphur Creek. Explosives data are presented in Table 6d and in Table 7 (comparison of detected levels, both rounds, to QC sample levels). Explosives were not detected in the sediments of the background site, ABGS-1. HMX and TNT were the prevalent explosives detected. RDX (DL=1.00 mg/kg) was detected only in Round 2 and only at ABGS-3 at 0.405 mg/kg (a "J" value) and at ABGS-6 at 1.78 mg/kg.

HMX (DL=2.20 mg/kg) was detected at a "J" level at ABGS-3 in Round 2, at "J" levels at ABGS-6, -7, -9, and -10 in both rounds, at ABGS-8 at a "J" level in Round 2 and a level of 2.90 mg/kg in Round 1, and at its highest level of 10.2 mg/kg at ABGS-4 in Round 1. Site ABGS-4 is located immediately downstream of the burn pans (see Plate 2).

TNT (DL=0.25) was detected at all sites except ABGS-1 at least once (note the much lower DL for TNT than for RDX and HMX). TNT was

detected in both rounds at all sites below ABGS-5. The highest level detected was 1.13 mg/kg in Round 1 at site ABGS-8 (Table 6d).

TNB (DL= 0.25 mg/kg) was detected at five sites, only at "J" levels and only in Round 2.

The explosive compound 2,4-DNT (DL=0.25 mg/kg) was detected at two sites, in the second round only: ABGS-3 at 0.53 mg/kg and ABGS-6 at a "J" level.

Other organics. Many of the occurrences of organics detected in the bottom sediments were attributed to sample contamination based on QC sample levels. Table 7 presents the detected levels of all organics in the sediments.

Sample analysis detected nine volatile organics. Of the nine, all occurrences of acetone were interpreted to be artifacts (attributable to laboratory contamination). Acetone, a common laboratory artifact, was detected at all sites in Round 1 and one site in Round 2, but all reported levels were less than 10 times QC levels and can be discarded as artifacts.

Methylene chloride, a common laboratory artifact, was detected in the bottom sediment at all sites and in the QC samples. Methylene chloride levels in Round 2, at all sites except ABGS-6, were artifacts. Only ABGS-6 reported levels >10 times the QC levels in both rounds. The presence of methylene chloride in all other site samples is suspect because of the high QC levels in Round 2. Carbondisulfide was detected at one site in Round 1 at a level above DL.

Chloroform was detected at most sites in both rounds at levels generally above DL. 1,1,1-trichloroethane was detected at sites ABGS-7 through -11 only in Round 1, generally above DL. Bromodichloromethane and dibromochloromethane were detected at several sites in both rounds but generally at estimated ("J") levels. Bromodichloromethane was reported at ABGS-10 in Round 1 at a detectable level. Toluene was detected at four sites in one round only and only at "J" levels. The compound 2-butanone was detected at three different sites between Rounds 1 and 2 and only at "J" levels. Ethylbenzene and t-xylene were detected at one and two sites, respectively, at "J" levels.

In summary, the volatile organics 1,1,1-trichloroethane, chloroform, bromodichloromethane, and carbondisulfide were detected in the sediments at some sites at levels above detection limit (above "J" levels). Other volatiles detected were generally at "J" levels. Reports of acetone and all but one methylene chloride are suspected to be artifacts of laboratory contamination.

Several semivolatile organics were detected in the sediments but most could be classified as artifacts based on their presence at sufficient levels in the corresponding QC samples (Table 7). All of the dibutylphthalate and

bis(2-ethylhexyl)phthalate occurrences in Round 1 and all of the latter compound in Round 2 were discarded as artifacts, but four occurrences of dibutylphthalate in Round 2 were not found in the QC samples or were at levels too high to permit reliably discarding the data. However, all of the detected levels of the two compounds were at "J" levels and subject to the uncertainty inherent in the estimation process.

Only one semivolatile was detected at levels above DL. The semivolatile 2,4-dinitrotoluene (DL=0.85 mg/kg) was detected at ABGS-11 in Rounds 1 and 2 at 1.1 and 2.3 mg/kg, respectively, and not in QC samples. Bis(2-ethylhexyl)phthalate was the only semivolatile reliably detected in the surface water samples, although 2,4-dinitrotoluene as an explosive was detected in the water of certain sites (see discussion of surface water analyses).

Several pesticides were detected in the sediments at levels above QC sample levels, and some were above DL. The pesticide PPDDE (DL= 0.003 mg/kg) was detected at a level of 0.0065 mg/kg in Round 1 at site ABGS-6, at several other sites in both rounds at "J" levels, and was not detected in QC samples (see Table 7). Heptachlor (DL=0.0025 mg/kg[4]) was detected at several sites in both rounds at "J" levels and at levels above DL at sites ABGS-6 through -11 in Round 2 only. Heptachlor was detected in the method blank accompanying the Round 2 samples but at a level below that of the site samples, and could not confidently be attributed to laboratory or field contamination.

Dieldrin (DL=0.0016 mg/kg) was detected at a level of 0.0032 mg/kg at site ABGS-7 in the first round. It was detected at three other sites at "J" levels in the first round, above QC sample levels. It was detected only once in the second round at a "J" level near the QC sample level.

The pesticide A-BHC (DL=0.002 mg/kg) was detected at sites ABGS-7, -8, -10, and -11 in Round 2 at levels of 0.0029 to 0.0044 mg/kg and was not detected in QC samples. A-BHC was not detected at all in Round 1.

Other pesticides and herbicides detected at "J" levels and not in QC samples were endosulfan in ABGS-7, both rounds; g-chlordane, three occurrences (in ABGS-1, -5, and -7); a-chlordane, once in ABGS-7; PCB-1232 and -1254, once each in ABGS-1 and -8, respectively; and D-BHC, once in ABGS-7. No pesticides, herbicides, or PCBs attributable to site contamination were detected in the surface water.

Personnel in the Pesticide Control Group at NSWCC were consulted concerning past and present use of pesticides and herbicides in the vicinity of the ABG. Chlordane had been used occasionally to treat wasp nests under

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[4] Pesticide/herbicide detection limits vary by about 25 percent from sample to sample depending on sample size. DLs shown in text arenominal values.

the eaves of buildings at the ABG, but in relatively small quantities. The only herbicide known to have been used in the past 40 years was Pramitol, a commercial form of triazine, which was used as a soil sterilant at the operations areas of the ABG to prevent vegetative growth. In the strongest application, however, the Pramitol would degrade within three years. Untraceable potential sources of pesticides are the wooden ammunition crates and pallets that are burned at the ABG. Crates and pallets could have been treated for pests such as powder-post beetles at their place of manufacture and subsequently delivered for destruction at the ABG (the crates and pallets have not been tested for the presence of pesticides). It should be noted that soil samples collected in 1990 at the Old Burn Pit, in the northwest corner of NSWCC, were reported to contain dieldrin, PPDDE, and PPDDT. Wooden crates and pallets had also been burned at the Old Burn Pit. Pesticide control personnel stated that heptachlor, dieldrin, and A-BHC are hydrocarbon-based compounds and are therefore persistent and, if introduced to the environment at the ABG in the past, would tend to linger.

Consensus of bottom sediment contamination. Apparent contamination of bottom sediments occurred at more sites and for more constituents than contamination of the surface water in Little Sulphur Creek.

Comparison of levels of metals detected in downstream sampling sites with levels in the background site ABGS-1 indicates that barium, cadmium, copper, lead, and zinc are potential site-related contaminants at all sampling sites. Aluminum, *antimony*, *arsenic*, chromium, *nickel*, magnesium, manganese, *mercury*, *silver*, *thallium*, and *vanadium* are potential site-related contaminants at four or fewer sites. Those metals underlined were not detected at all in the surface water samples.

Nitrites and nitrates were reported in the sediments at all sites except the background site. Nitrites are conservatively presumed to be sediment contaminants, although the evidence is inconclusive. Nitrates are believed to be site-related contaminants at all sites downstream of the background site.

Five explosives were detected in the sediments, compared to three in the surface water. RDX and HMX were found both in the sediment and in the water, but there was little correlation of occurrences. HMX occurred at sites ABGS/W-7 and ABGS/W-8 in both water and sediment, but occurred at other sediment sites (ABGS-3 and -6) at higher levels, and did not occur at those sites in the water (see Figures 36 and 43). 2,4-DNT occurred in site ABGS/W-7 in both sediment and water in Round 2. TNT was common in the sediment below site ABGS-5 in both rounds, but did not occur in the water of any site. TNB was present at five sites but only at "J" levels.

Other organics probably present in the sediments (probably not attributable to field or laboratory contamination) included chloroform, 1,1,1-trichloroethane, bromodichloromethane, dibutylphthalate, 2,4-

dinitrotoluene (semivolatile), PPDDE, heptachlor, dieldrin, and A-BHC. Methylene chloride is a suspected contaminant at one site.

Distribution of Contaminants

The distribution of monitored parameters in the surface water and sediment of Little Sulphur Creek in the vicinity of the ABG is presented through a series of maps (Figures 22 through 32) and profiles (Figures 33 through 49). Figure 22 shows the sampling site locations. The other maps show where groups of parameters were detected in surface water or in sediments. For example, Figure 23 illustrates where metals were detected in the surface water. The maps show only where monitored parameters were detected. They do not indicate amounts detected. Organics other than explosives are listed only for those compounds detected at levels above DL (no "J" levels). Compounds eliminated from concern because of their presence in sufficient amounts in QC samples to be designated artifacts are not included. Explosives compounds were mapped at all levels of detection because of their importance as indicator compounds for the ABG activities. Nitrites were not detected above QC levels in the surface water and were not mapped. Nitrates were detected at all surface water sites and were not mapped. Nitrites were detected at all sediment sites and nitrates at all but one. Nitrites and nitrates were not mapped for sediment sites.

The profiles, a series of line graphs in Figures 33 through 49, show amounts detected of several groups of metals, nitrites and nitrates, and explosives at sampling sites 1, on the left, through 11, at the right (note in Figure 22 that site ABG-3 is actually located upstream, or left, of site ABG-2). Figures 33 through 37 depict surface water sample results; Figures 38 through 49 depict sediment sample results. Amounts detected, the ordinate scale of the profiles, varied considerably among the monitored parameters and, in some cases, from round to round. To show trends, parameters having a similar range of amounts detected were grouped for profiling. For example, the metals barium, zinc, and lead were all detected in the sediments in amounts between about 25 and 400 mg/kg. The three metals were grouped for profiling in Figure 39. Similar amounts-detected scales were used for Rounds 1 and 2 where possible, but where the range of detected amounts varied considerably between rounds, particularly with the water samples, the scales were necessarily different.

Sites ABGW-7 and -8 had the greatest frequency or quantity of surface water contaminants in the ABG study area. A possible explanation is that the sites are located in that part of Little Sulphur Creek characterized by intermittent (seasonal) flow. The channel there flows only during wet seasons, receiving runoff only from the ABG valley upstream and from adjacent slopes, and only when the runoff is great enough to escape capture by the porous sandstone of the Big Clifty formation in the east central portion of

the ABG. The channel in the vicinity of ABGW-7 and -8 receives no known flow from springs. The seasonal influx of runoff may flush contaminants that coat the sediments of the channel bottom or that are deposited by wind (fallout) onto the slopes above the channel during dry weather. Other parts of the channel above and below ABGW-7 and -8 receive year-round "flushing" that would tend to dilute water-borne contaminant concentrations.

Distribution of metals and nutrients

Figures 22 through 25 illustrate the distribution of metals detected at levels above background at surface water and sediment sampling sites, Rounds 1 and 2. Metals are abbreviated using standard periodic chart elemental symbols. Many more monitored metals occurred at sediment sampling sites than at water sampling sites. Aluminum, barium, magnesium, and manganese were common to every water sampling site. Note the preponderance of metals other than aluminum, barium, magnesium, and manganese at water sampling sites ABGW-7 and -8 in Round 2 (Figure 24).

Most monitored metals were detected at some level at the background site (ABG-1) and were widely dispersed at sampling sites downstream. Detected metals varied from site to site and from sampling round to sampling round. It is difficult to make generalizations concerning trends in occurrences of metals in the surface water and sediments of Little Sulphur Creek. The profiles of Figures 33 through 49, however, provide evidence of a tendency toward elevated levels of particular metals and nutrients at specific sites.

Site ABGW-7 showed elevated levels (higher than other sites) of eight metals and nitrate in the surface water, especially in Round 2. The metals were aluminum, barium, zinc (Figure 33), manganese, lead, chromium, copper (Figure 34), and magnesium (Figure 35). Nitrates were conspicuously elevated in Round 2 (Figure 36). Site ABGW-8 showed elevated levels of four metals and nitrate, especially in Round 2. The metals were aluminum, barium, manganese, and magnesium. Nitrates were elevated in Round 2. Nitrates in Round 1 were higher at the three consecutive sites ABGW-4, -5, and -6 than at other sites (Figure 36).

Distribution of metals and nutrients in the sediments differed from that in the water. Sediment sampling sites ABGS-6, -3, -9, -10, and -11 showed elevated levels of several compounds relative to other sites. Site ABGS-6 had elevated levels of barium, zinc, lead (Figure 39), copper (Figure 40), cadmium (Figure 41), and silver (Figure 42). Site ABGS-3 had elevated levels of aluminum and magnesium (Figure 38), barium, lead, arsenic, chromium, nickel, and vanadium. Sediment sites ABGS-9, -10, and -11 generally showed elevated levels of aluminum, copper, vanadium and, to a lesser extent, chromium, manganese, and nickel, and were higher in nitrites in Round 1 (Figure 41). Sites ABG-9, -10, and -11 occupy portions of Little Sulphur Creek that receive much of their water from springs. The sediment

in those portions of the stream probably originated in the upstream reaches of Little Sulphur Creek where flood flows were strong enough to transport sediment in suspension and as bedload. It is unlikely that a substantial part of the sediments would be transported through the solution conduits that feed the springs. If the contamination in the sediments is presumed to have been in the sediments before they were transported downstream, that is, if they were introduced to the sediments within or near the burning ground and not by precipitation from stream water flowing over sediments already in place, then the springs, A, B, and C, would not be considered a significant source of contaminants for sediments at the three sampling sites. However, because contaminants were present in water samples at ABG-9, -10, and -11 (see Figures 21, 31, 32, 33, and 36), contamination emanating from spring flow cannot be ruled out. Sampling of sites within the tributaries between the springs and Little Sulphur Creek would be necessary to resolve the question of source.

Sediment sampling sites ABGS-4 and -5 were somewhat elevated in nickel, vanadium, arsenic, and chromium, particularly in Round 2 (Figure 40).

Several metals showed similar trends in levels of occurrence at successive sites (the profiles of the detected amounts were roughly parallel). Metals displaying parallel trends included barium and zinc (Figure 39) and arsenic, chromium, nickel, and vanadium (Figure 40).

Distribution of explosives

Figures 27 and 28 show the distribution of explosives at surface water and sediment sites, respectively. Explosives occurred preferentially (i.e., at particular sites) more in surface water samples than in sediment samples. Sites ABGW-7 and -8 had the most occurrences of explosives in the surface water (Figure 27). Surface water sites ABGW-9 and -11, also downstream of the ABG, had the only other occurrences of explosives, specifically the compound HMX.

HMX has a reported half life of only 4 to 5 days for a 0.5 parts per million concentration in water when exposed to natural sunlight (McLellan, Hartley, and Brower 1988). Considering the relatively short life of the compound in surface waters (a 0.5 mg/l concentration would be reduced to below detection limit within one month), the persistence of HMX in the surface waters of Little Sulphur Creek indicates that HMX is possibly being reintroduced to the stream during the rainy season by disturbance of the sediments within the stream bed. Airborne contaminants from burning operations at the ABG and contaminants in sediments eroded from the slopes surrounding the stream may also contribute to stream contaminant levels. HMX was detected at many of the sediment sampling sites (see Figures 27 and 43).

Detectable levels of HMX and other explosives were more widely distributed in the sediments of Little Sulphur Creek than in the water. The corrective measures implemented at the ABG in the past few years have lessened the probability of contamination by current Burning Ground activities. The propensity for explosives to occupy the bottom sediments of the stream (Figures 27 and 44) increases the potential for reintroduction of the compounds to stream water during runoff conditions.

Levels of explosives at sampling sites are profiled in Figure 37 for surface water and Figures 43 and 45 for sediments. Sites ABGW-7 and -8 were notable for RDX, HMX, and TNT in Round 2 surface water. Site ABGW-9 had an elevated level[5] of HMX in Round 1 (Figure 37).

For sediments, sites ABGS-6, -7, and -8 generally had elevated levels of RDX, HMX, and TNT in both rounds (Figure 44). Site ABGS-3, which is located upstream of the ABG operations, had elevated levels of all five detected explosives in Round 2 (Figures 44 and 45).

Distribution of organics

Only one organic other than explosives was detected at a level above DL in the surface water. The semivolatile compound bis(2-ethylhexyl)phthalate was detected in Round 2 at ABGW-6 at a level of 0.013 mg/l. Figure 29 illustrates the occurrence of the semivolatile, and was the only map appropriate for organics distribution in surface water.

Volatile organics in the bottom sediments were widely distributed at levels above DL. Their distribution and levels of detection are illustrated in Figures 30, 46, and 47. Chloroform occurred most frequently and occurred in both rounds. 1,1,1-trichloroethane was detected at four sites in Round 1 (Figure 47), at sites from ABGS-7 downstream. The distribution of 1,1,1-trichloroethane somewhat parallels that of chloroform. All reported occurrences of acetone and all but one occurrence of methylene chloride were discarded as laboratory artifacts, but their reported levels are plotted in Figure 46.

Semivolatiles were detected often in sediment samples (Table 7) but only the semivolatile 2,4-dinitrotoluene (2,4-DNTOL) was detected at levels above DL and above QC levels. It occurred only at site ABGS-11, near the boundary, but in both Round 1 and Round 2 at levels of 1.1 and 2.3 mg/kg, respectively (see Figures 30 and 47).

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[5] An elevated level is an estimated or detected contaminant level that is noticeably higher than the levels at the other sampling sites, as depicted in the line graphs of Figures 32 through 48. "Elevated level" does not imply a significant or action level, and may actually be below the DL.

Pesticides and herbicides were detected in sediments at levels above DL and above QC levels only at sites ABGS-6 and sites downstream of ABGS-6. The most common compounds detected were A-BHC and heptachlor. Figures 31 and 48 illustrate the preference of pesticides and herbicides for sites downstream of the ABG activity area.

Many of the detected organic compounds occurred in QC samples, which made their presence as site contaminants suspect. Methylene chloride was widely dispersed among sample sites, occurring primarily in Round 1, and is particularly suspect as a valid site contaminant. The organic compounds chloroform, 1,1,1-trichloroethane, 2,4-dinitrotoluene, and the pesticides A-BHC and hepatachlor, however, show some preference for occurrence at sampling sites from ABGS-6 and downstream. The distribution of these five compounds increases the probability that they are products of site-related contamination.

5 Conclusions and Recommendations

Conclusions

The surface water of the ABG study area is Little Sulphur Creek. It heads in a north and a south fork west of the ABG, flows through the burning ground, and flows out of the NSWCC approximately 1-1/4 miles south of the ABG.

Flow in Little Sulphur Creek is seasonal. Portions of the stream do not contain surface water in extended dry periods. The lower portion of the stream is fed by permanent springs year-round. During wet periods, flow occurs in all reaches of Little Sulphur Creek.

Certain contaminants have been released to the surface waters and bottom sediments of Little Sulphur Creek in the ABG study area. The distribution and extent of chemical contaminants in the surface water differ from those in the bottom sediments. Generally, contaminants were detected more frequently in sediments than in surface waters. This implies that contaminants accumulate and persist in some sediments but are diluted and flushed seasonally in the surface waters. Contaminants detected in one of the two sampling rounds were not necessarily detected in the other round, possibly a result of variation in water temperature and stream flow in the two sampling periods.

Certain metals, including aluminum, barium, manganese, and magnesium were detected in the surface water of most sampling sites. Chromium, cadmium, copper, lead, and zinc were detected less frequently. By comparison to background levels, aluminum, barium, manganese, and magnesium are potential site contaminants at all sampling stations; chromium, cadmium, copper, lead, and zinc are potential contaminants at four or fewer stations. Three explosives, RDX, HMX and 2,4-DNT, were detected only at surface water sites ABGW-7, -8 and -9, all downstream of the ABG. Nitrates were detected at levels higher than background at all surface water sites. The semivolatile compound bis(2-ethylhexyl)phthalate was the only organic other than explosives present in the surface water. Sites ABGW-7 and -8 had the greatest frequency of detected contaminants for surface water.

Metals, nitrates, and explosives occurred somewhat more frequently or at higher levels in the surface water samples in Round 2 (summer) than in Round 1 (spring). The much higher water temperatures present in Round 2 may account for the increased frequency or levels of explosives in the surface water, but other factors may also contribute. Bottom sediment samples did not show a similar trend.

All of the monitored metals were detected in the bottom sediments of the 11 sampling sites. Mercury, thallium, and antimony had limited distribution but all other metals were detected at almost all sites. By comparison to background site levels, barium, cadmium, copper, lead, and zinc were potential site-related contaminants at all sampling stations. Aluminum, antimony, arsenic, chromium, nickel, magnesium, manganese, mercury, silver, thallium, and vanadium were potential contaminants at four or fewer sites each. Nitrates were considered to be site-related contaminants at all sampling stations. Nitrites were considered to be potential contaminants although the evidence is inconclusive and suspect. Five explosives were detected in bottom sediments. RDX, HMX, TNT, and 2,4-DNT were detected at levels above DL at least one site each. TNB was detected only at "J" levels at five sites. Several volatile organics were detected at levels above DL and above QC sample levels, and were widely distributed in the study area bottom sediments. The pesticides and herbicides A-BHC and heptachlor were reported at levels above DL at most sediment sampling sites below ABGS-6.

All of the acetone and all but one methylene chloride occurrence were determined to be artifacts of laboratory contamination.

The potential impact of occurrences of contaminants in the surface water and sediment of Little Sulphur Creek will be addressed in the Risk Assessment currently underway for the ABG.

Recommendations

A Phase III Surface Water Release Characterization should be performed for the ABG. Results of the Phase II Release Assessment indicate the existence of contaminants, some of which could have originated at the ABG, in the surface waters and bottom sediments of Little Sulphur Creek both within and downstream of the ABG. The Phase III Release Characterization should be combined with the Risk Assessment to be performed at the ABG to prevent duplication of effort.

Surface water and bottom sediment sampling sites for the Phase III work should be those used in the Phase II study with the addition or substitution of additional background sites farther upstream on the south and north forks west of the burning ground. Phase II surface water and sediment background samples were generally below down-gradient levels, but with some excep-

tions. Additional or replacement background stations should be established as much as 1,000 ft to the west (upslope), depending on available flow conditions. The Phase III investigation should establish additional downstream sampling sites, particularly near springs, to distinguish contaminant sources. At least one round of sampling should be conducted during a period of high runoff.

Phase III Release Characterization should monitor metals, nitrites and nitrates, cyanide and sulfide, explosives, volatile and semivolatile organics, and pesticides/herbicides. Other surface water characteristics, including discharge (volume of flow per unit time), dissolved oxygen, and total suspended solids should be quantified during each sampling event.

Data from the Phase II Surface Water study should be compared to and integrated with data from the Parts 1 and 2 soils and Phase III groundwater investigations already conducted for the ABG. Integration of all three analyses will help to determine probable sources of and to verify the distribution and extent of contamination reported in the ABG study area.

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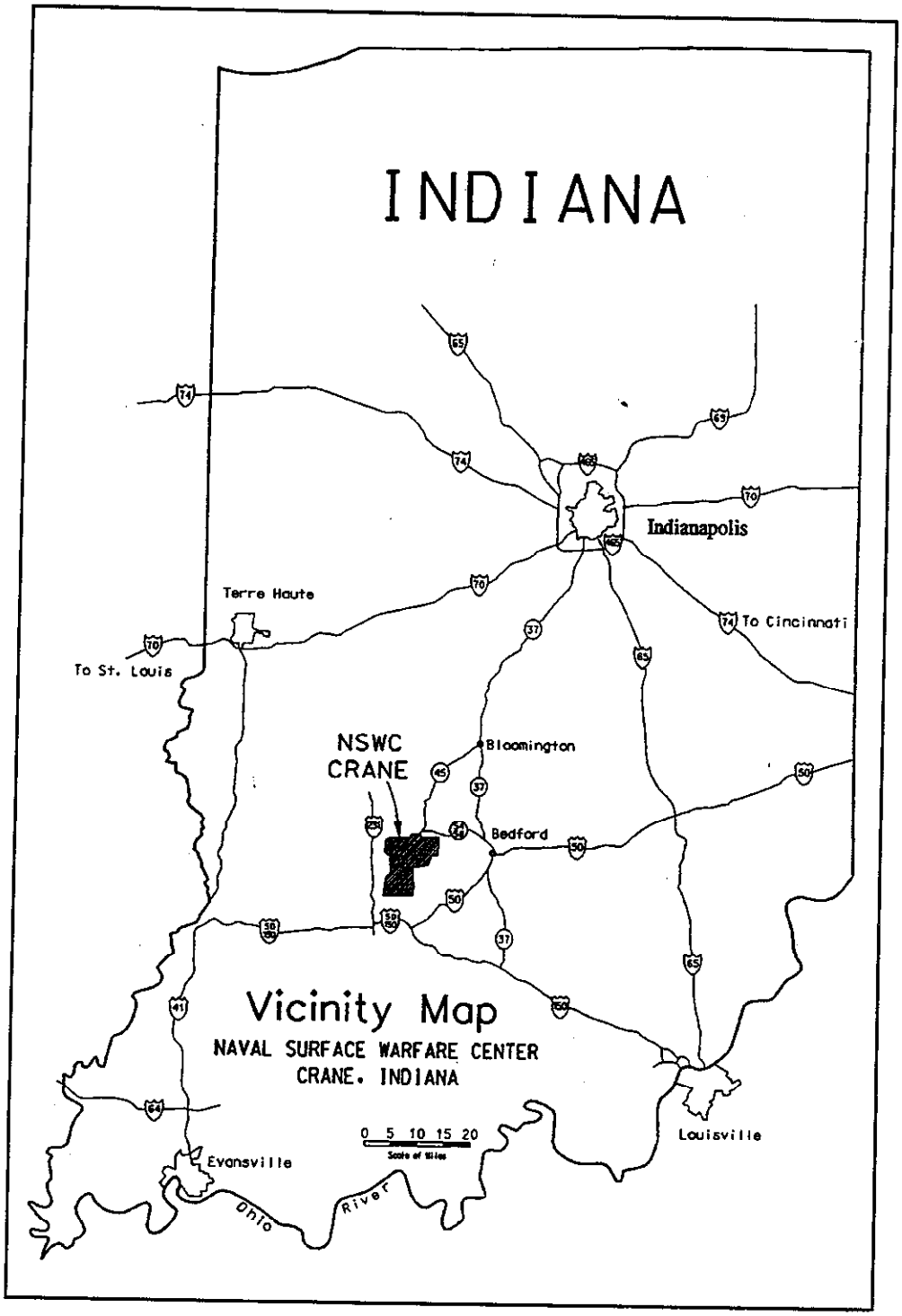


Figure 1. Location of NSWC Crane, Indiana

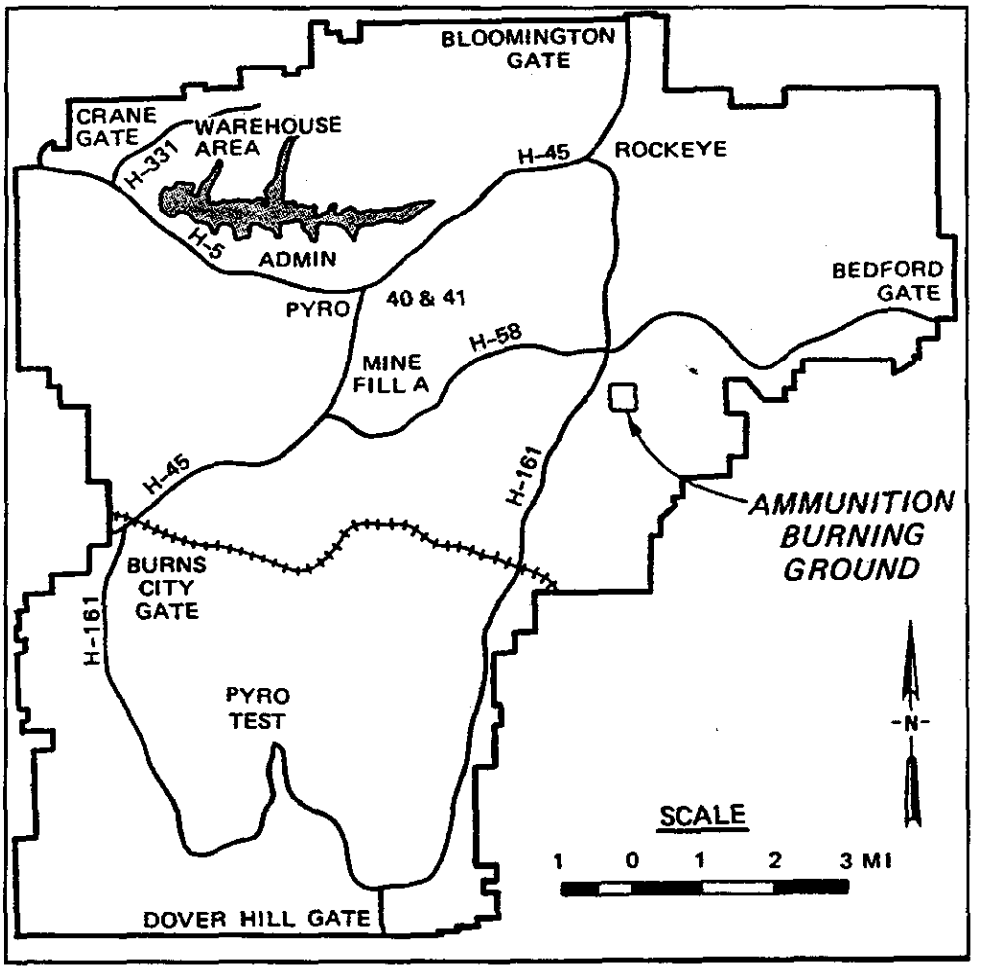


Figure 2. Naval Surface Warfare Center (NSWC) Crane and location of the Ammunition Burning Ground

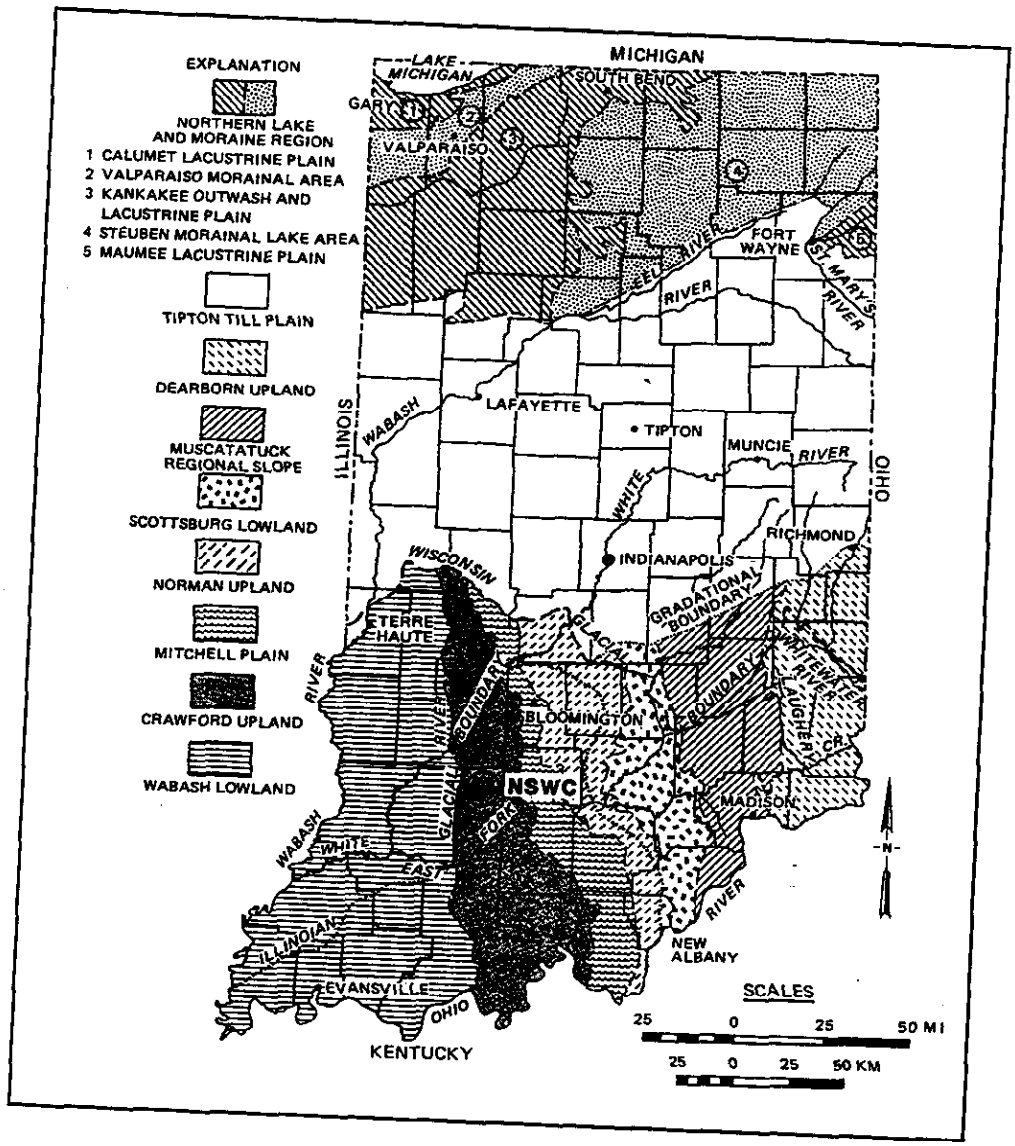


Figure 3. Physiographic divisions of Indiana (Perry and Smith, 1958)

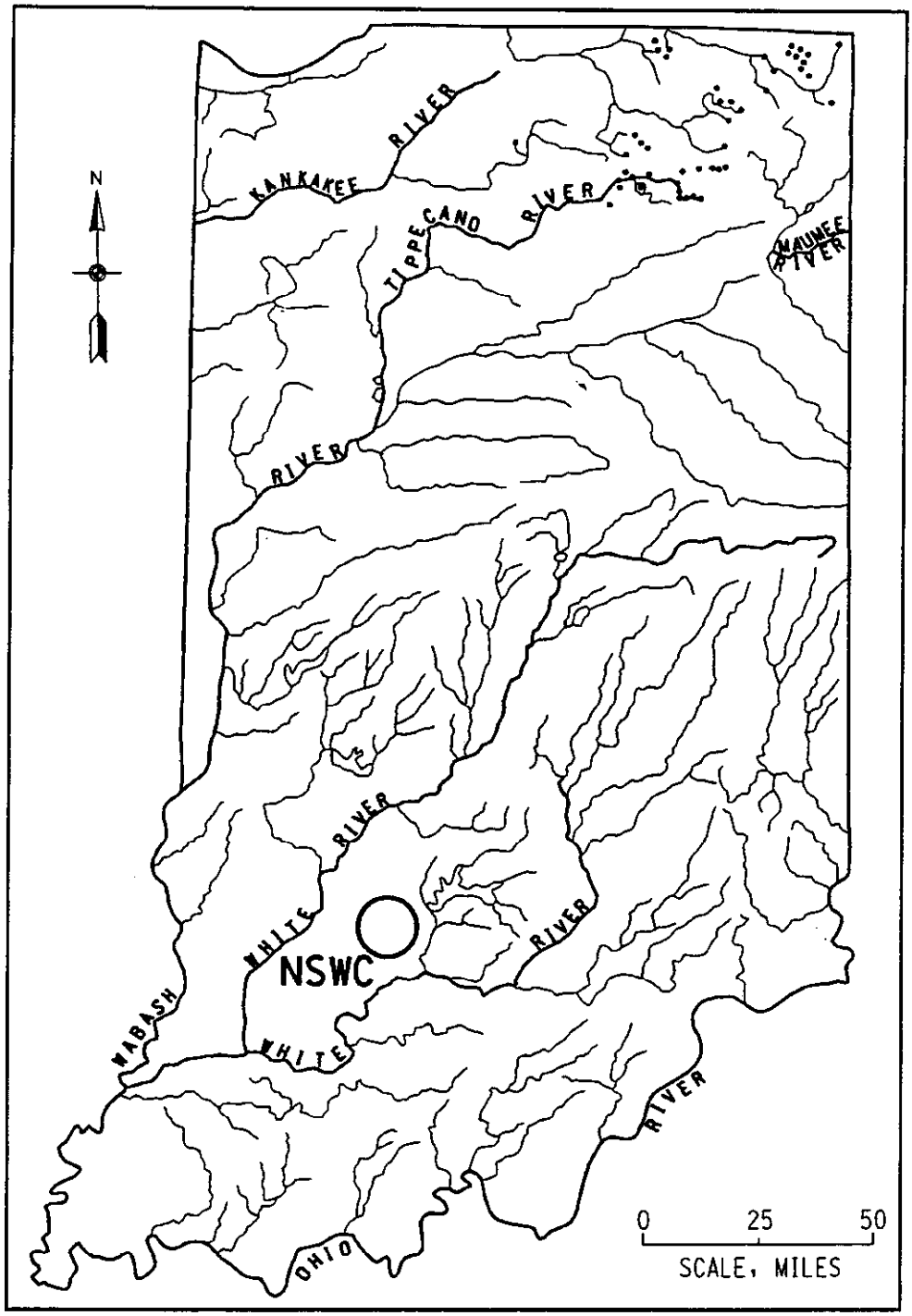


Figure 4. The stream system in Indiana (after Indiana Academy of Science, 1966)

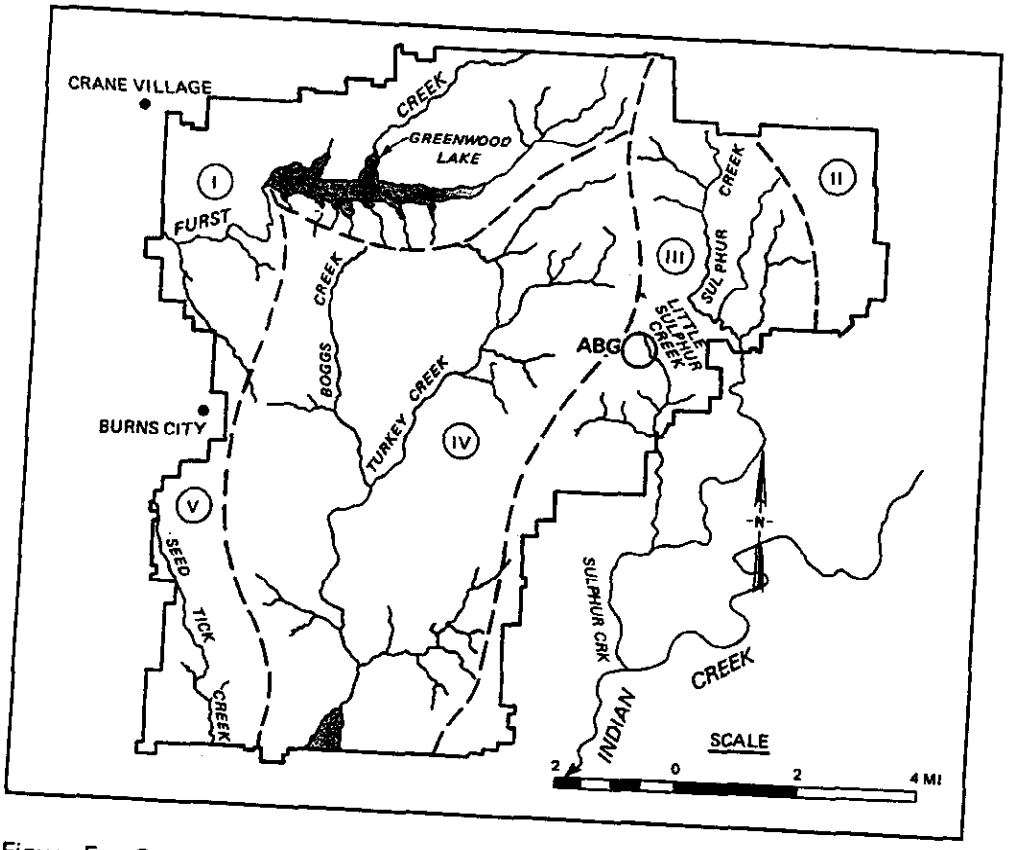


Figure 5. Surface drainage at the NSWC Crane, Indiana (Chesapeake Division Naval Facilities Command, 1979)

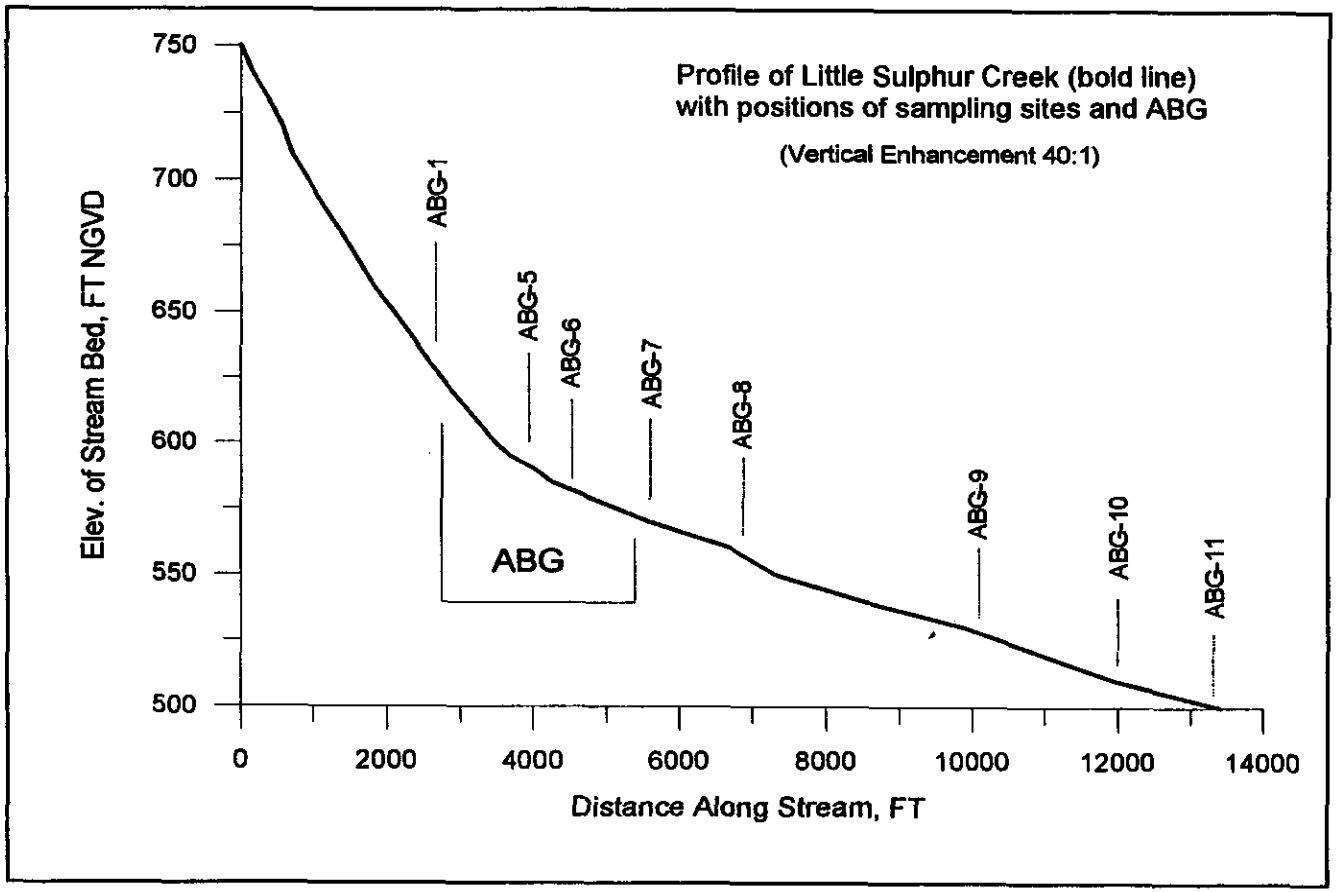


Figure 6. Profile along Little Sulphur Creek from the south fork headwaters (left) to the NSWC boundary (near site ABG-11). Note that vertical scale is 40 times horizontal scale

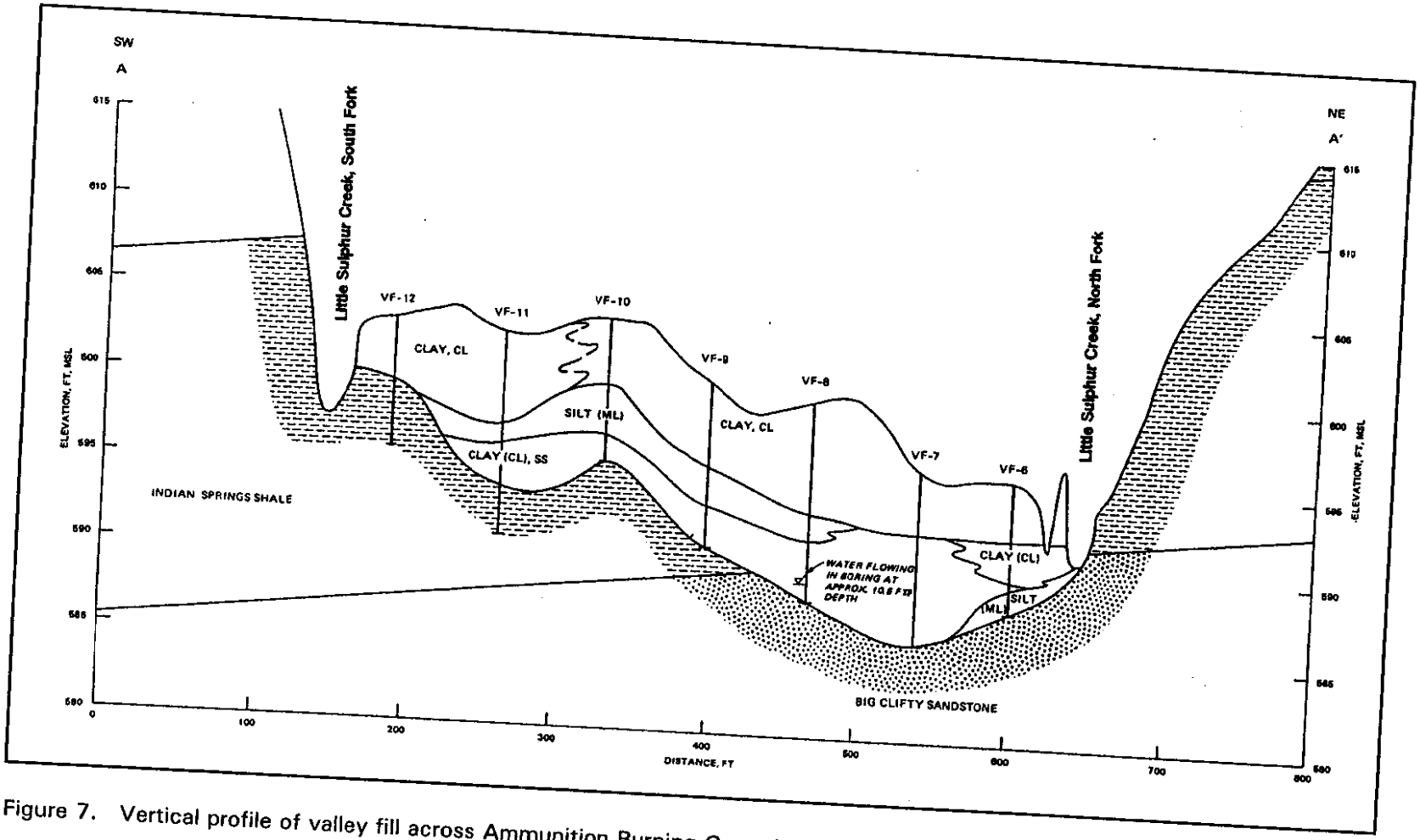


Figure 7. Vertical profile of valley fill across Ammunition Burning Ground, NSWC

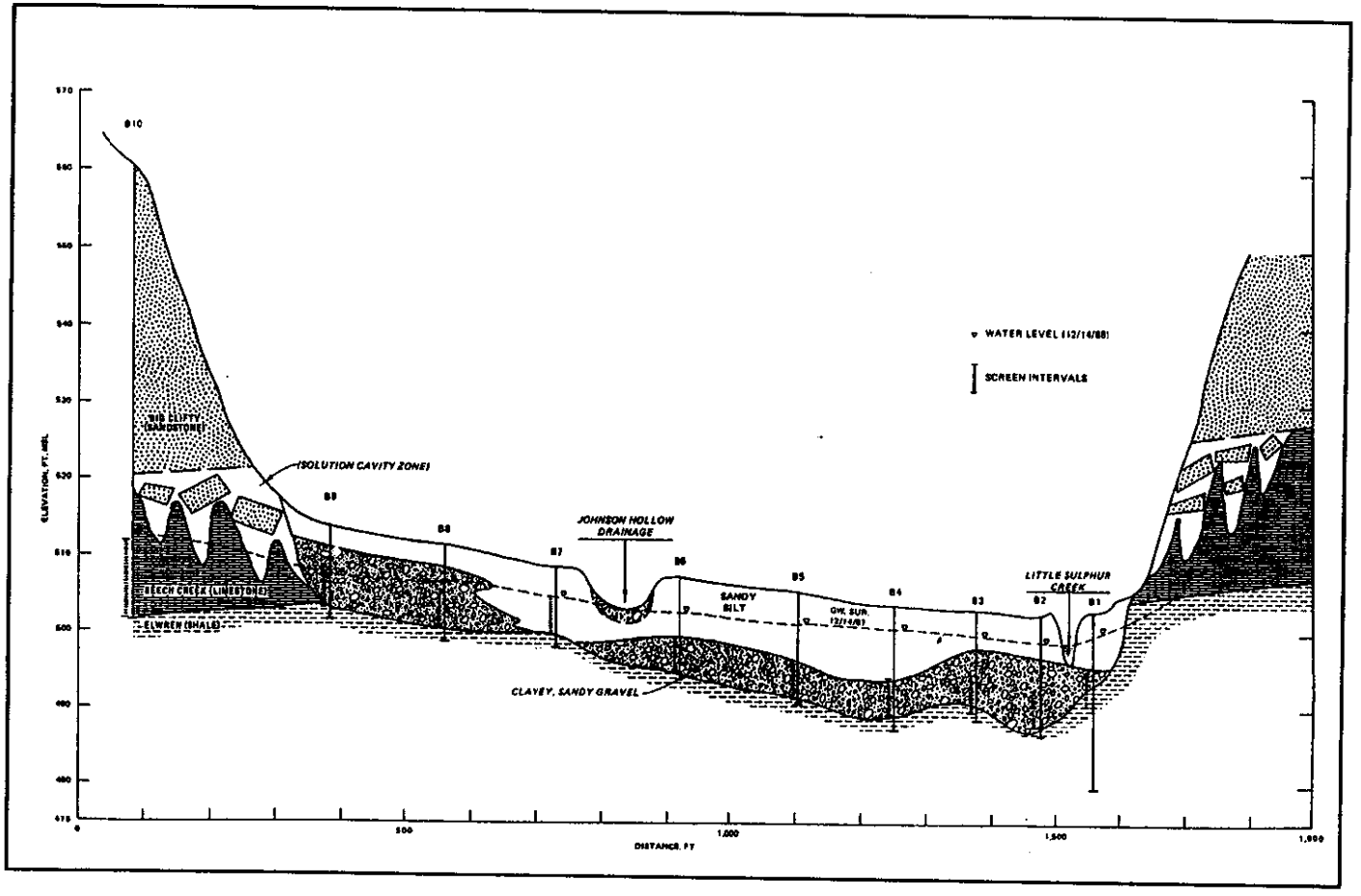


Figure 8. Vertical profile across Little Sulphur Creek near the NSWC boundary (west is to the left)

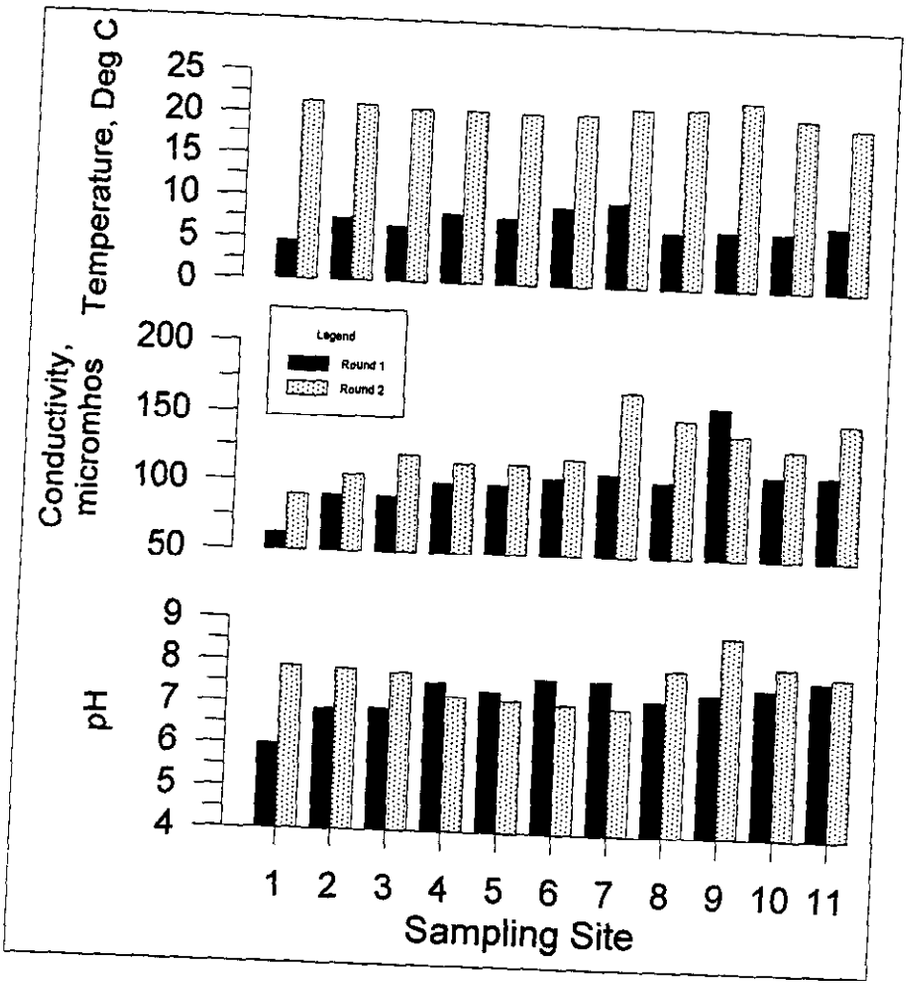


Figure 9. Field measurements of surface water, Little Sulphur Creek, Rounds 1 and 2

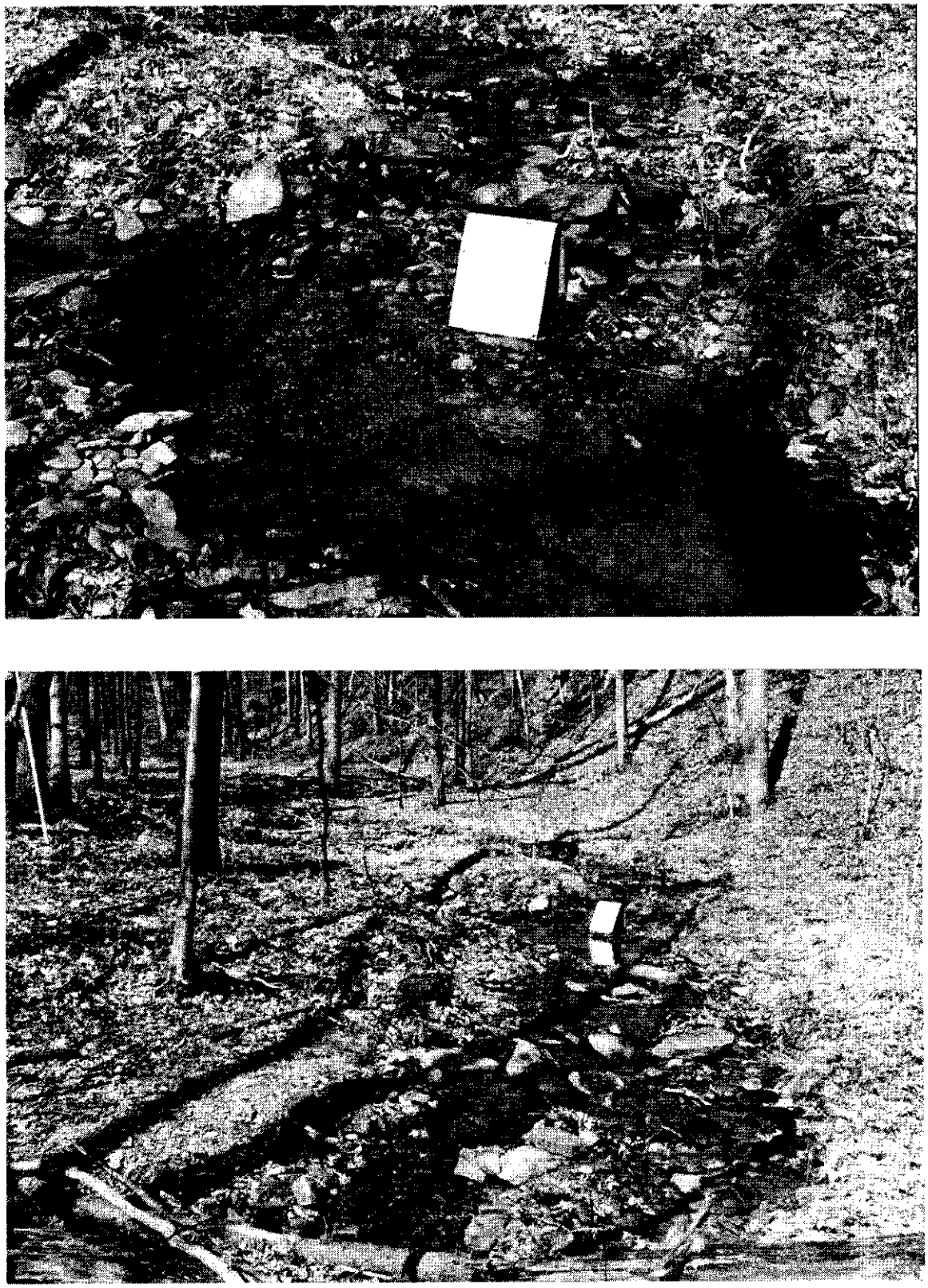


Figure 10. Surface water sampling site ABG-1, Ammunition Burning Ground, NSWC

Figure 11. Surface water sampling site ABG-2, Ammunition Burning Ground, NSWC

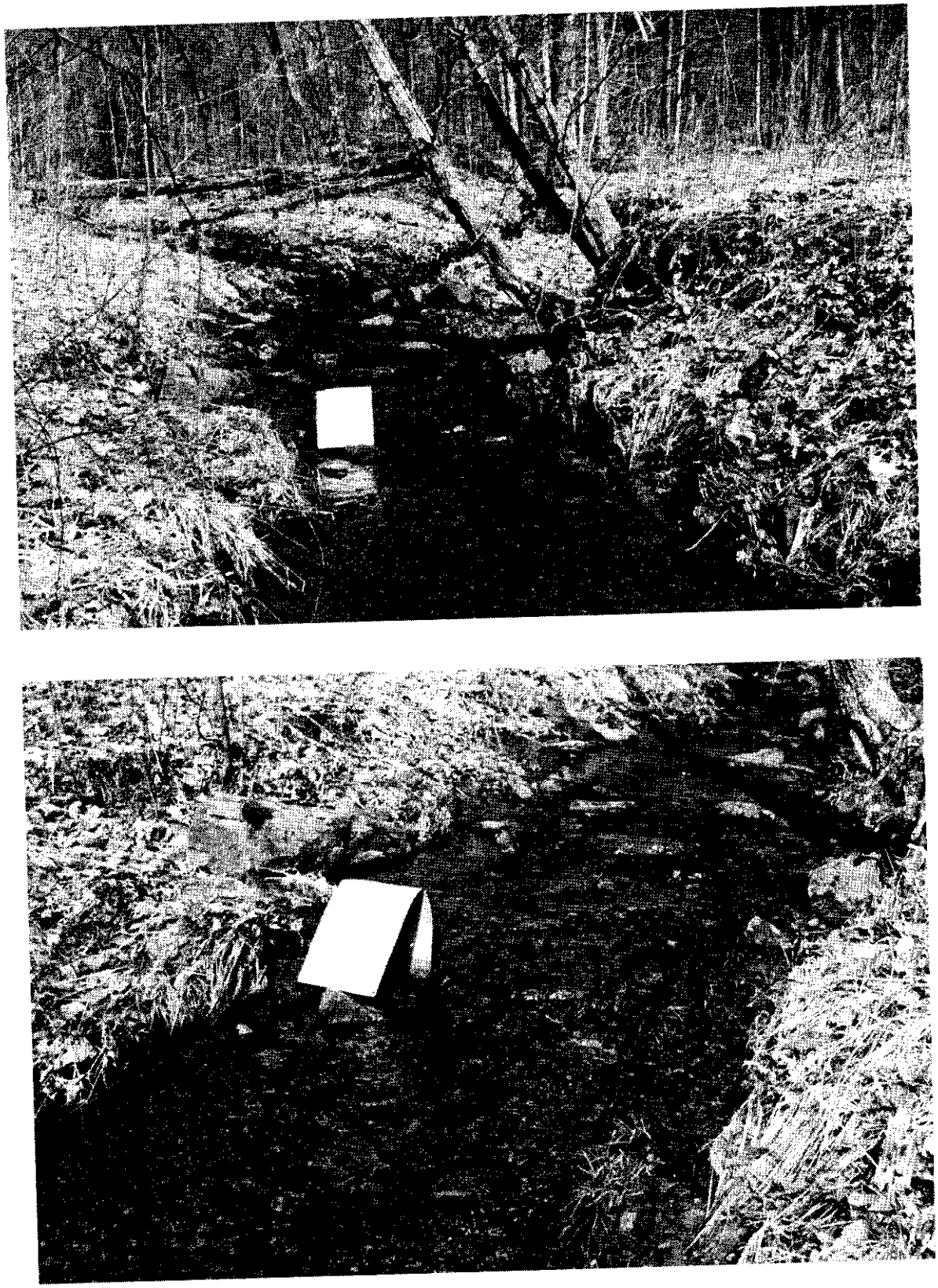


Figure 12. Surface water sampling site ABG-3, Ammunition Burning Ground, NSWC

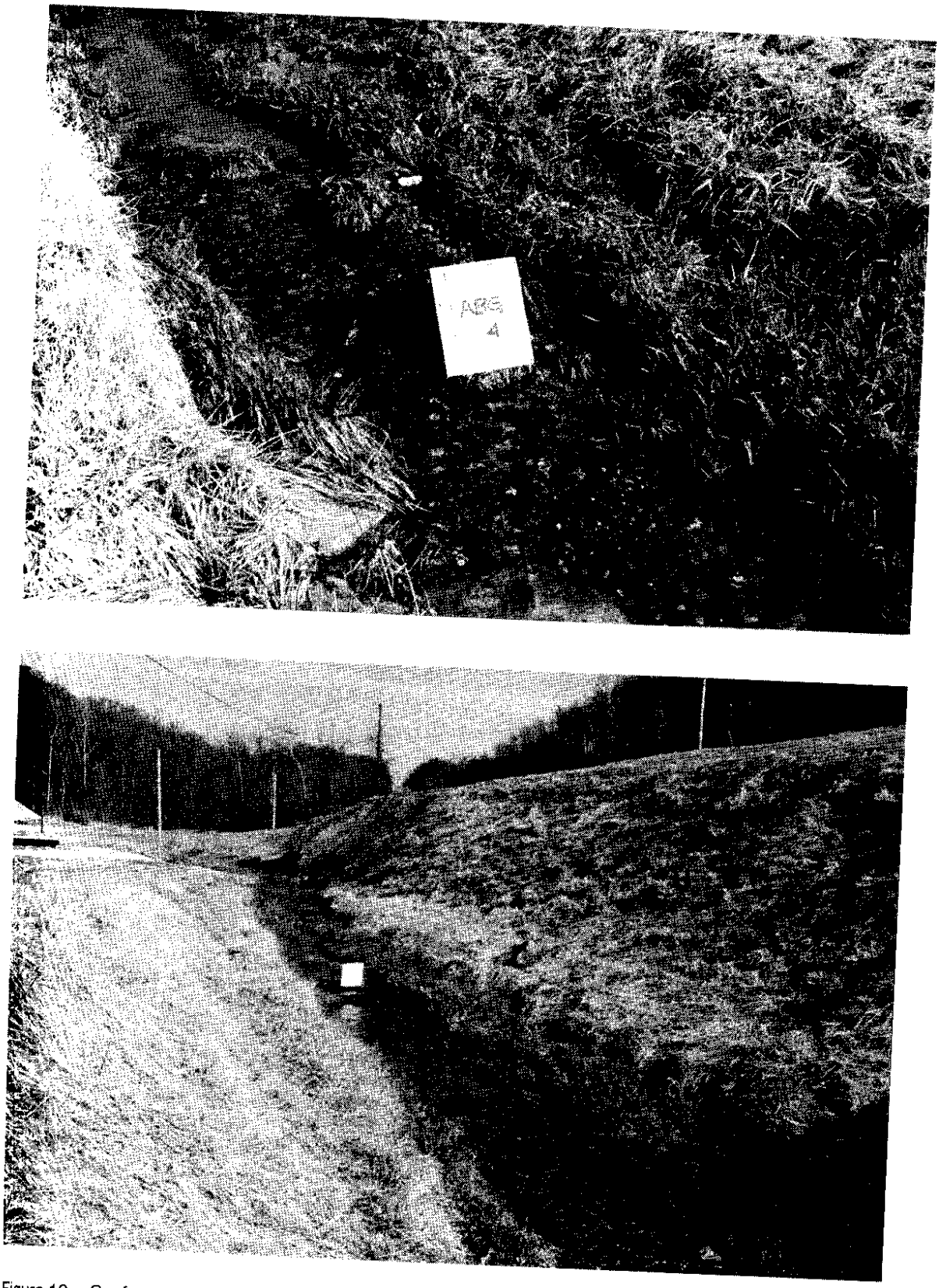


Figure 13. Surface water sampling site ABG-4, Ammunition Burning Ground, NSWC

Figure 14. Surface water sampling site ABG-5, Ammunition Burning Ground, NSWC

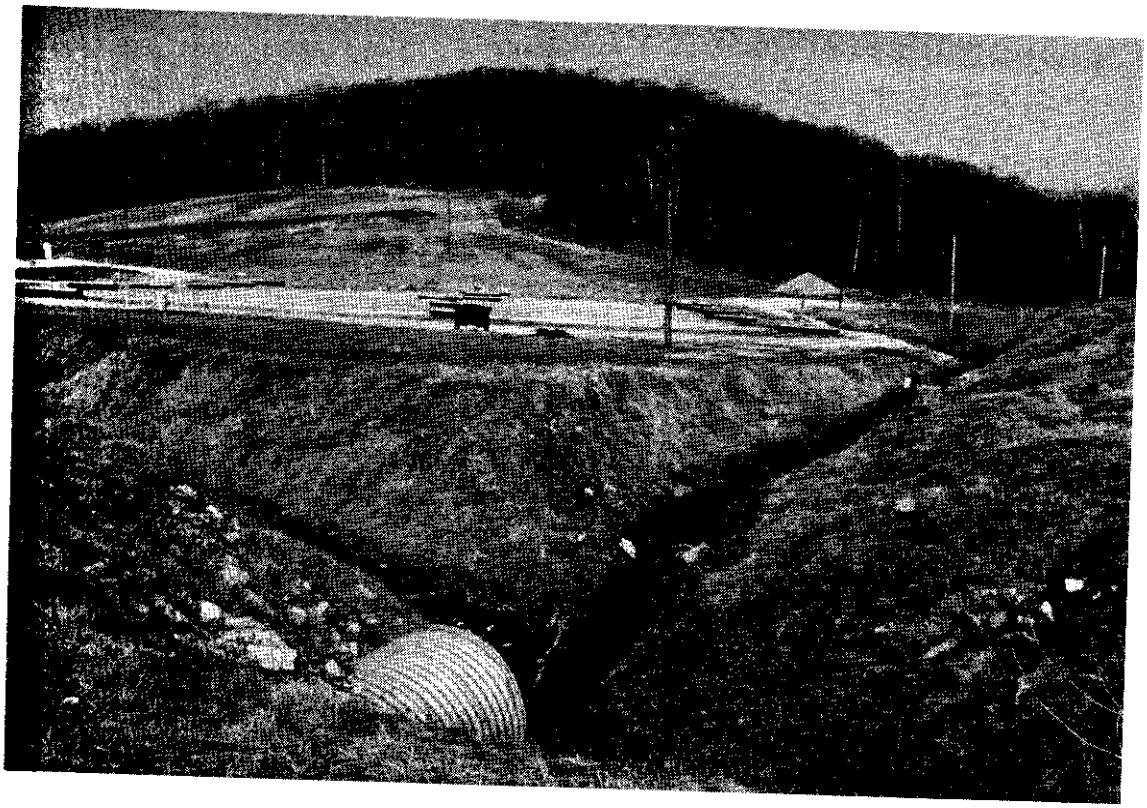


Figure 15. Little Sulphur Creek at the Ammunition Burning Ground, NSWC

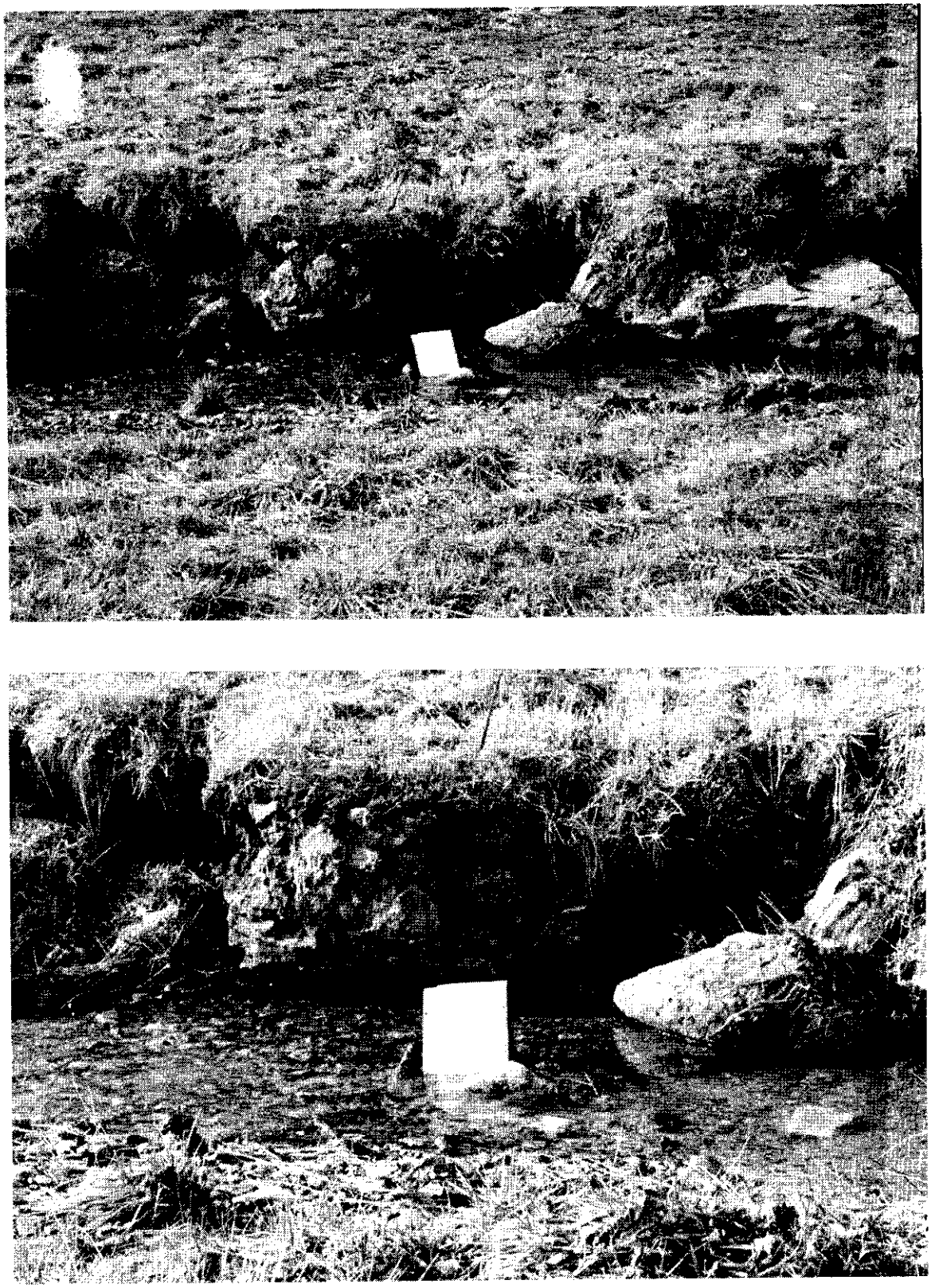
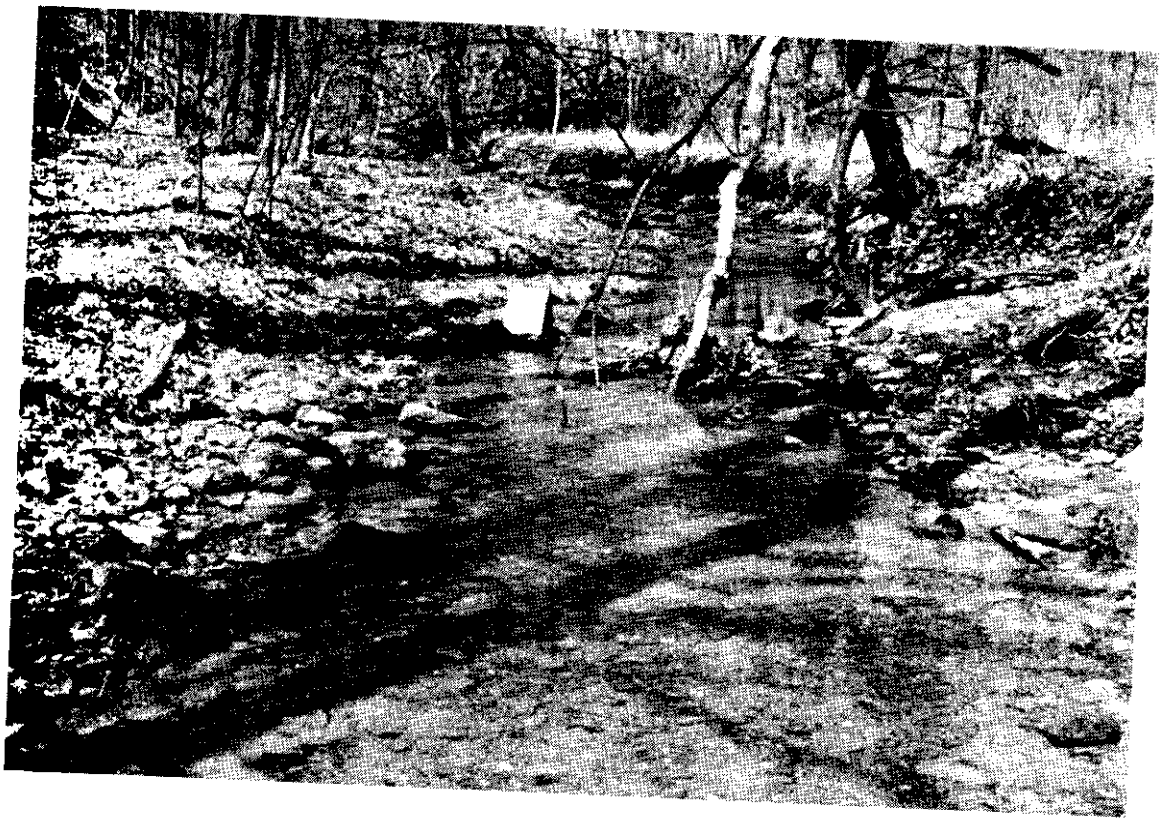


Figure 16. Surface water sampling site ABG-6, Ammunition Burning Ground, NSWC



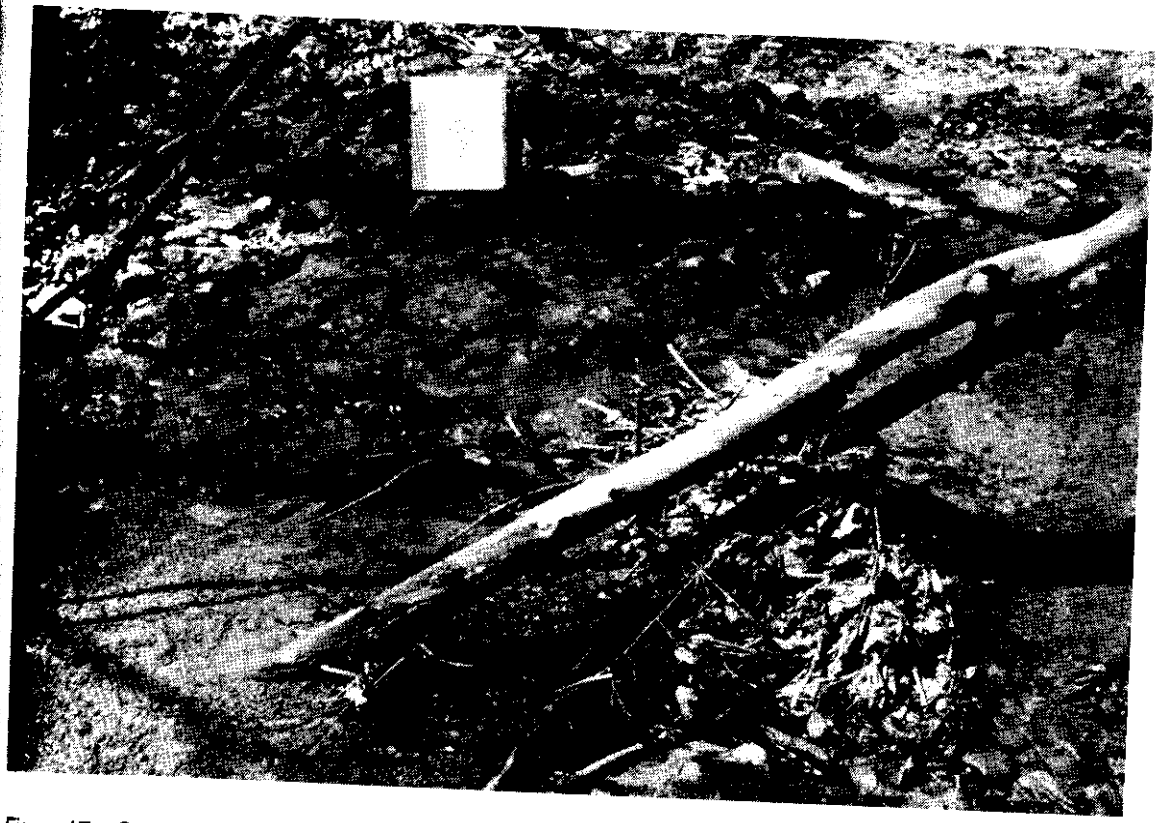


Figure 17. Surface water sampling site ABG-7, Ammunition Burning Ground, NSWC

Figure 18. Surface water sampling site ABG-8, Ammunition Burning Ground, NSWC

Figure 19. Surface water sampling site ABG-9, Ammunition Burning Ground, NSWC

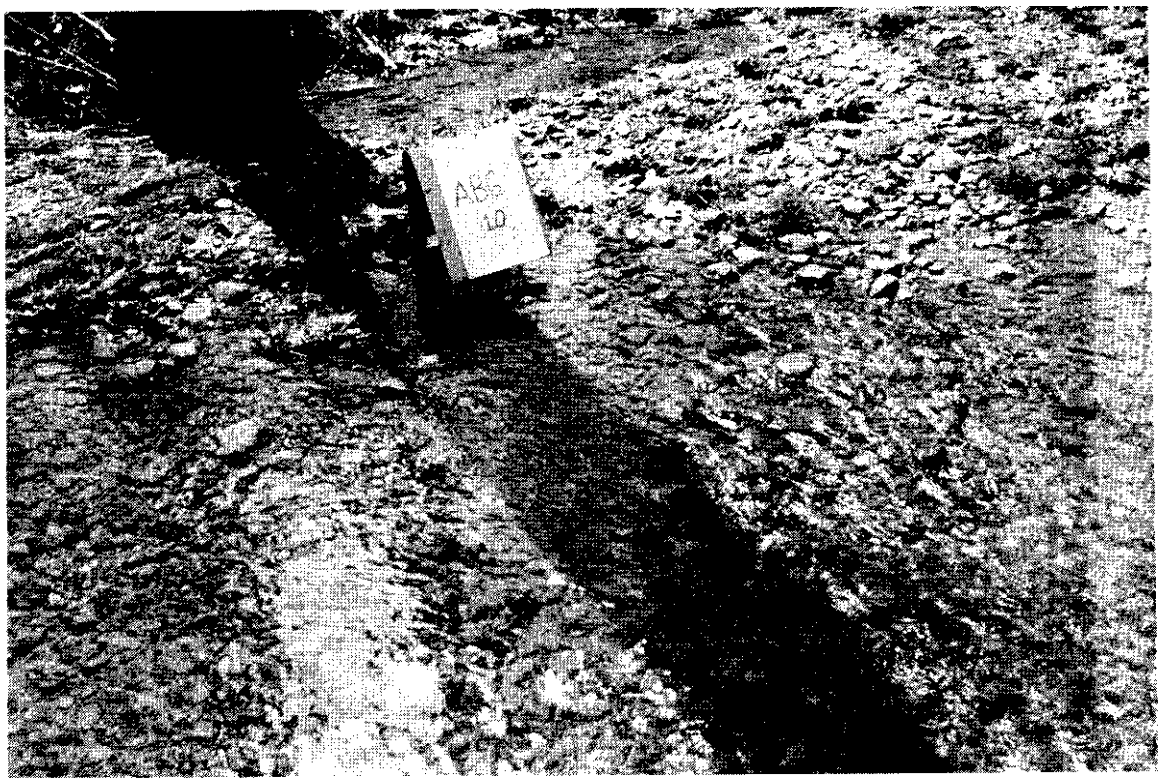


Figure 20. Surface water sampling site ABG-10, Ammunition Burning Ground, NSWC

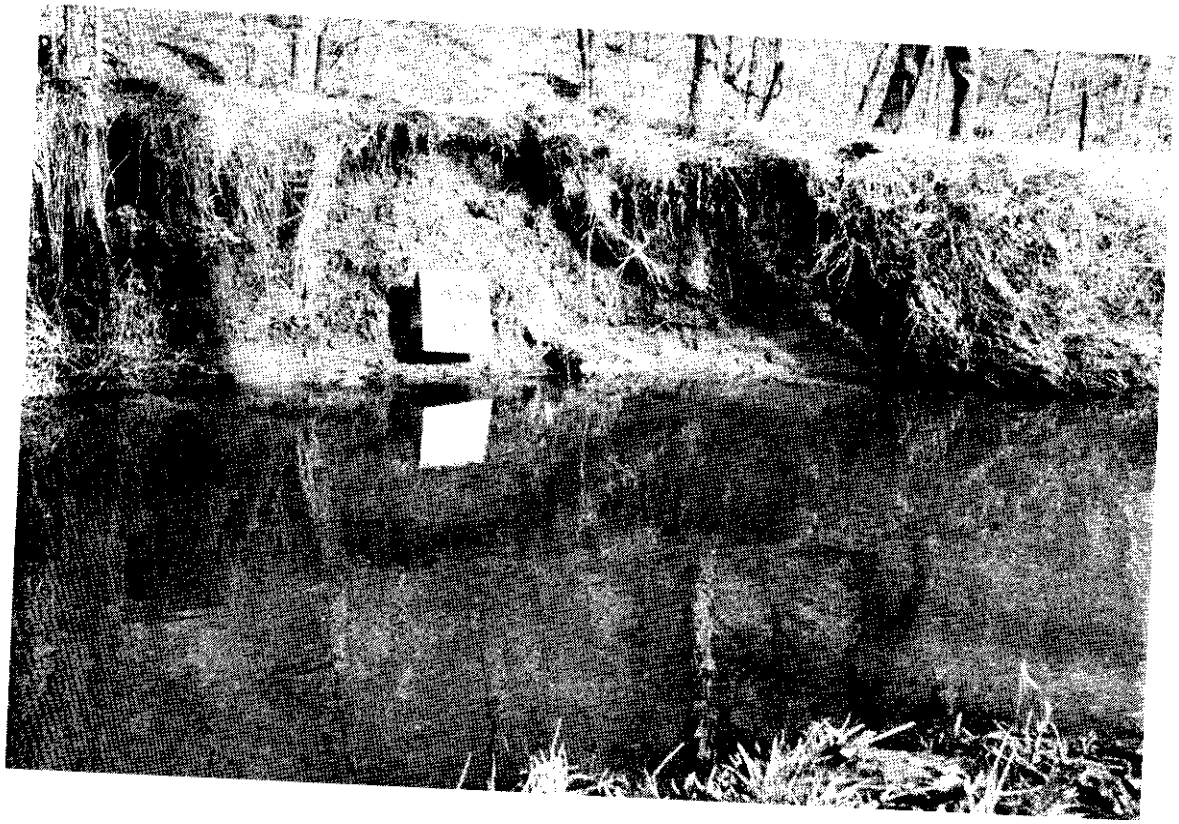


Figure 21. Surface water sampling site ABG-11, Ammunition Burning Ground, NSWC

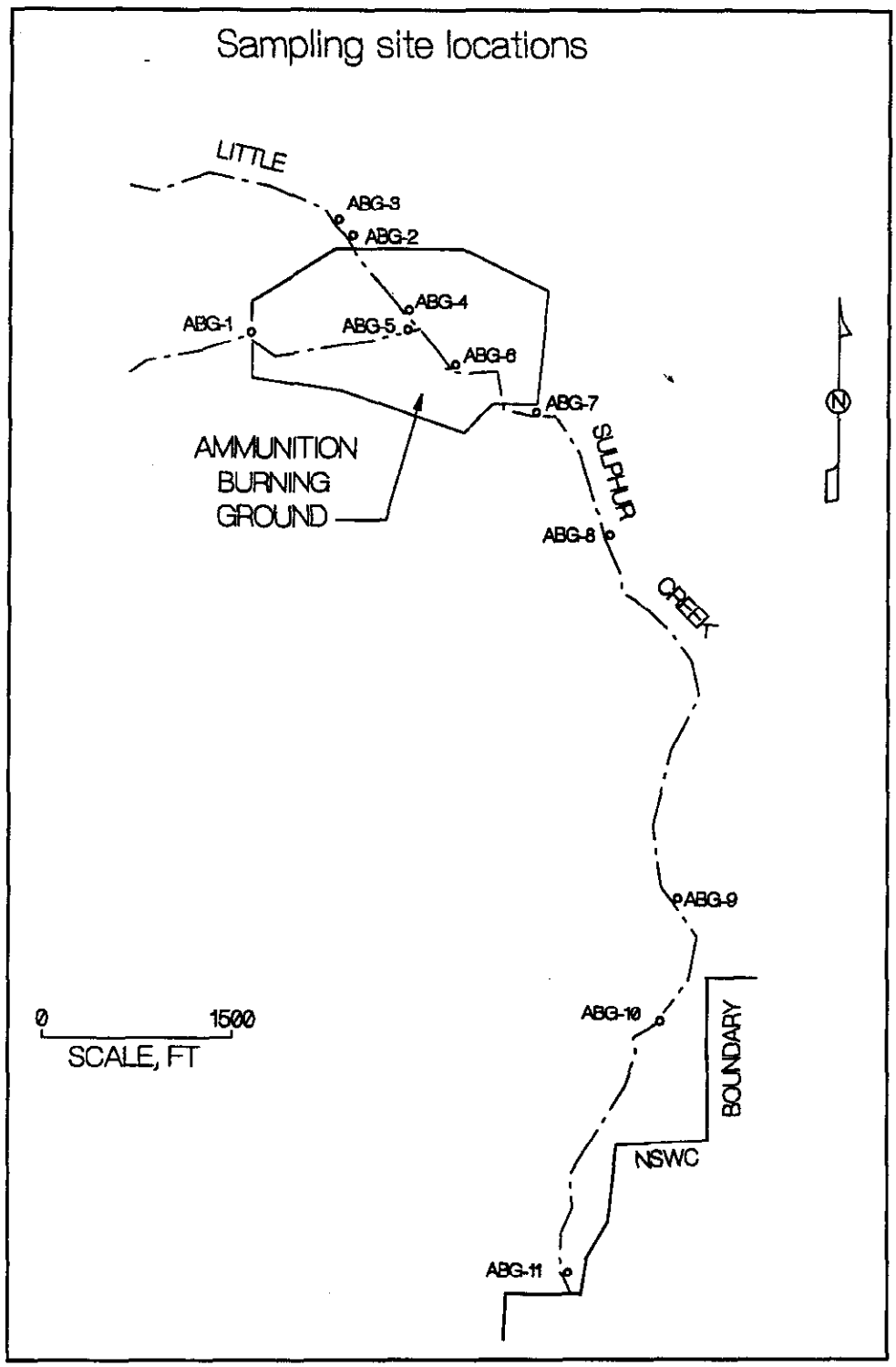


Figure 22. Site map for Surface Water Investigation of the Ammunition Burning Ground and Little Sulphur Creek (accompanies Figures 23-32)

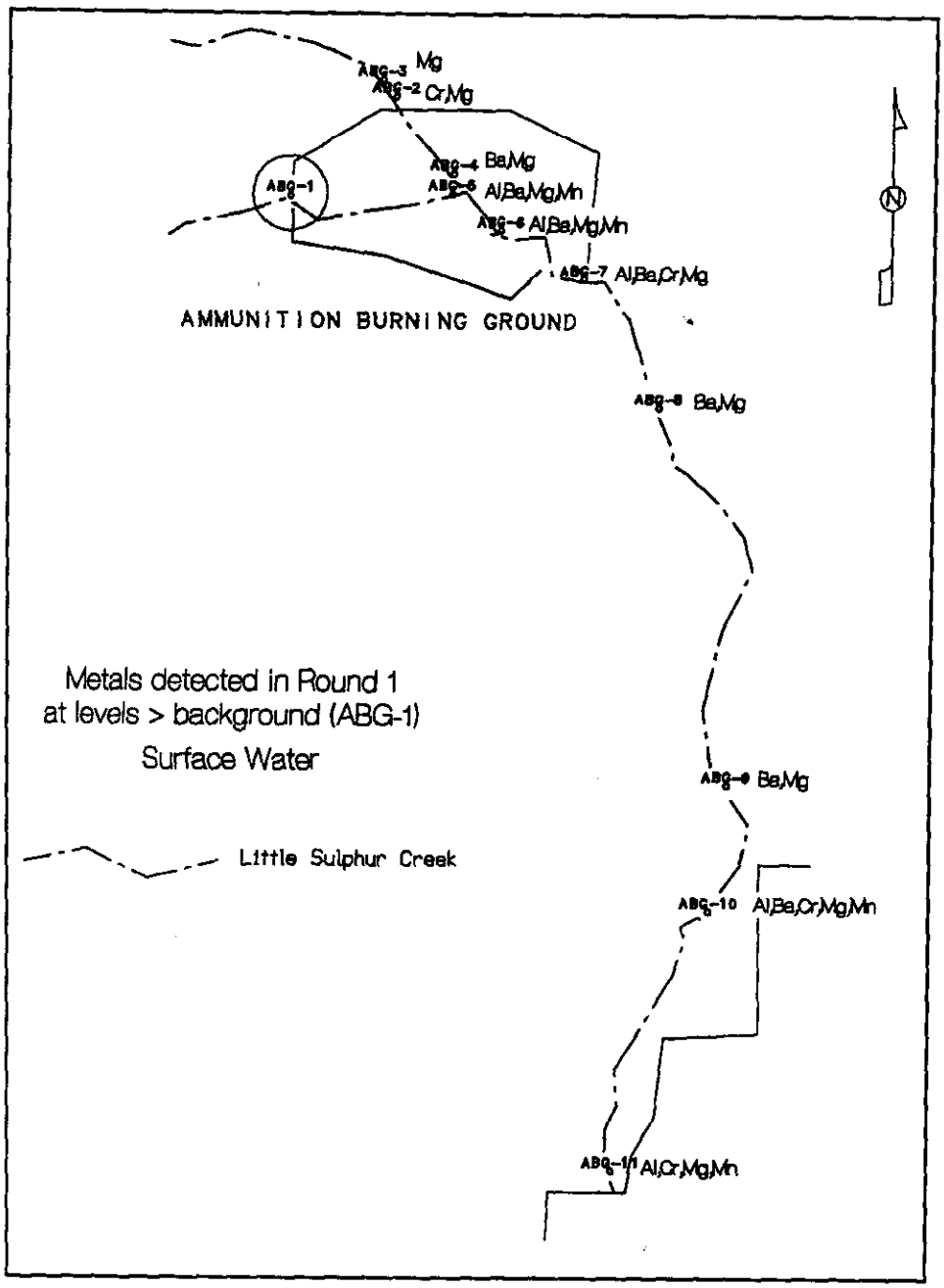


Figure 23. Metals detected in the surface water of Little Sulphur Creek at levels higher than background in sampling Round 1

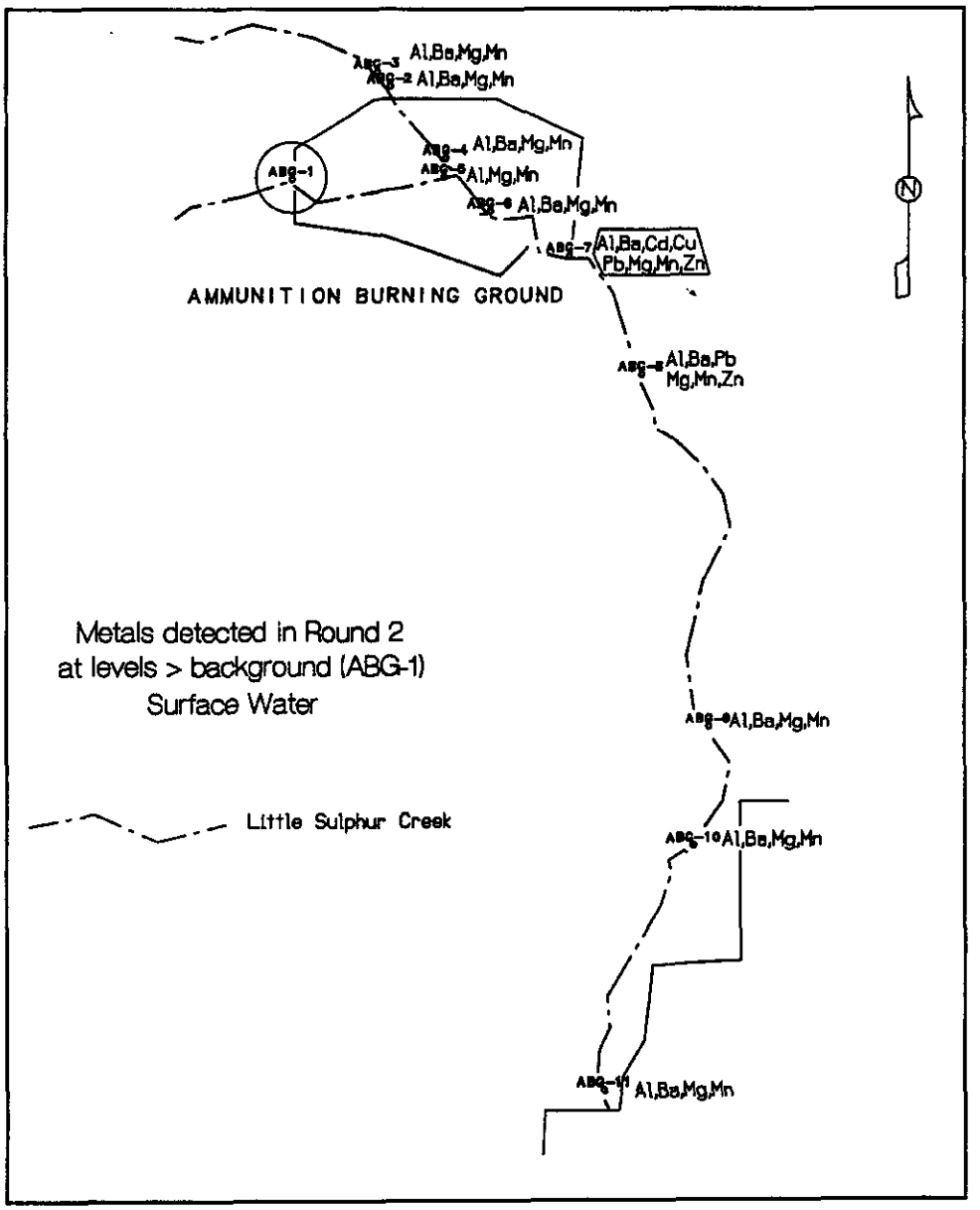


Figure 24. Metals detected in the surface water of Little Sulphur Creek at levels higher than background in sampling Round 2

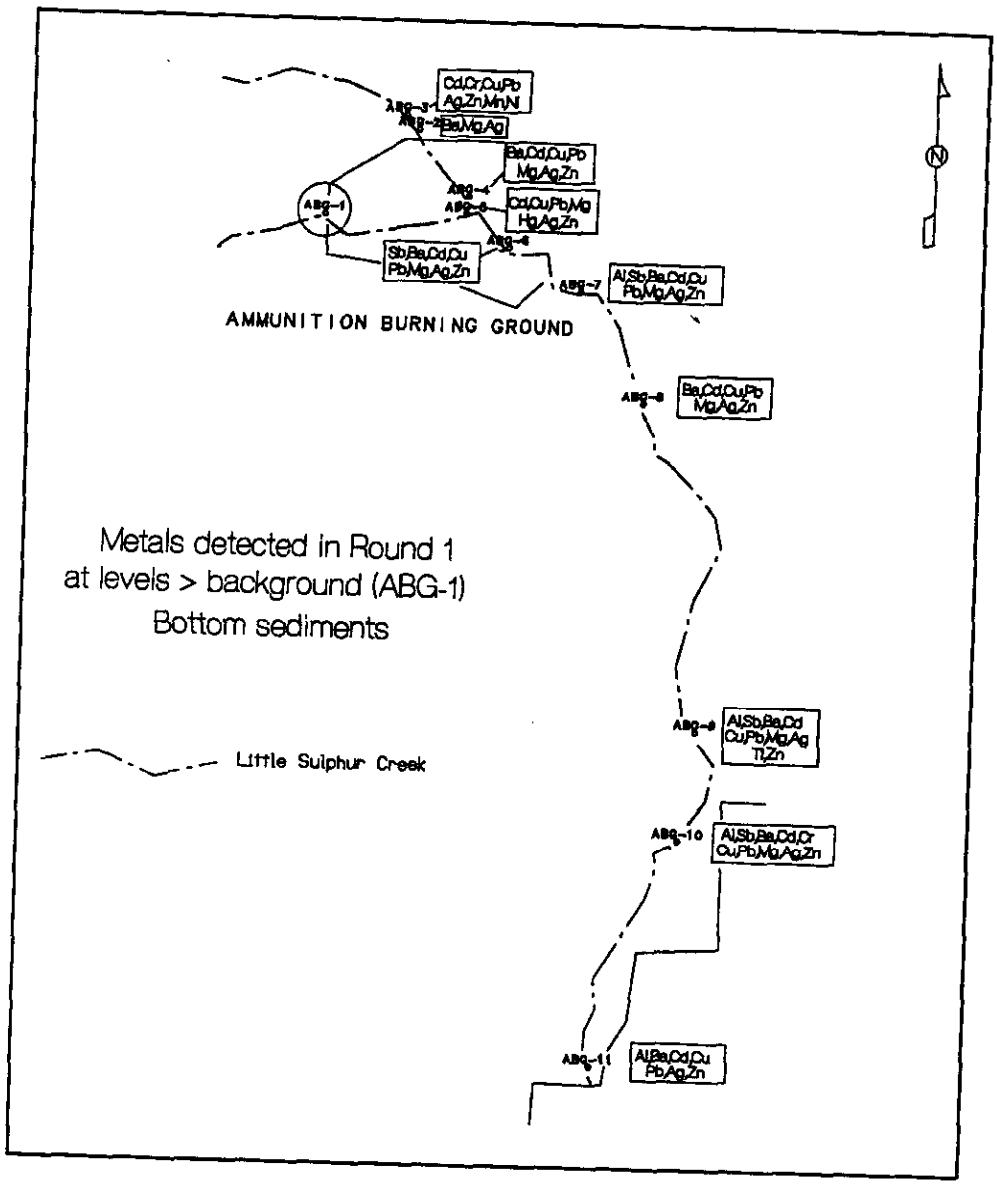


Figure 25. Metals detected in the sediment of Little Sulphur Creek at levels higher than background in sampling Round 1

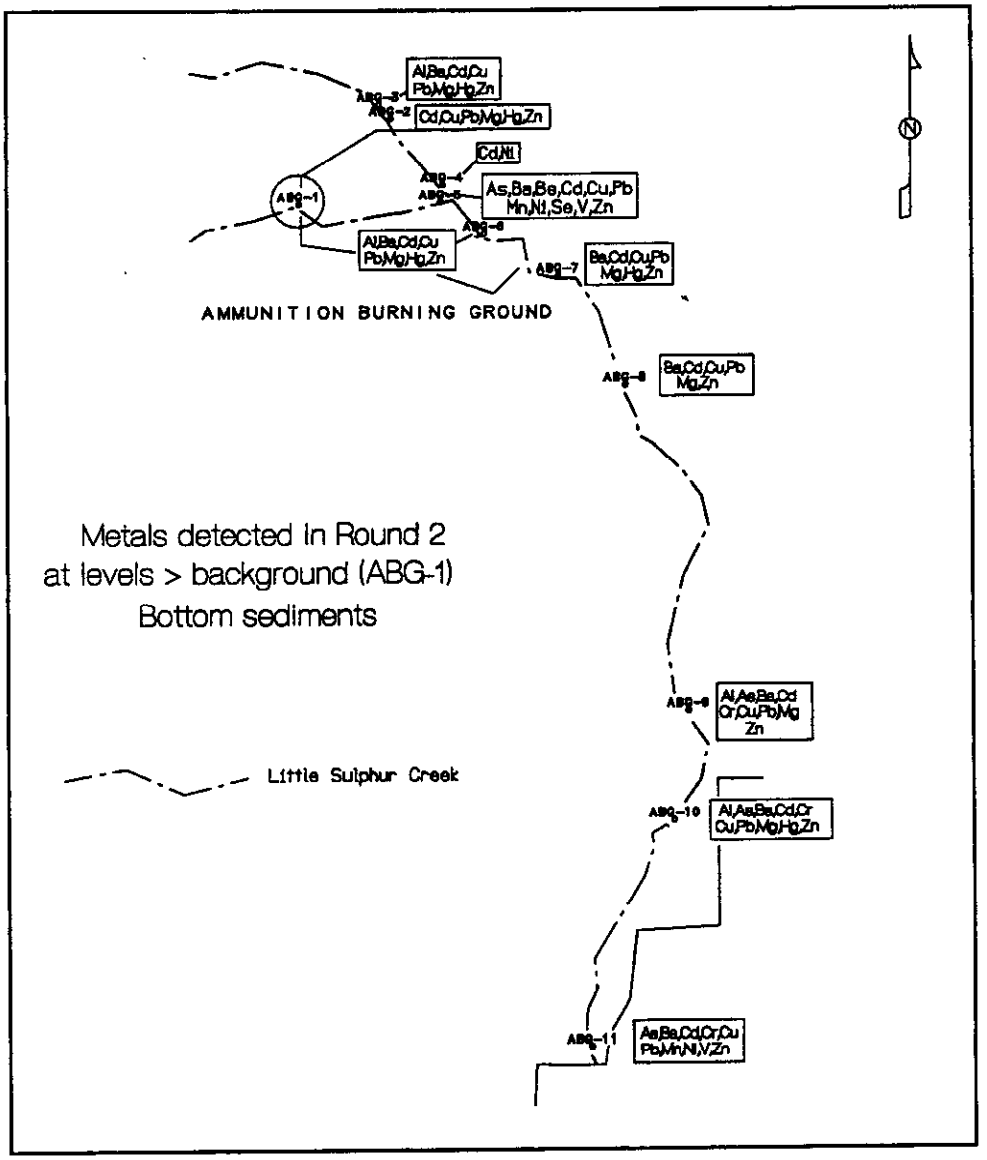


Figure 26. Metals detected in the sediment of Little Sulphur Creek at levels higher than background in sampling Round 2

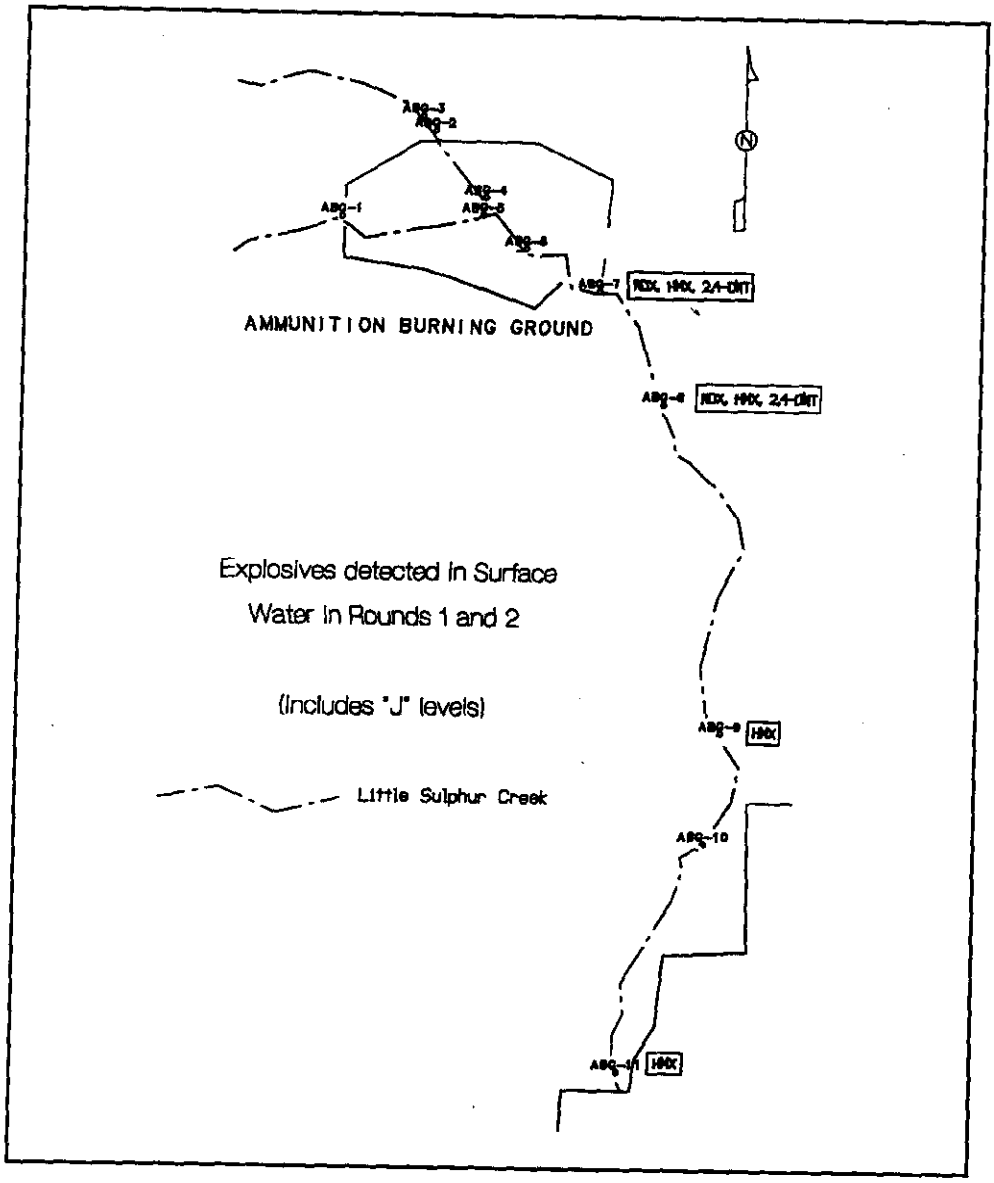


Figure 27. Explosives detected in the surface water of Little Sulphur Creek in sampling Rounds 1 and 2

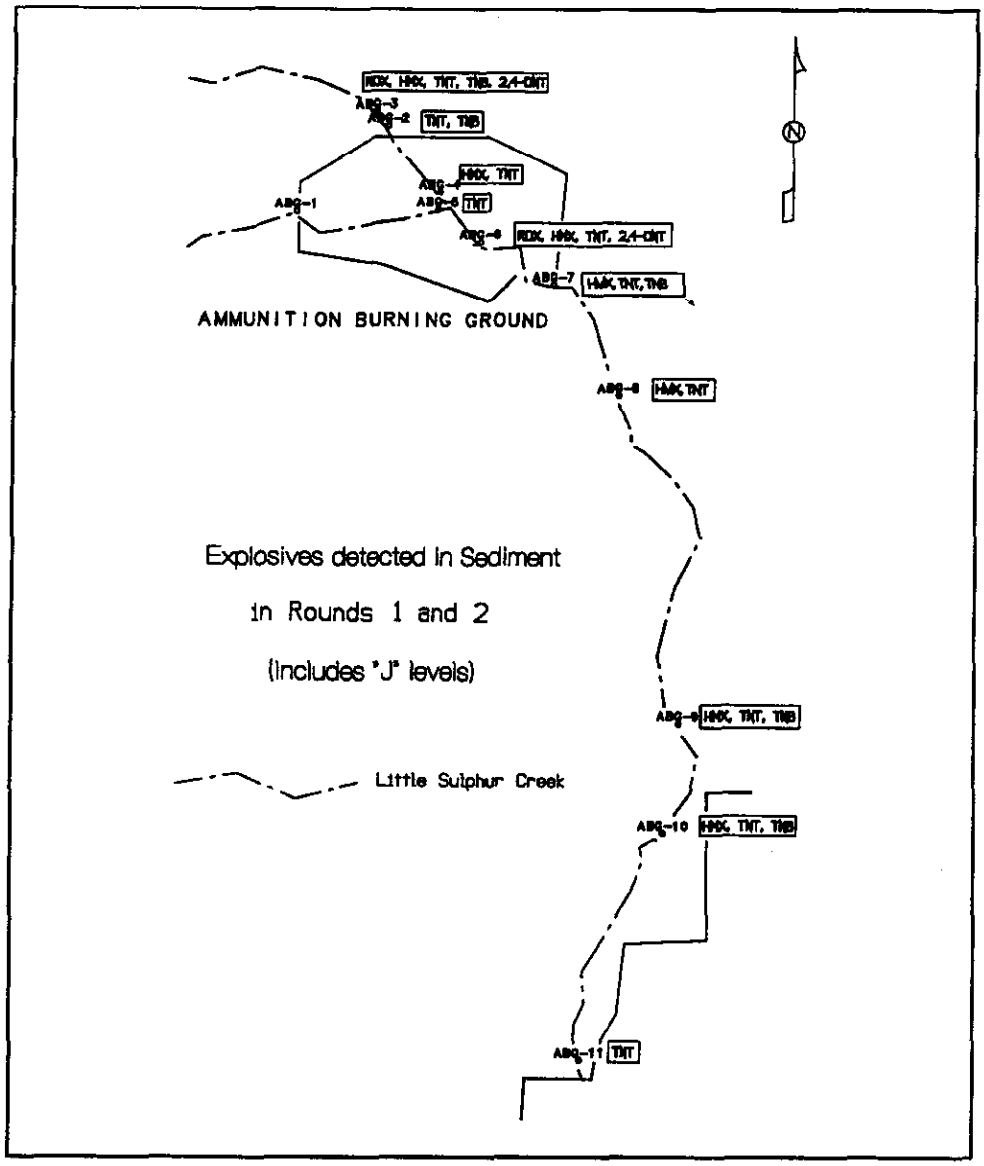


Figure 28. Explosives detected in the sediment of Little Sulphur Creek in sampling Rounds 1 and 2

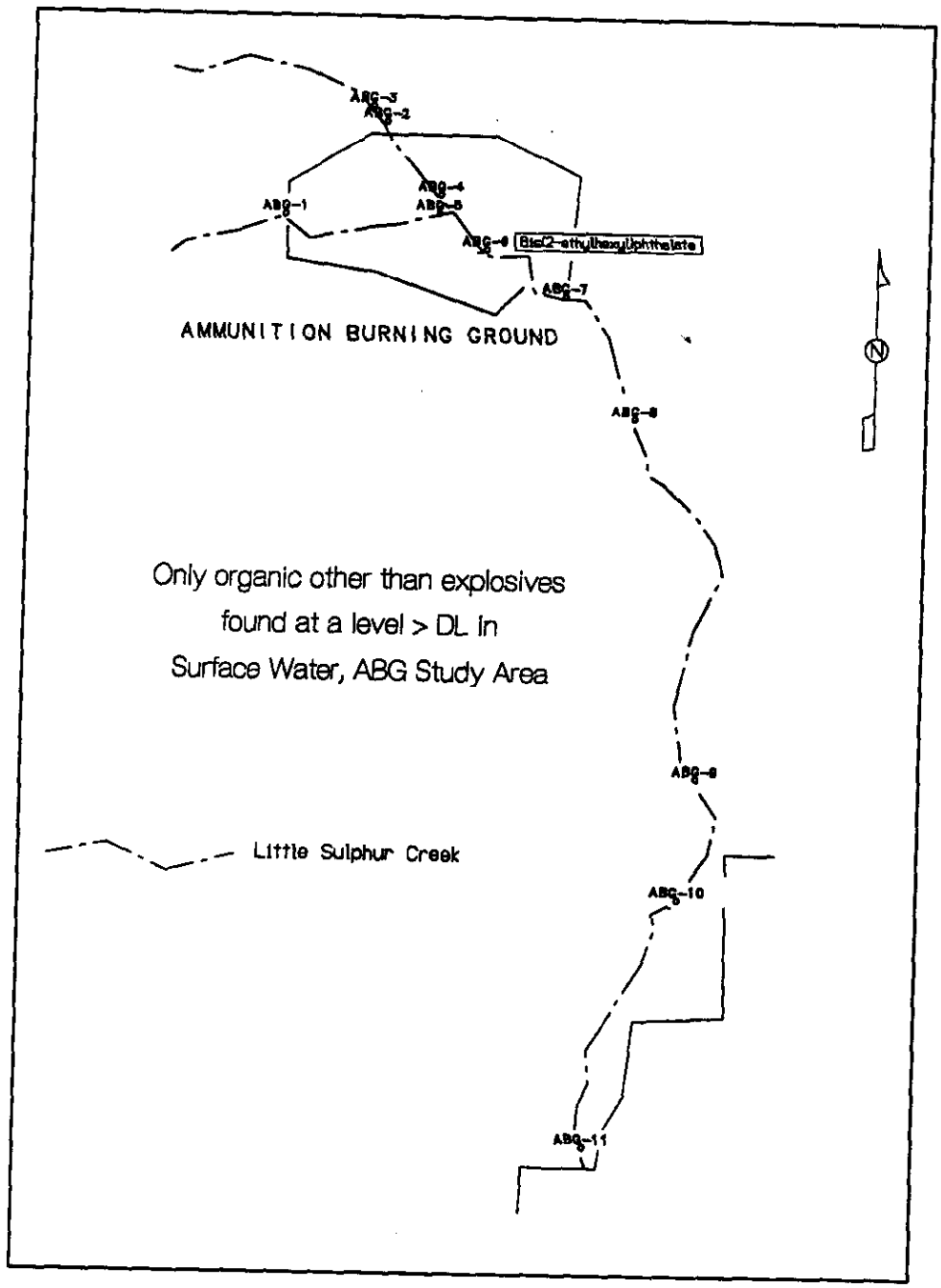


Figure 29. Organics detected in the surface water of Little Sulphur Creek, Rounds 1 and 2

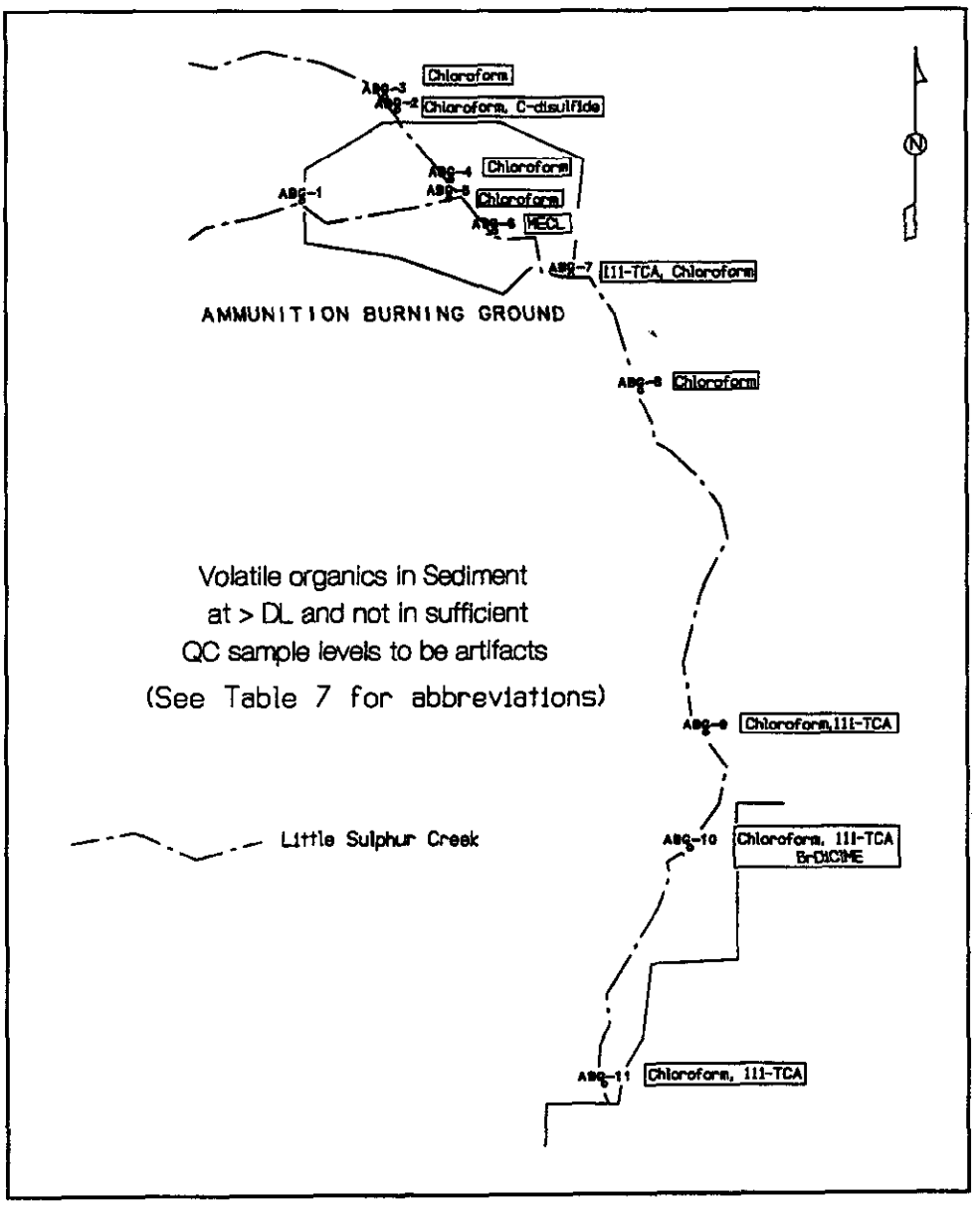


Figure 30. Volatile organics detected in the sediment of Little Sulphur Creek, Rounds 1 and 2

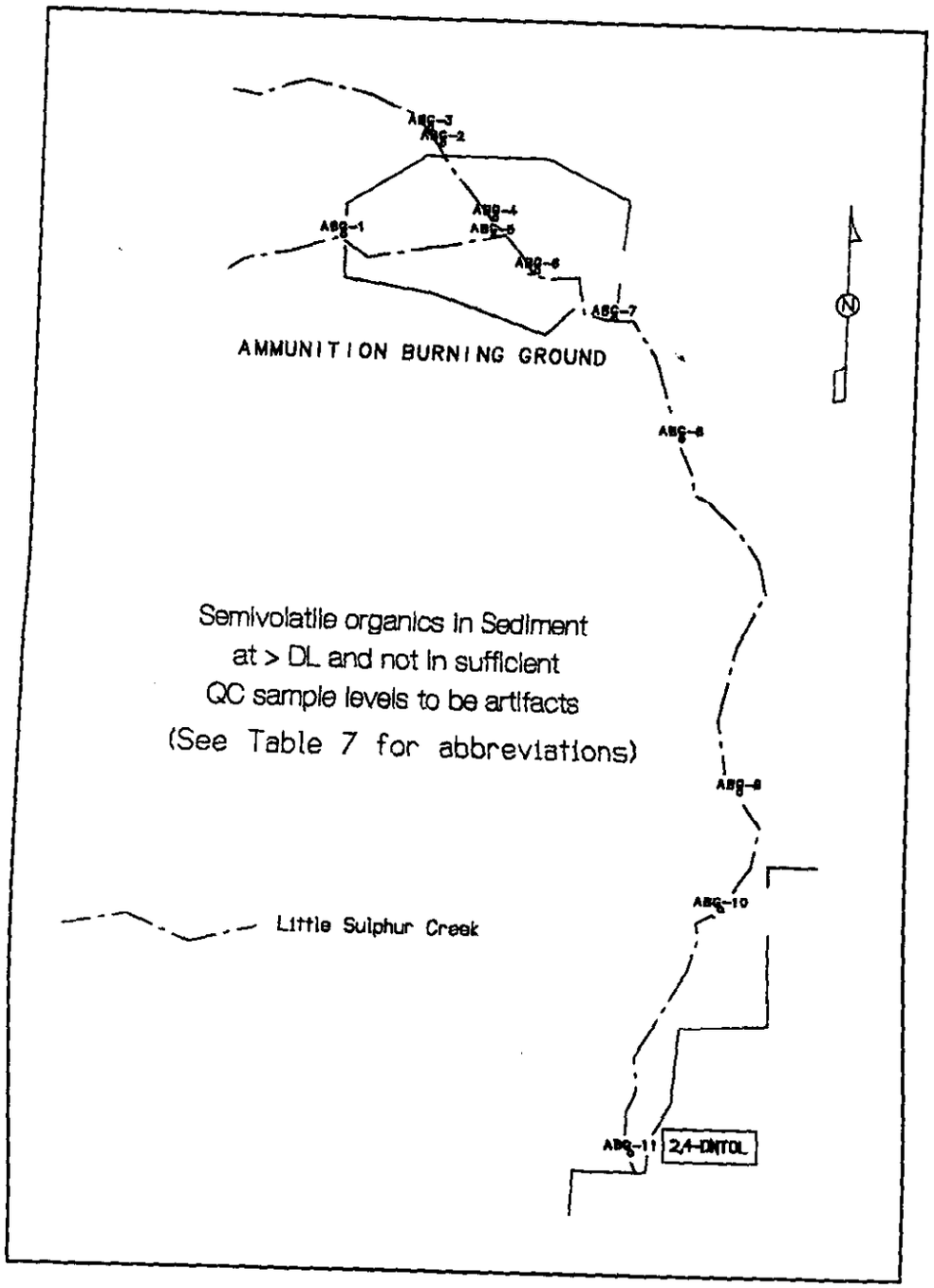


Figure 31. Semivolatile organics detected in the sediment of Little Sulphur Creek, Rounds 1 and 2

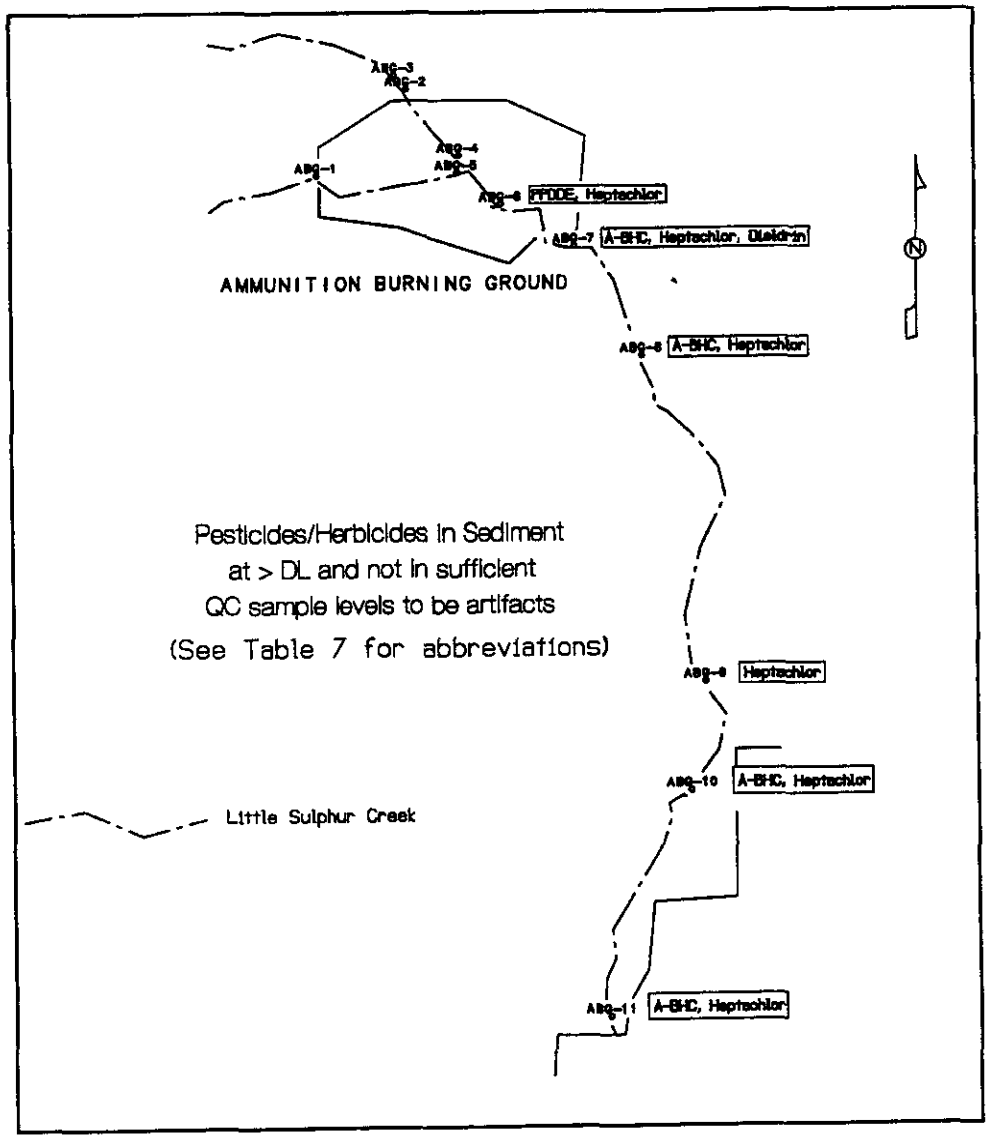


Figure 32. Pesticides/herbicides detected in the sediment of Little Sulphur Creek, Rounds 1 and 2

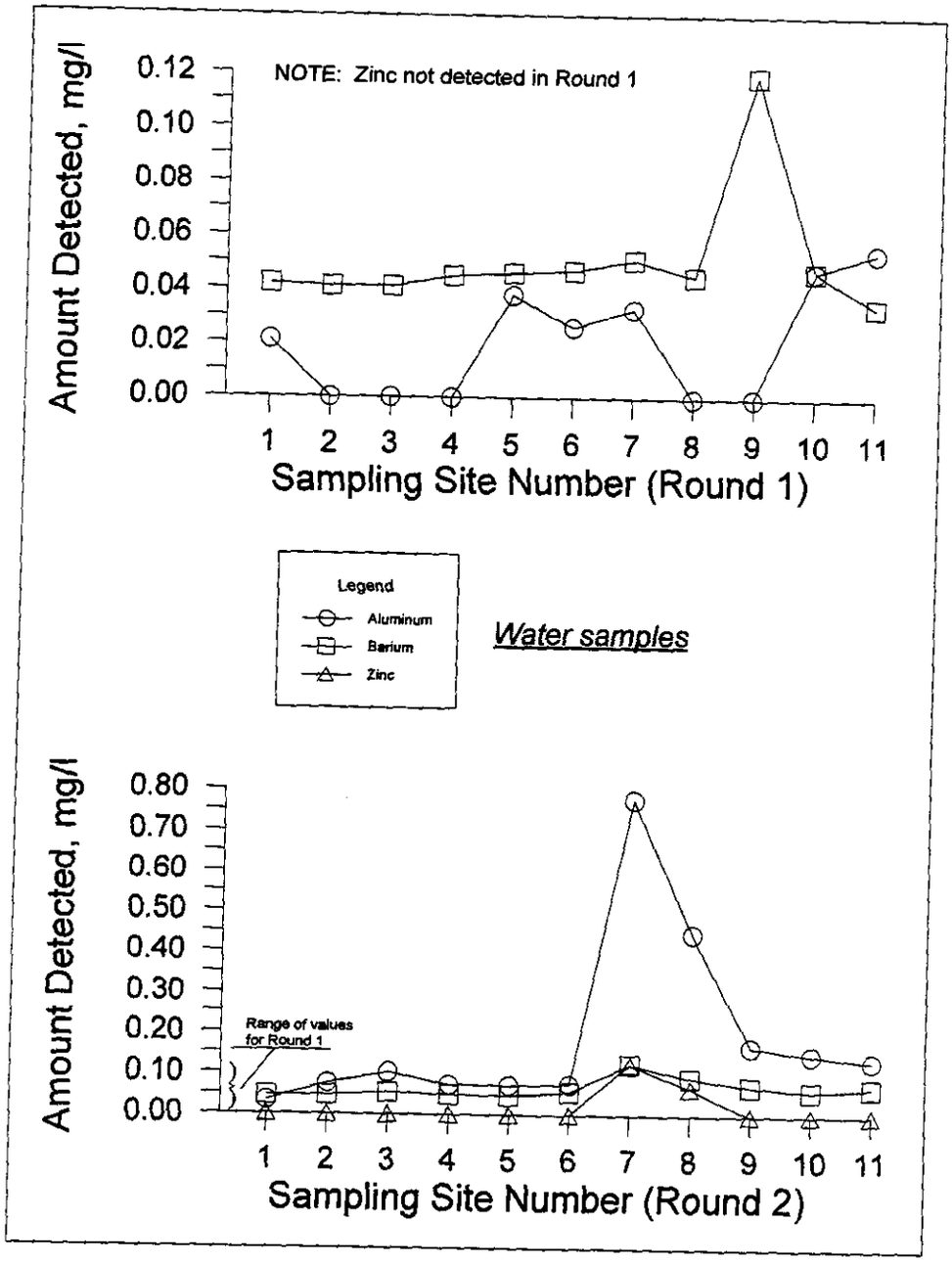


Figure 33. Levels of aluminum, barium, and zinc in water sampling sites of Little Sulphur Creek, Rounds 1 and 2

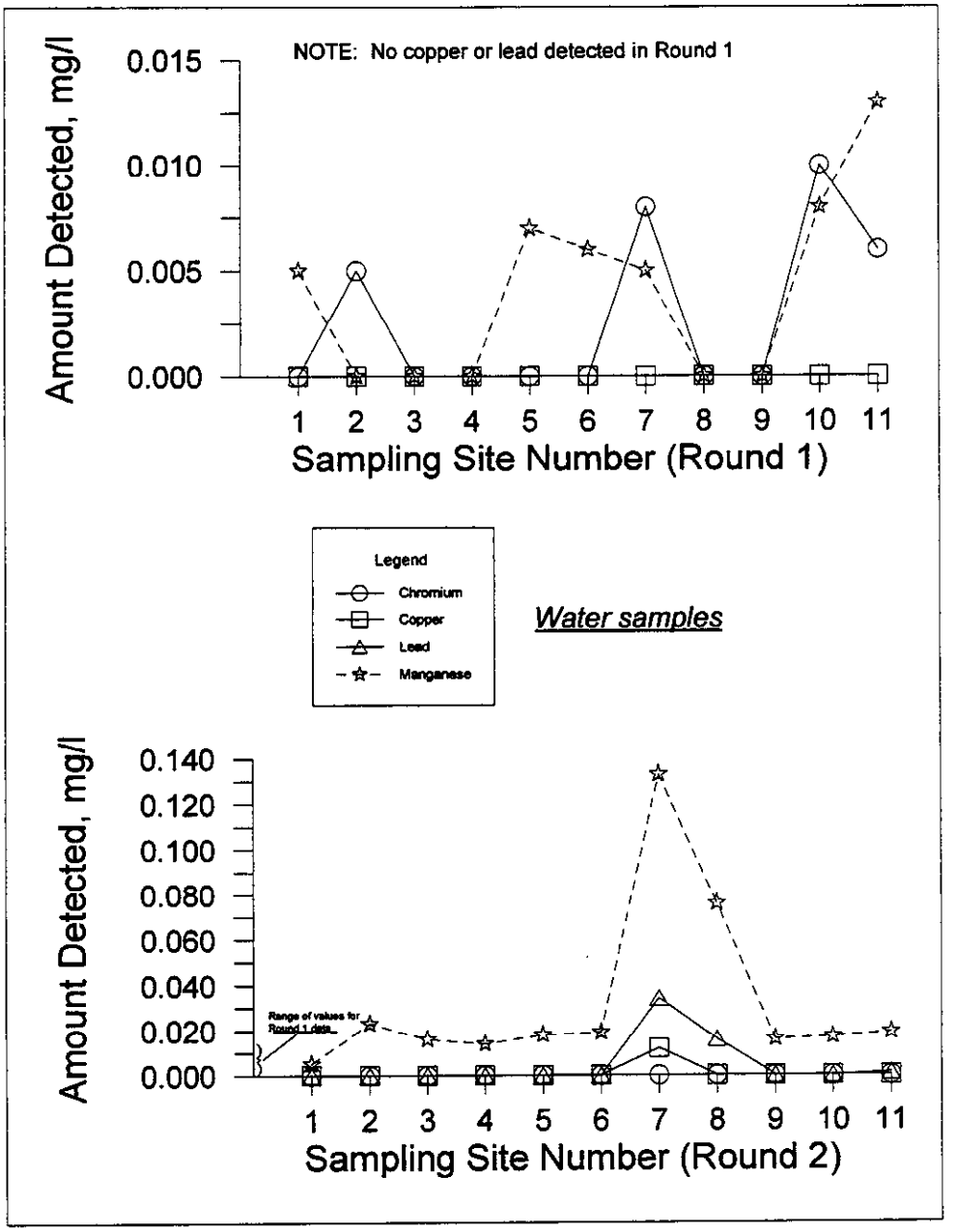


Figure 34. Levels of chromium, copper, lead, and manganese in water sampling sites of Little Sulphur Creek, Rounds 1 and 2

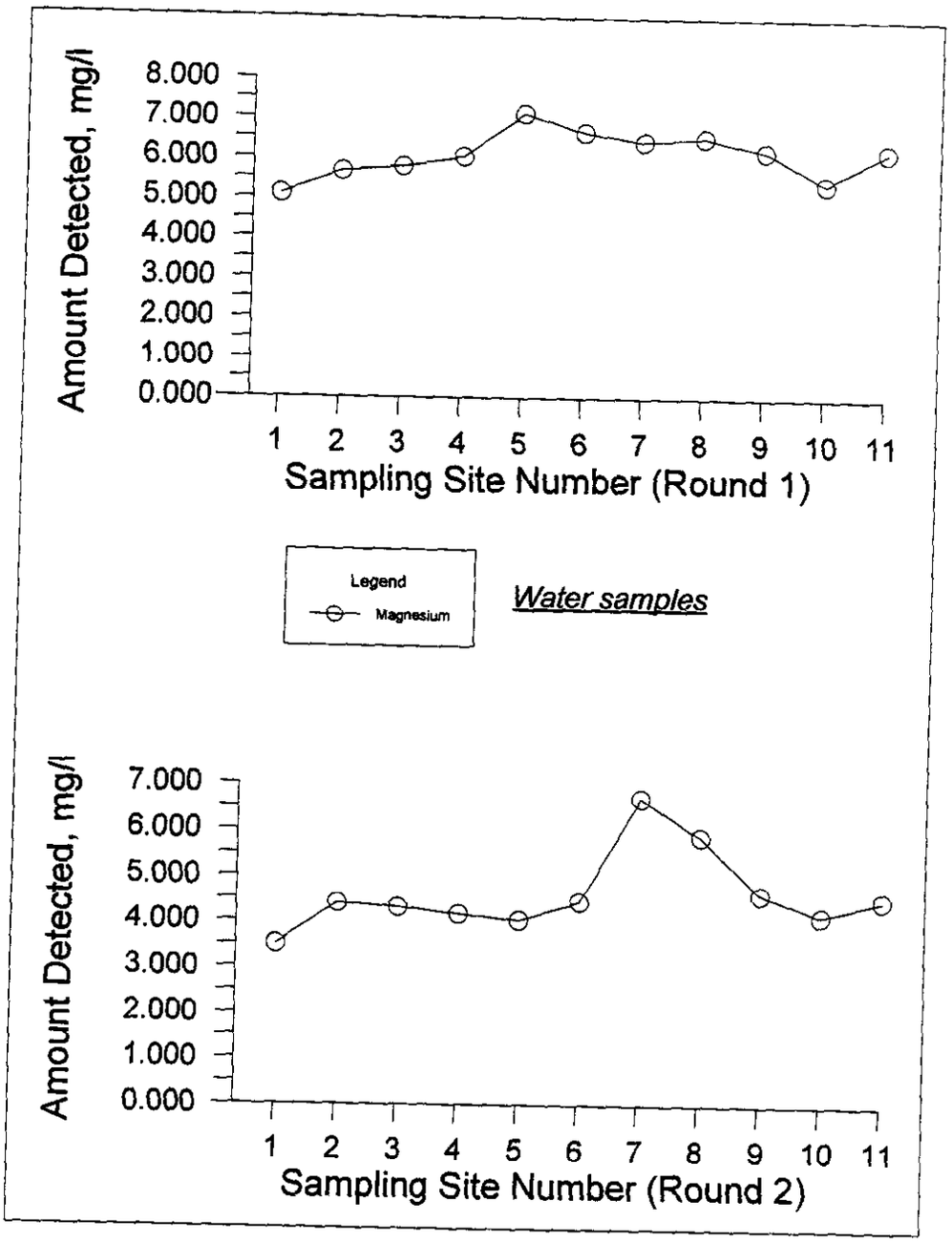


Figure 35. Levels of magnesium in water sampling sites of Little Sulphur Creek, Rounds 1 and 2

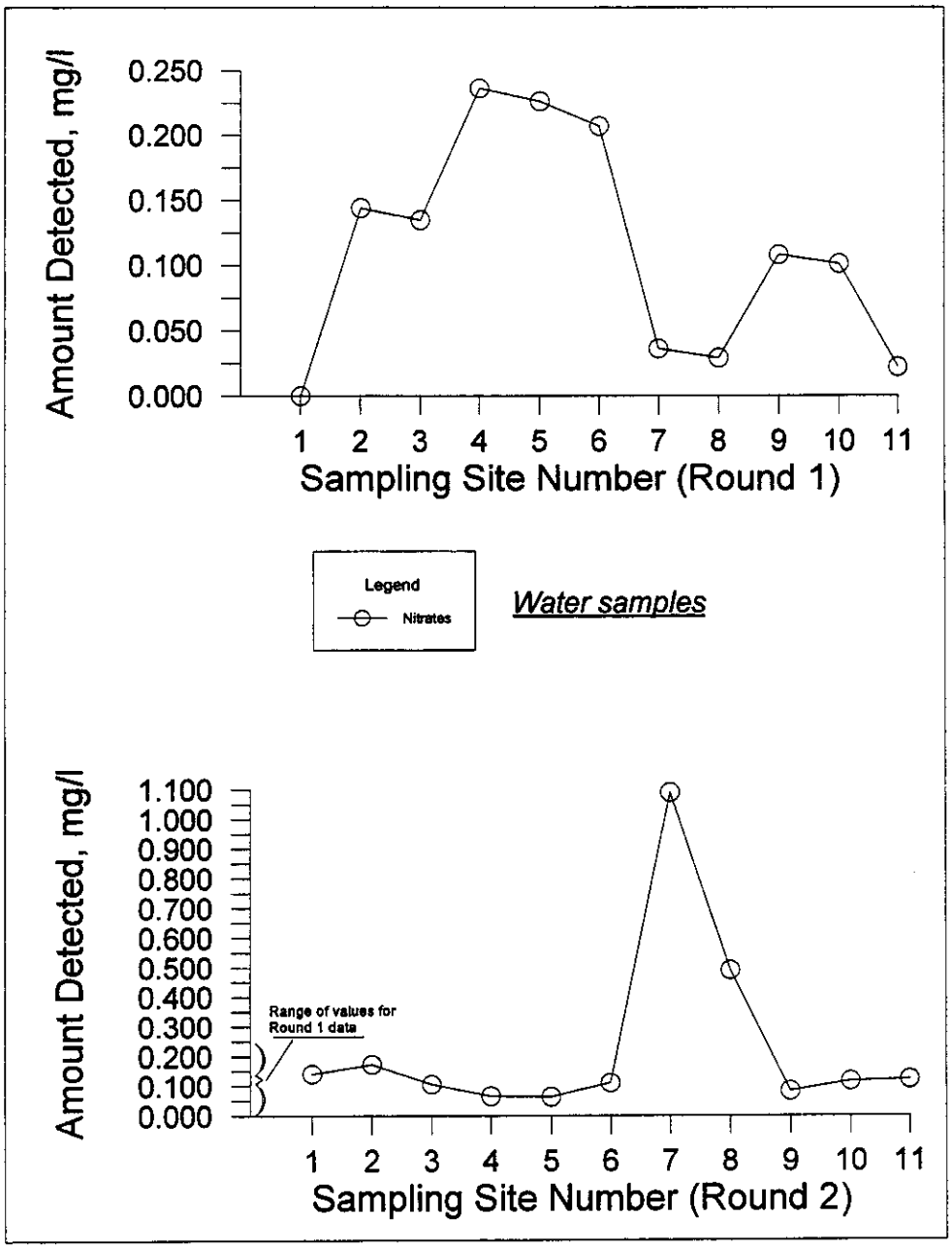


Figure 36. Levels of nitrates in water sampling sites of Little Sulphur Creek, Rounds 1 and 2

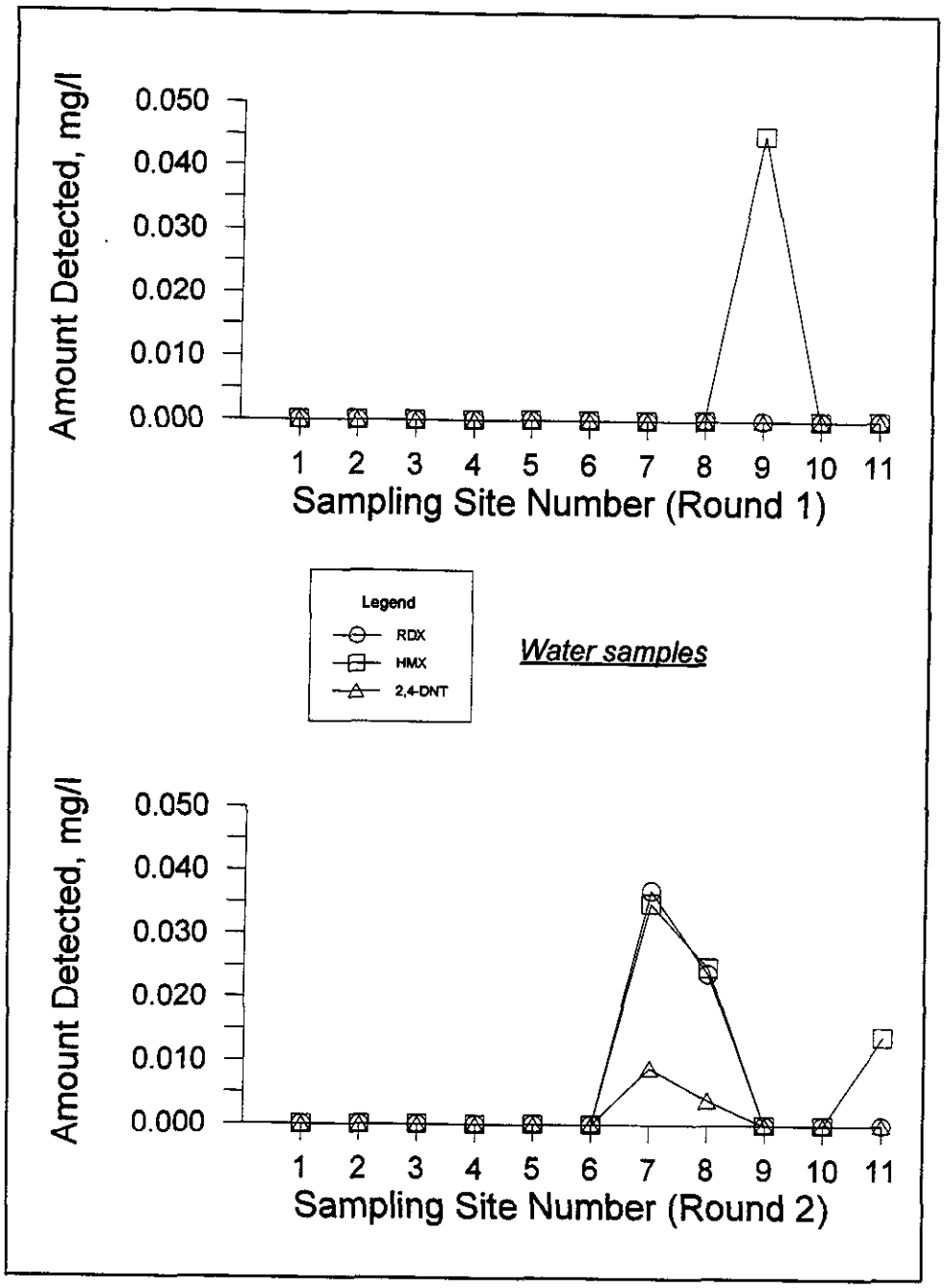


Figure 37. Levels of explosives in water sampling sites of Little Sulphur Creek, Rounds 1 and 2

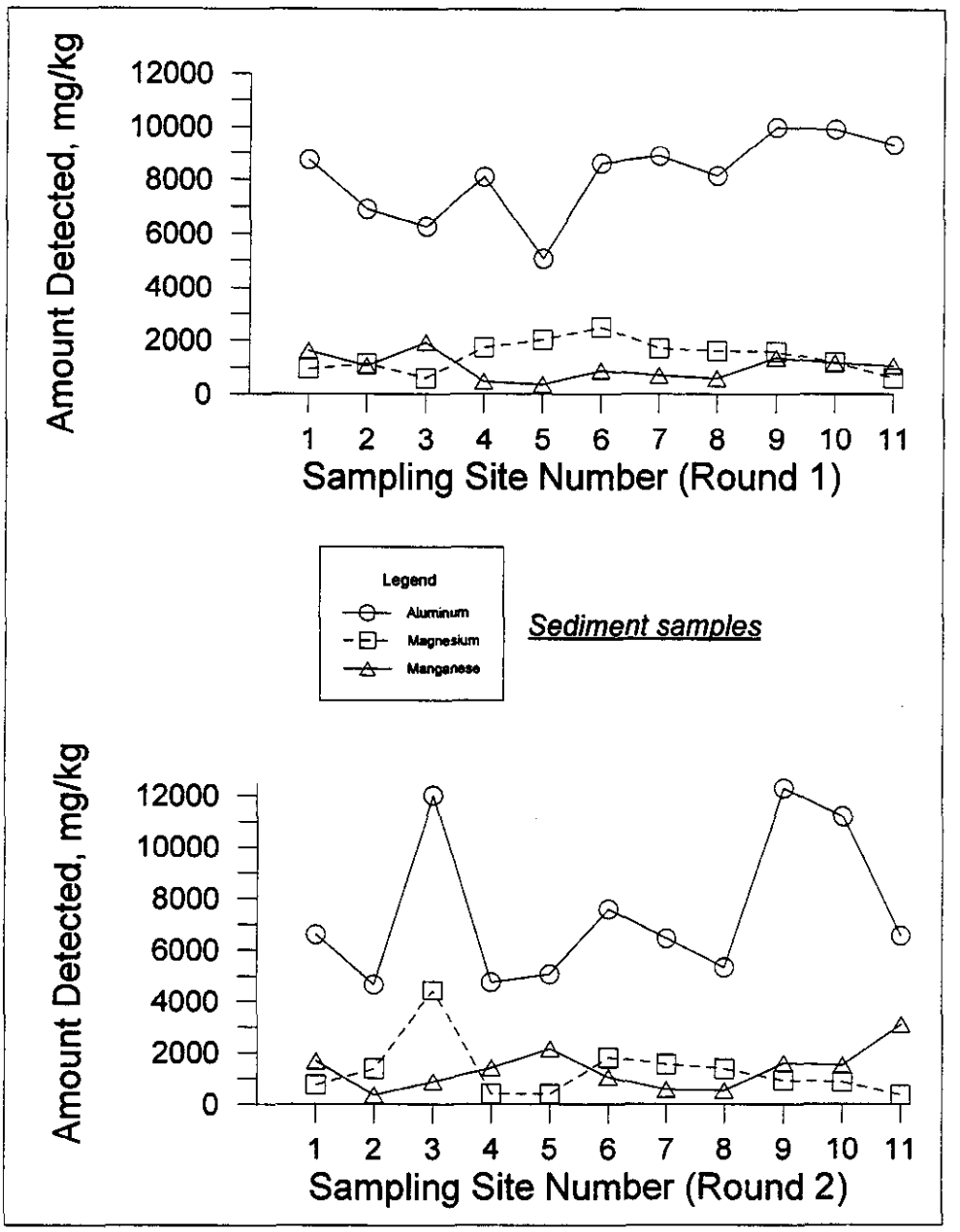


Figure 38. Levels of aluminum, magnesium, and manganese in sediment sampling sites of Little Sulphur Creek, Rounds 1 and 2

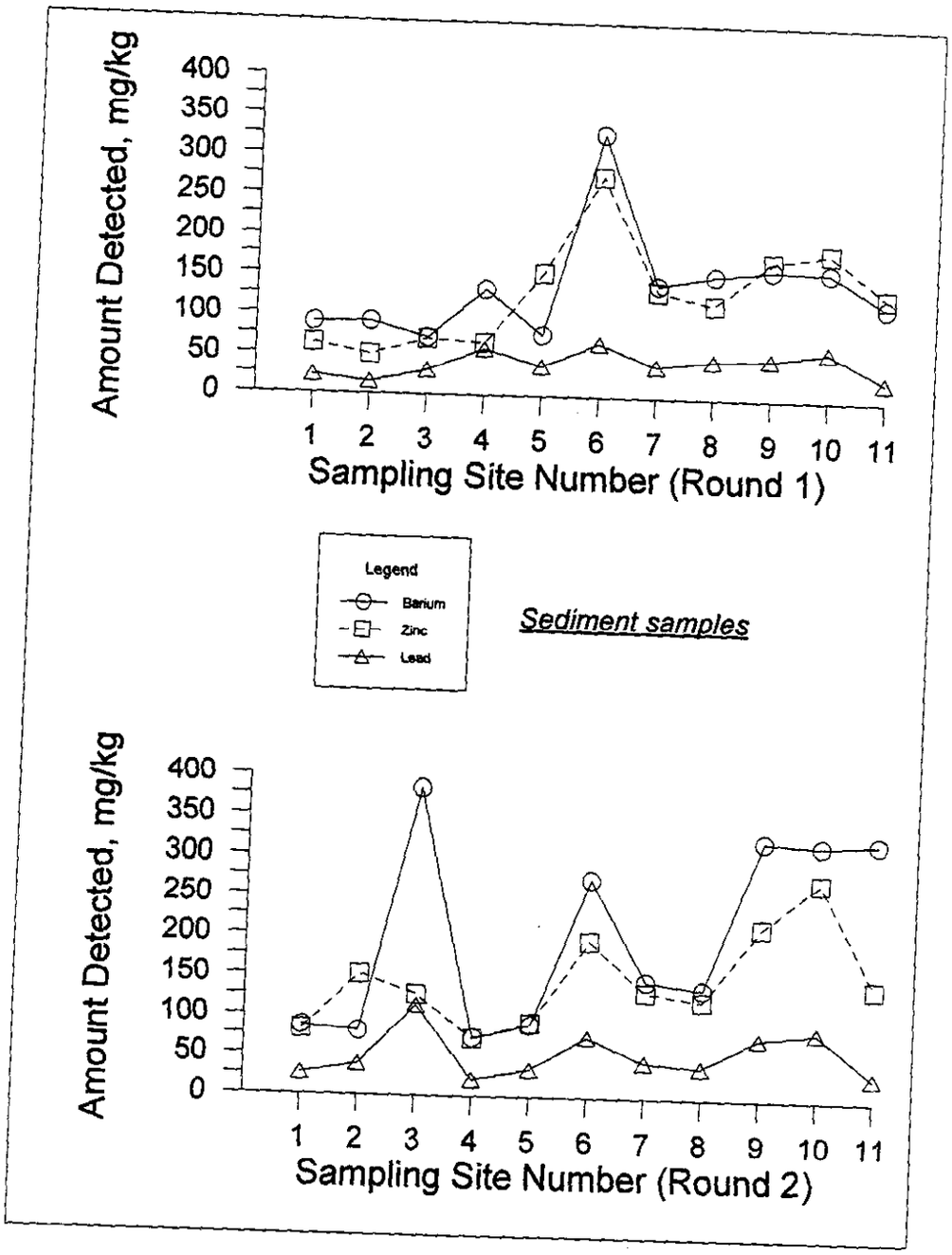


Figure 39. Levels of barium, zinc, and lead in sediment sampling sites of Little Sulphur Creek, Rounds 1 and 2

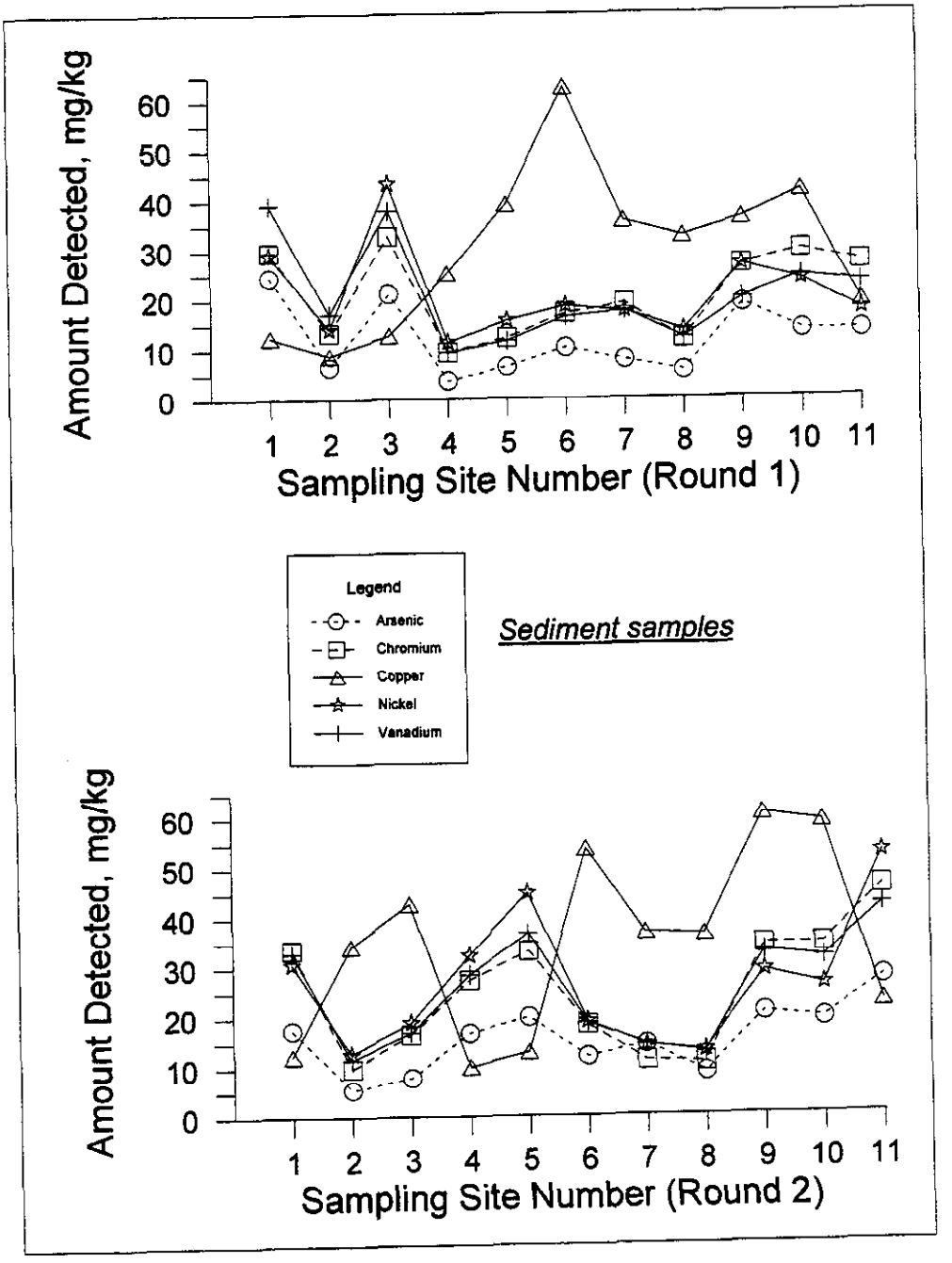


Figure 40. Levels of arsenic, chromium, copper, nickel, and vanadium in sediment sampling sites of Little Sulphur Creek, Rounds 1 and 2

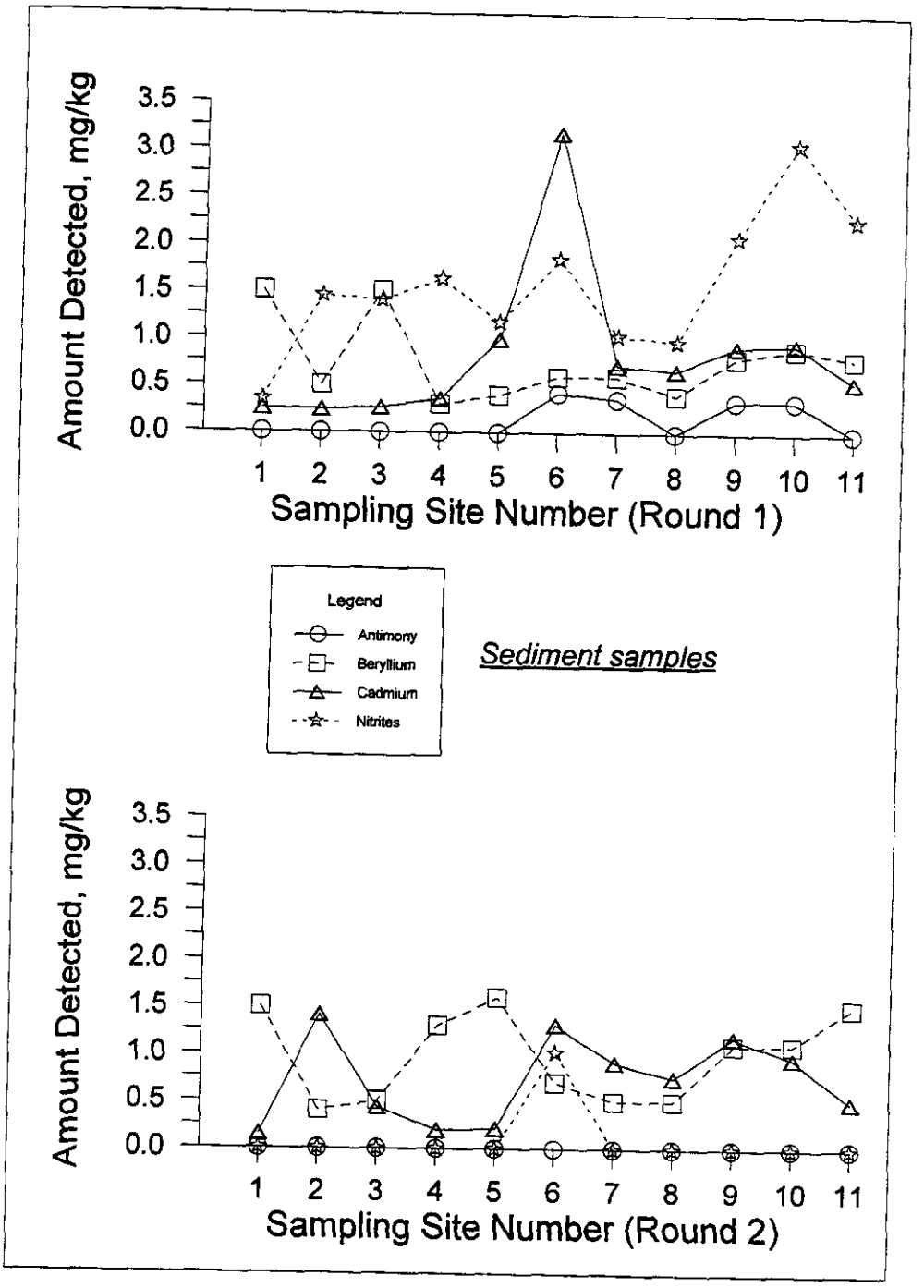


Figure 41. Levels of antimony, beryllium, cadmium, and nitrites in sediment sampling sites of Little Sulphur Creek, Rounds 1 and 2

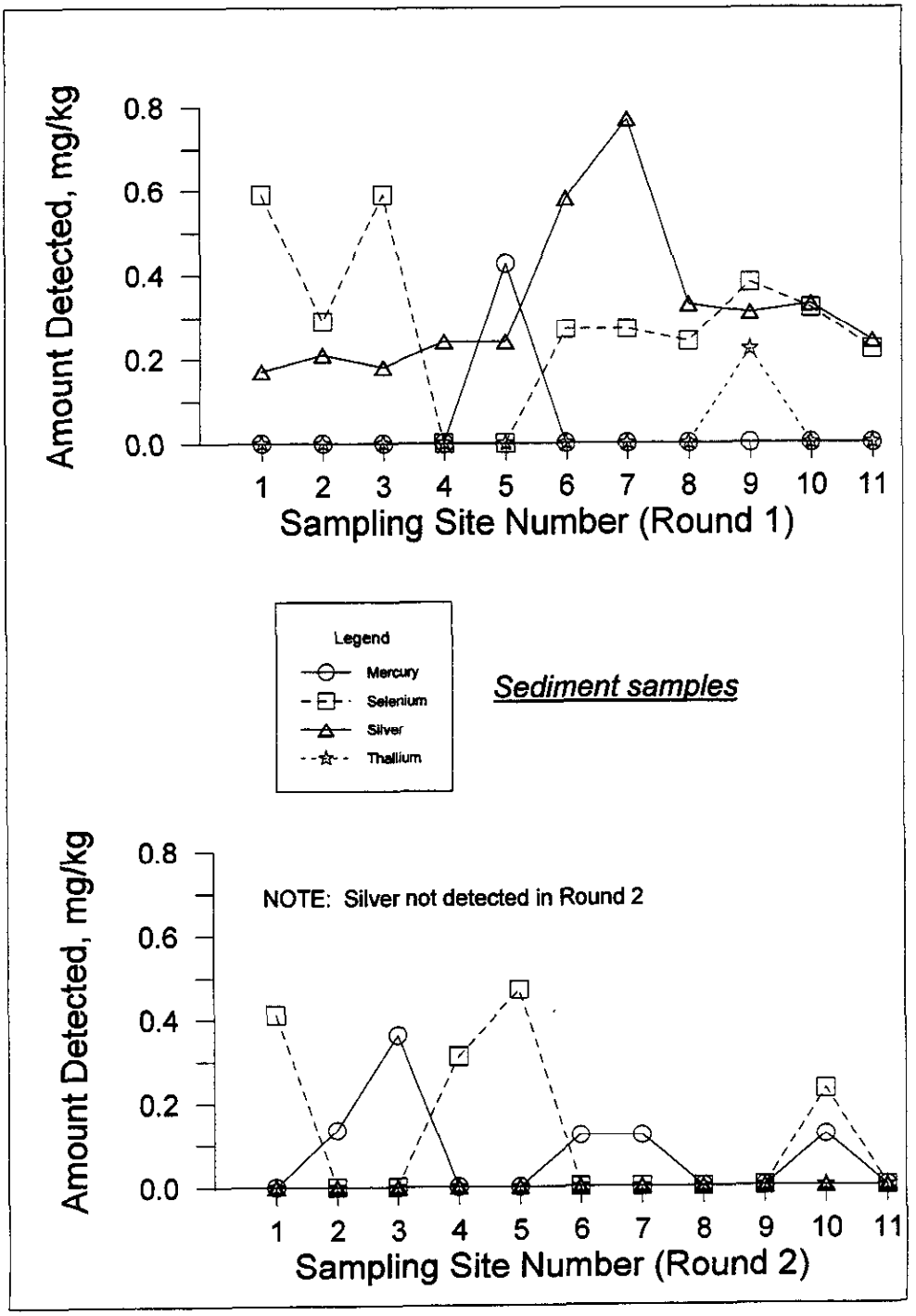


Figure 42. Levels of mercury, selenium, silver, and thallium in sediment sampling sites of Little Sulphur Creek, Rounds 1 and 2

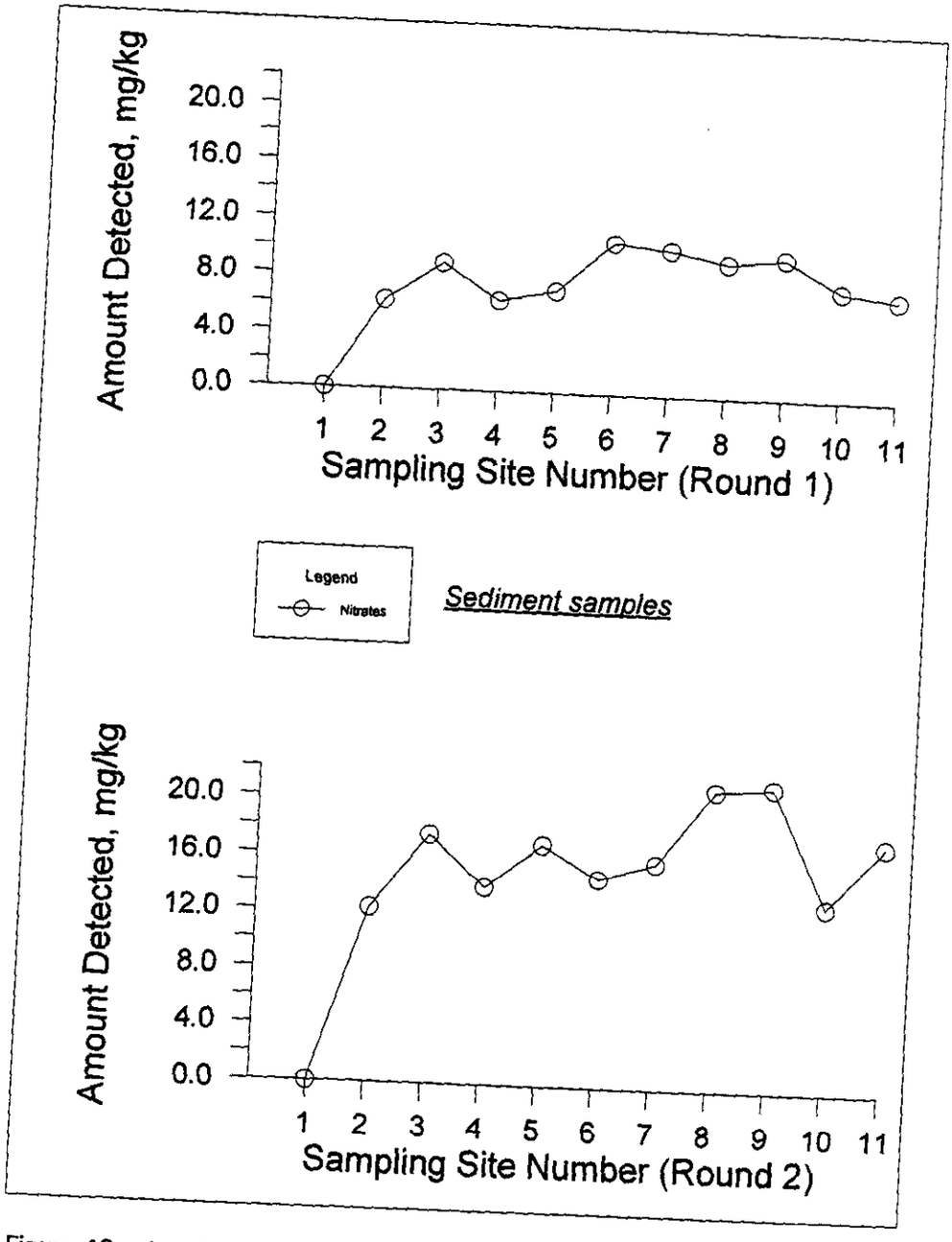


Figure 43. Levels of nitrates in sediment sampling sites of Little Sulphur Creek, Rounds 1 and 2

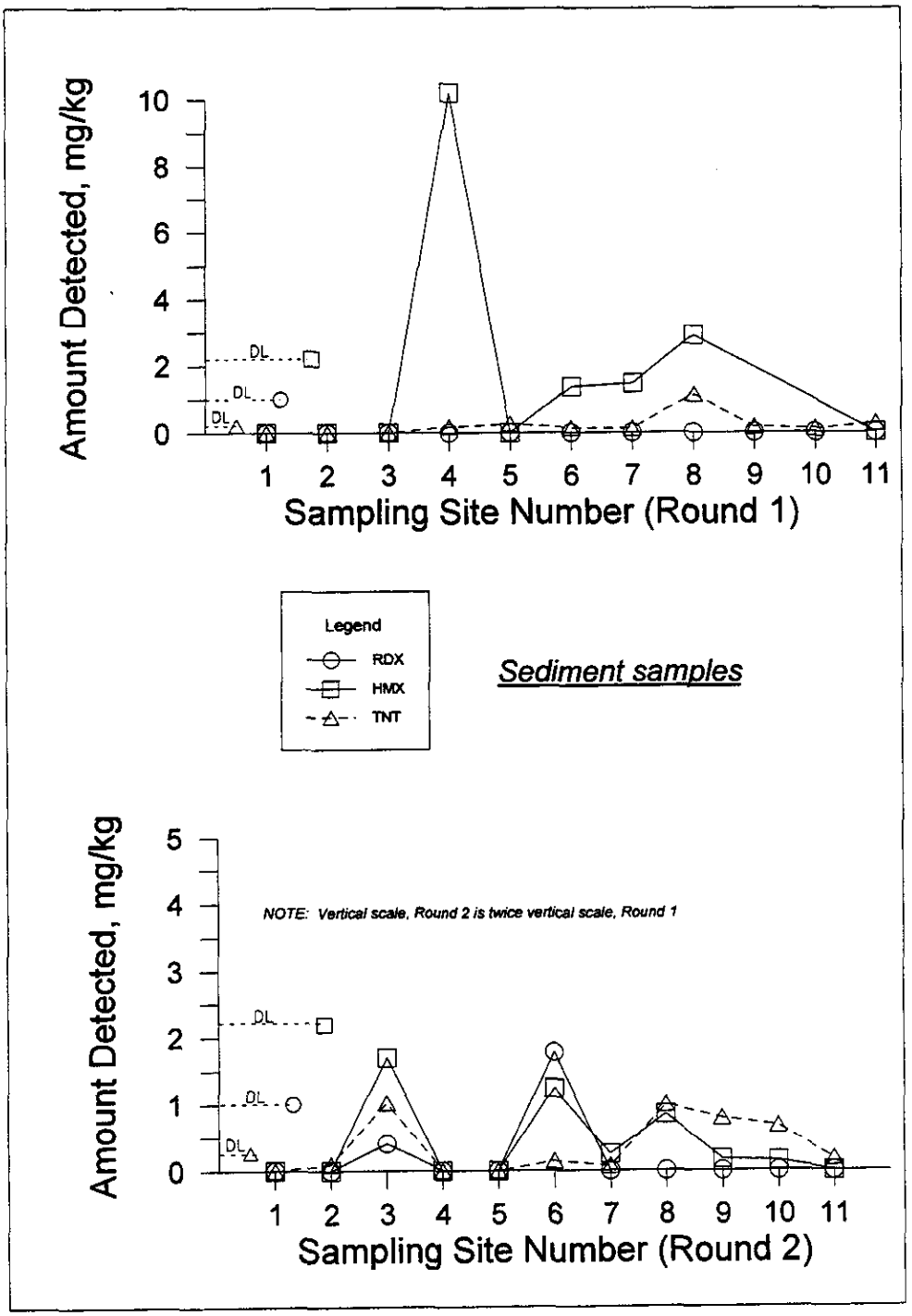


Figure 44. Levels of three explosives in sediment samping sites of Little Sulphur Creek, Rounds 1 and 2

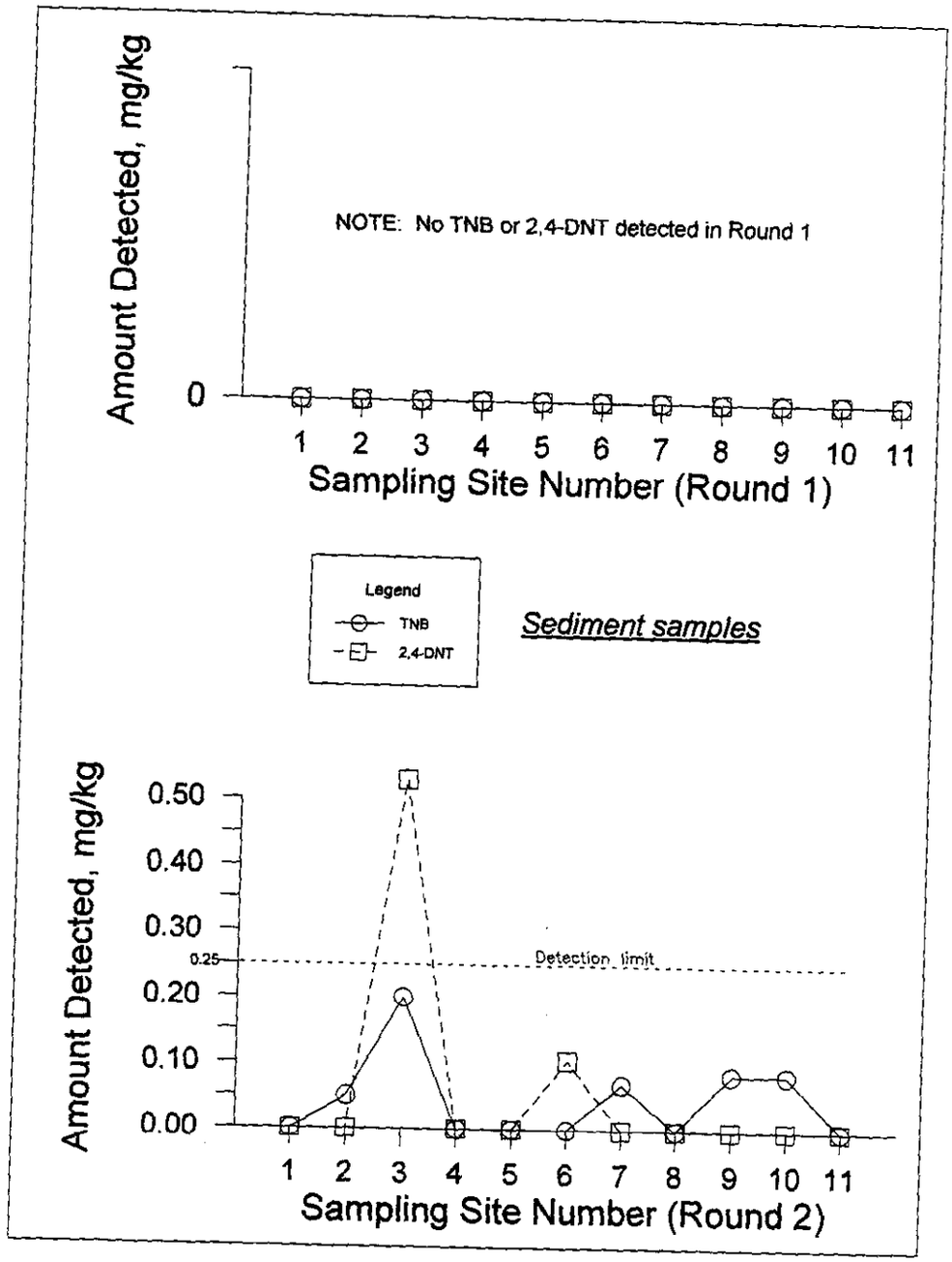


Figure 45. Levels of two explosives in sediment sampling sites of Little Sulphur Creek, Rounds 1 and 2

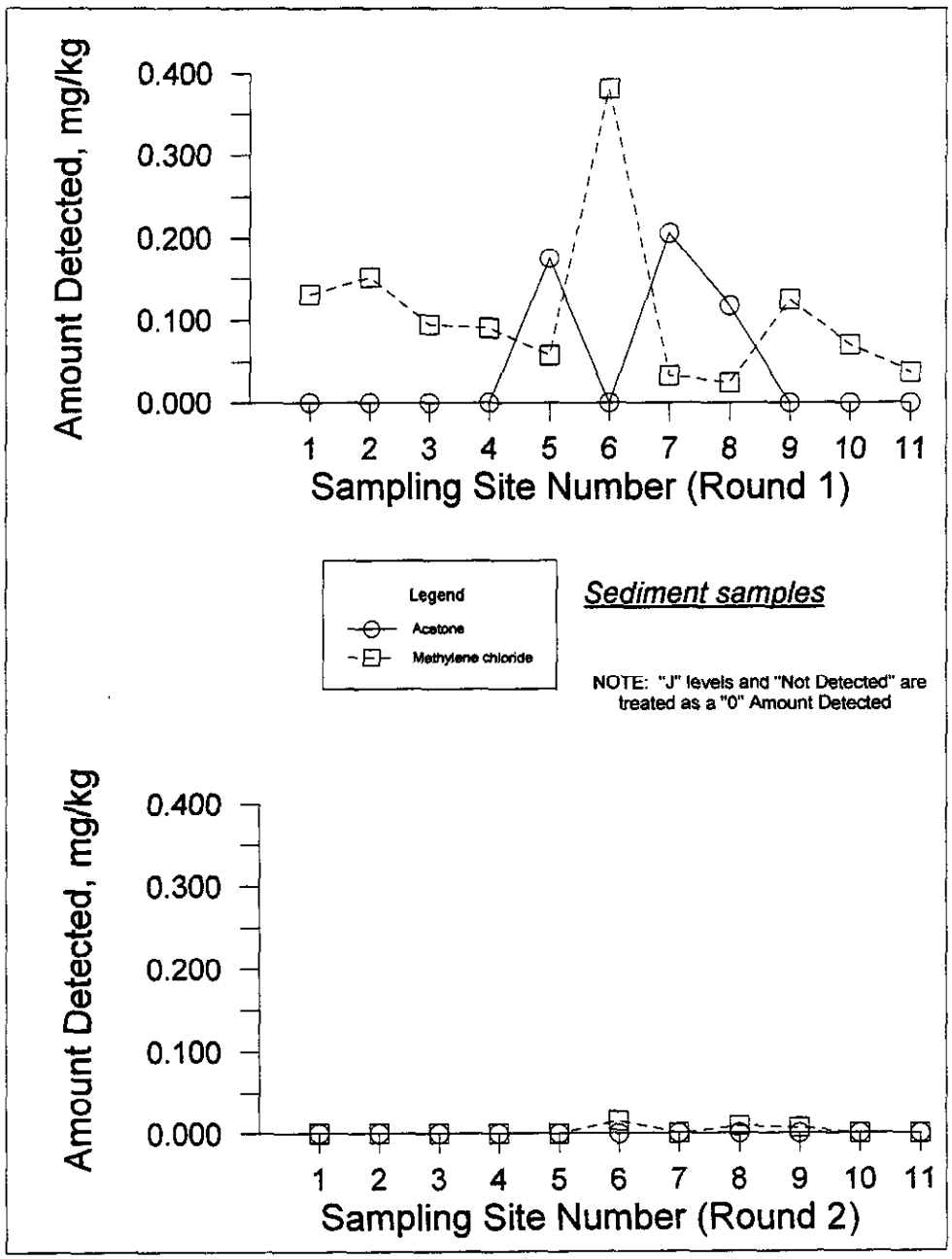


Figure 46. *Levels of volatile organics (acetone and methylene chloride)* detected in sediment of Little Sulphur Creek (all but methylene chloride at site 6 were considered to be artifacts of laboratory contamination)

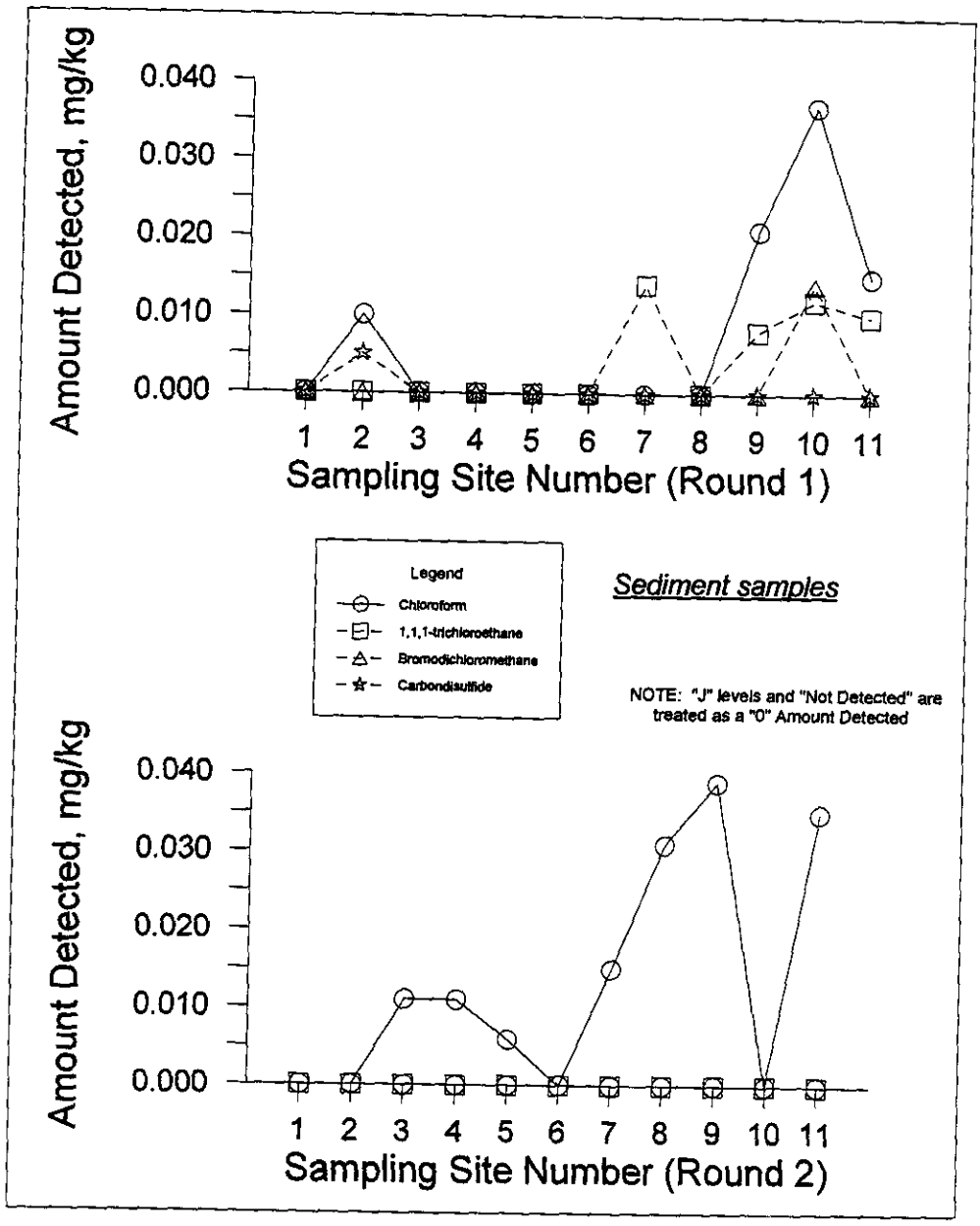


Figure 47. Levels of volatile organics in sediment sampling sites of Little Sulphur Creek

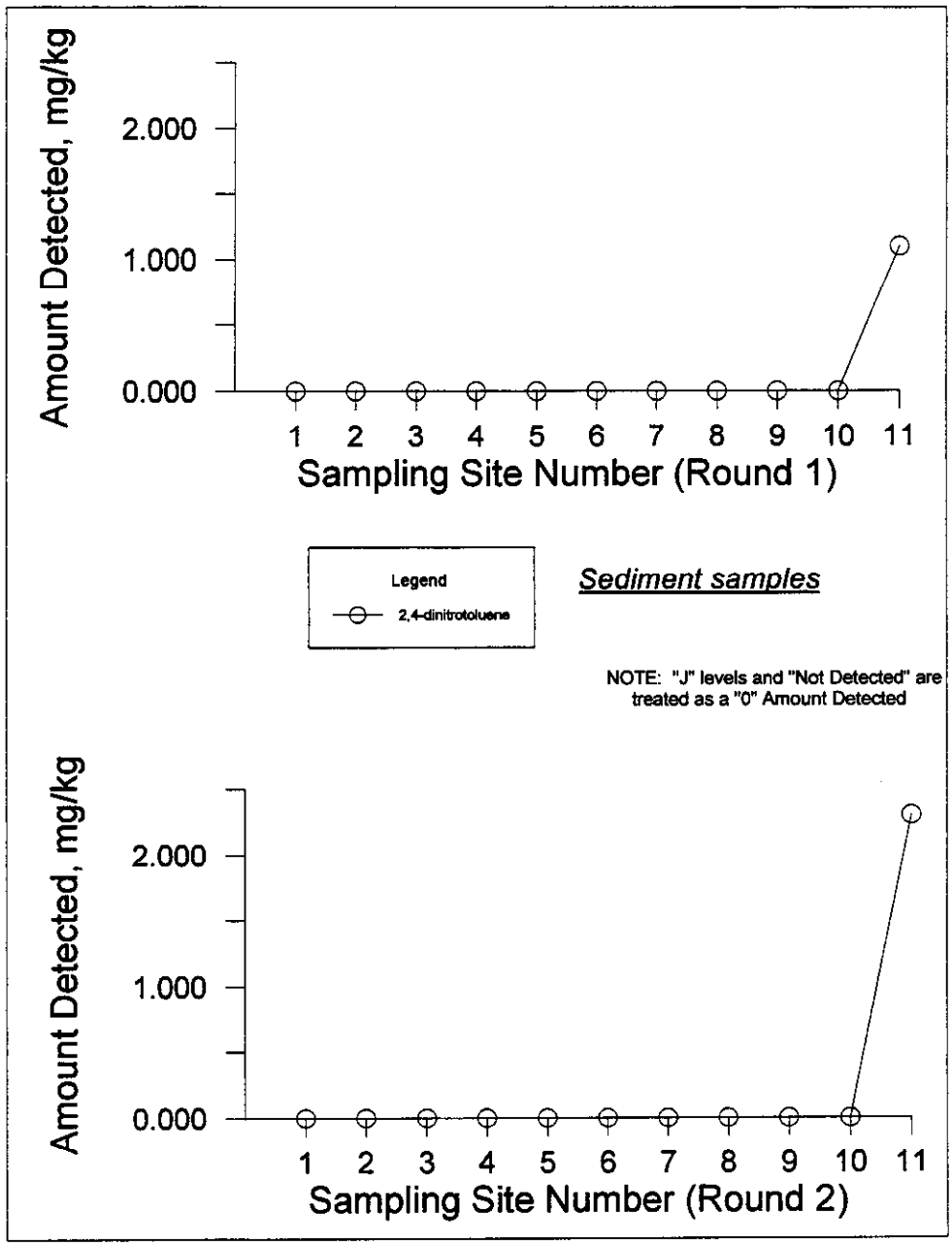


Figure 48. Levels of semivolatile organics (2,4-dinitrotoluene) in sediment sampling sites of Little Sulphur Creek

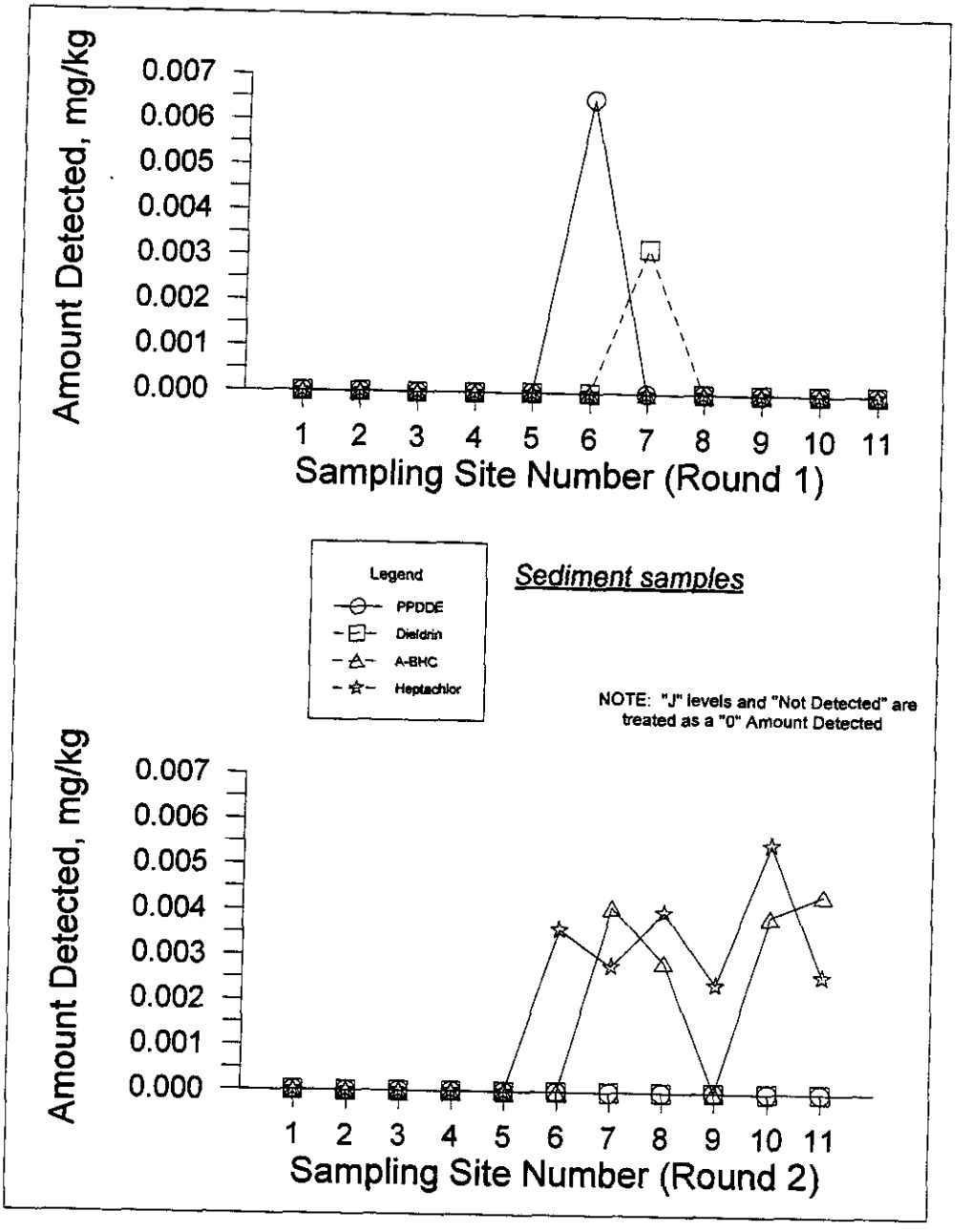


Figure 49. Levels of pesticides in sediment sampling sites of Little Sulphur Creek

Table 1
Field Measurements, Surface Water Sampling, Little Sulphur Creek, Ammunition Burning Ground

	pH		Conductivity[1]		Temperature[2]	
Site No.	Rnd 1[3]	Rnd 2[4]	Rnd1	Rnd 2	Rnd 1	Rnd 2
ABG-1	5.99	7.87	62	90	4.6	21.4
ABG-2	6.85	7.84	90	105	7.4	21.1
ABG-3	6.89	7.76	90	120	6.5	20.7
ABG-4	7.55	7.21	100	115	8.2	20.6
ABG-5	7.36	7.14	100	115	7.8	20.5
ABG-6	7.69	7.07	106	120	9.3	20.5
ABG-7	7.68	7.01	110	170	10	21.4
ABG-8	7.22	7.98	105	150	6.7	21.5
ABG-9	7.42	8.79	160	140	7.0	22.5
ABG-10	7.58	8.10	111	130	7.0	20.6
ABG-11	7.79	7.89	112	150	7.8	19.5

[1] Conductivity in micromhos/cm.
[2] Temperature in °C (7°C = 45°F, 20°C = 68°F).
[3] Round 1 = March 28, 1992.
[4] Round 2 = July 17, 1992.

Table 2
Laboratory Analytical Procedures

Parameter	Method	Reference
Volatile Organics (VOA)	GC/MS	USEPA Method 8240
Semivolatile or Base Neutral Acid Extractibles (BNAs)	GC/MS	USEPA Method 8270
Organochlorine Pesticides and PCBs	GC	USEPA Method 8080
Organophosphorus Pesticides	GC	USEPA Method 8140
Chlorinated Herbicides	GC	USEPA Method 8150
Explosives	HPLC	USEPA Method 8330
Metals	ICP and Furnace Methods	USEPA Method 6010 USEPA Series 7000 Methods
Cyanide	Colorimetric	USEPA Method 9012
Sulfides	Acid Soluble/Insoluble	USEPA Method 9030
Nitrites/Nitrates	Colorimetric	USEPA Method 353.2

Notes: GC/MS = Gas Chromatograph/Mass Spectrometer.
HPLC = High Performance Liquid Chromatography.
ICP = Inductively Coupled Plasma Atomic Emission Spectroscopy.

Table 3a
Levels of Metals Detected in Surface Water, Ammunition Burning Ground, Rounds 1 and 2 (in mg/l)[1] (ND = Not Detected)

Sampling Site	Al DL = 0.020		Ba DL = 0.02		Cd DL = 0.0002		Cr DL = 0.005		Cu DL = 0.005		Pb DL = 0.001		Mg DL = 0.1	
	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd	Rnd 2	Rnd 1	Rnd 2
ABGW-1	0.021	0.032	0.042	0.045	ND	ND	ND	ND	ND	ND	ND	ND	5.09	3.50
ABGW-2	ND	0.075	0.041	0.046	ND	ND	0.005	ND	ND	ND	ND	ND	5.66	4.40
ABGW-3	ND	0.102	0.041	0.053	ND	ND	ND	ND	ND	ND	ND	ND	5.78	4.31
ABGW-4	ND	0.072	0.045	0.048	ND	ND	ND	ND	ND	ND	ND	ND	6.04	4.17
ABGW-5	0.038	0.071	0.046	0.045	ND	ND	ND	ND	ND	ND	ND	ND	7.12	4.04
ABGW-6	0.026	0.073	0.047	0.055	ND	ND	ND	ND	ND	ND	ND	ND	6.66	4.45
ABGW-7	0.033	0.777	0.051	0.124	ND	0.0003	0.008	ND	ND	0.012	ND	0.034	6.44	6.73
ABGW-8	ND	0.447	0.045	0.091	ND	ND	0.005	ND	ND	ND	ND	0.016	6.54	5.89
ABGW-9	ND	0.168	0.119	0.070	ND	ND	ND	ND	ND	ND	ND	0.002	6.21	4.64
ABGW-10	0.047	0.148	0.047	0.059	ND	ND	0.010	ND	ND	ND	ND	0.001	5.41	4.17
ABGW-11	0.054	0.133	0.034	0.068	ND	ND	0.006	ND	ND	ND	ND	0.001	6.21	4.52

[1] The following heavy metals were not detected: Sb, As, Be, Se, Ag, Tl, V, Hg. Ni was detected once at site ABGW-1 in the first round only.
[2] Underlined values indicate probable sampling or laboratory artifacts.

Table 3b
Levels of Metals, Nutrients and Explosives[1] (in mg/l) Detected in Surface Water, Ammunition Burning Ground (ND = Not Detected)

	Mn DL = 0.005		Zn DL = 0.01		NO_2 DL = 0.005		NO_3 DL = 0.02		RDX DL = 0.02		HMX DL = 0.02		2,4-DNT DL = 0.02	
Sampling Site	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2
ABGW-1	0.005	0.005	ND	ND	0.005[2]	ND	ND	0.139	ND	ND	ND	ND	ND	ND
ABGW-2	ND	0.023	ND	ND	ND	ND	0.144	0.172	ND	ND	ND	ND	ND	ND
ABGW-3	ND	0.016	ND	ND	ND	ND	0.135	0.104	ND	ND	ND	ND	ND	ND
ABGW-4	ND	0.014	ND	ND	0.007	ND	0.236	0.064	ND	ND	ND	ND	ND	ND
ABGW-5	0.007	0.018	ND	ND	0.011	ND	0.226	0.062	ND	ND	ND	ND	ND	ND
ABGW-6	0.006	0.019	ND	ND	ND	ND	0.207	0.109	ND	ND	ND	ND	ND	ND
ABGW-7	0.005	0.133	ND	0.124	0.005	ND	0.036	1.090	ND	0.037	ND	0.035	ND	0.009J
ABGW-8	ND	0.076	ND	0.065	0.006	ND	0.029	0.492	ND	0.024	ND	0.025	ND	0.004J
ABGW-9	ND	0.016	ND	ND	0.008	ND	0.108	0.082	ND	ND	0.045	ND	ND	ND
ABGW-10	0.008	0.017	ND	ND	0.010	ND	0.101	0.116	ND	ND	ND	ND	ND	ND
ABGW-11	0.013	0.019	ND	ND	0.006	ND	0.022	0.122	ND	ND	ND	0.014J	D	ND

[1] The explosives listed were the only ones detected.
[2] Underlined values indicate probable sampling or laboratory artifacts.

Table 4
Comparison of Detected Metals and Nutrients and Corresponding QC Samples (Surface Water) (Only for compounds detected in QC samples)

Sample Site	Sampling Round	Detected Compound	Amount Detected (MG/L)	QC Sample and Amount (MG/L)	Artifact?
(Water)	Metals				
ABGW-2	1	Cr	0.005	ND	No
ABGW-7	1	Cr	0.008	ND	No
ABGW-8	1	Cr	0.005	Rinsate, 0.005	Yes
ABGW-10	1	Cr	0.010	Rinsate, 0.005	No?
ABGW-7	2	Cu	0.012	ND	No
ABGW-7	2	Pb	0.034	Rinsate, 0.0013	No?
ABGW-8	2	Pb	0.0158	As above	No?
ABGW-9	2	Pb	0.0019	As above	Yes?
ABGW-10	2	Pb	0.0012	As above	Yes
Nitrites/Nitrates (Nutrients)					
ABGW-1	1	NO_2	0.005	Field Blank, 0.006 Rinsate, 0.01	Yes
ABGW-4	1	NO_2	0.007	As above	Yes
ABGW-5	1	NO_2	0.011	As above	Yes
ABGW-7	1	NO_2	0.005	As above	Yes
ABGW-8	1	NO_2	0.006	Field Blank, 0.006 Rinsate, 0.013	Yes
ABGW-9	1	NO_2	0.008	As above	Yes
ABGW-10	1	NO_2	0.010	As above	Yes
ABGW-11	1	NO_2	0.006	As above	Yes
Note: No NO_3 detected in Round 2 water					
Nitrites/Nitrates (Continued)					
ABGW-2	1	NO_3	0.144	Field Blank, 0.006 Rinsate, ND	No
ABGW-3	1	NO_3	0.135	As above	No
ABGW-4	1	NO_3	0.236	As above	No
ABGW-5	1	NO_3	0.226	As above	No
ABGW-6	1	NO_3	0.207	As above	No
ABGW-7	1	NO_3	0.036	As above	No

(Continued)

Table 4 (Concluded)

Sample Site	Sampling Round	Detected Compound	Amount Detected (MG/L)	QC Sample and Amount (MG/L)	Artifact?
Nitrites/Nitrates (Continued)					
ABGW-8	1	NO_3	0.029	Field Blank, 0.006 Rinsate, 0.109	Yes
ABGW-9	1	NO_3	0.108	As above	Yes
ABGW-10	1	NO_3	0.101	As above	Yes
ABGW-11	1	NO_3	0.022	As above	Yes
ABGW-1	2	NO_3	0.139	No Field Blank Rinsate, ND	No
ABGW-2	2	NO_3	0.172	As above	No
ABGW-3	2	NO_3	0.104	As above	No
ABGW-4	2	NO_3	0.064	As above	No
ABGW-5	2	NO_3	0.062	As above	No
ABGW-6	2	NO_3	0.109	As above	No
ABGW-7	2	NO_3	1.09	As above	No
ABGW-8	2	NO_3	0.492	As above	No
ABGW-9	2	NO_3	0.082	As above	No
ABGW-10	2	NO_3	0.116	As above	No
ABGW-11	2	NO_3	0.122	As above	No
(Sediment)					

For Sediment,
Cr detected at all sites >> QC amounts, both rounds.
Cu detected at all sites >> QC amounts, both rounds.
Pb detected at all sites >> QC amounts, both rounds.
Co detected at all sites >> QC amounts, both rounds.
NO_2 detected at all sites > QC amounts, Round 1.
NO_2 detected only in ABGS-06 in Round 2, >> QC amount.
NO_3 > QC amounts, both rounds, all sites, except ND at ABGS-01, both rounds.

Table 5
Comparison of Detected Organic Compounds and Corresponding QC Samples (Surface Water)

Sample Site	Sampling Round	Detected Compound[1]	Amount Detected (MG/L)	QC Sample and Amount (MG/L)	Artifact?
Explosives					
ABGW-9	1	HMX	0.045	ND	No
ABGW-7	2	HMX	0.035	ND	No
ABGW-8	2	HMX	0.025	ND	No
ABGW-11	2	HMX	0.014J	ND	No
ABGW-7	2	2,4-DNT	0.009J	ND	No
ABGW-8	2	2,4-DNT	0.004J	ND	No
Volatiles					
ABGW-1 thru 7	1	MECl	0.002-0.018	Trip Blank, 0.015 Method Blank, 0.007 Method Blank, 0.009	Yes
ABGW-8 thru 11	1	MECl	0.006-0.018	Rinsate, 0.011 Trip Blank, 0.006 Method Blank, 0.009 Method Blank, 0.004	Yes
ABGW-2	1	12DCIETA	0.002J	ND	No
ABGW-5	1	Chloroform	0.001J	Field Blank, 0.001J	Yes
ABGW-1 thru 7	1	Acetone	0.004-0.02J	Field Blank, 0.009J Rinsate, 0.019J Trip Blank, 0.008J Method Blank, 0.01J Method Blank, 0.014J	Yes
ABGW-8 thru 11	1	Acetone	0.005-0.019J	Rinsate, 0.019J Trip Blank, 0.005J Method Blank, 0.014J Method Blank, 0.009J	Yes
ABGW-10	1	4ME2PE	0.001J	ND	No
ABGW-1 thru 11	2	MECl	0.0003-0.003J	Rinsate, 0.001J Trip Blank, 0.016 Method Blank, 0.0013J Method Blank, 0.0012J Method Blank, 0.0006J	Yes
ABGW-1,3,4,5,8,9	2	Acetone	0.0014J-0.003J	Rinsate, 0.013J Trip Blank, 0.0039J Method Blank, 0.0059J Method Blank, 0.0028J Method Blank, 0.0039J	Yes

(Continued)

[1] Abbreviations: MECl = Methylene Chloride; 12DCIETA = 1,2-Dichloroethane; 4ME2PE = 4-Methyl-2-Pentanone; Bis2EHPh = Bis(2-Ethylhexyl)Phthalate: DiNOcPh = Di-Ni-Octylphthalate; DiBuPh = Dibutylphthalate.

Table 5 (Concluded)

Sample Site	Sampling Round	Detected Compound[1]	Amount Detected (MG/L)	QC Sample and Amount (MG/L)	Artifact?
Semivolatiles					
ABGW-6	1	Bis2EHPh	0.002J	ND	No
ABGW-7	1	Bis2EHPh	0.0019J	ND	No
ABGW-7	1	DiNOcPh	0.0009J	Field Blank, 0.001J	Yes
ABGW-8,9,11	1	DiBuPh	0.0006J	Rinsate, 0.0006J Method Blank, 0.0011J	Yes
ABGW-6	2	Bis2EHPh	0.013	Rinsate, 0.0041J	No
Pesticides/Herbicides					
ABGW-6	2	B-BHC	0.000016J	Method Blank, 0.000030J	Yes
ABGW-7	2	B-BHC	0.000032J	Method Blank, 0.000030J	Yes
ABGW-6	2	Heptachlor	0.000008J	Method Blank, 0.000028J	Yes
ABGW-9	2	Heptachlor	0.000015J	Method Blank, 0.000028J	Yes
ABGW-1,4,5, 6 thru 11	2	a-Chlordane	0.00001J-0.000037J	Rinsate, 0.000020J Method Blank, 0.000022J	Yes

Table 6a
Levels of Metals Detected in Sediment, Ammunition Burning Ground, Rounds 1 and 2 (in mg/kg). (ND = Not Detected)

Sampling Site	Al DL = 4.0		Sb DL = 0.3/1.2		As DL = 0.20		Ba DL = 2.0		Be DL = 0.1		Cd DL = 0.02		Cr DL = 0.5	
	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2
ABGS-1	8,730	6,590	ND	ND	24.4	17.5	89.7	86.0	1.50	1.50	0.249	0.141	29.6	33.5
ABGS-2	6,900	4,660	ND	ND	6.55	5.51	91.4	80.1	0.496	0.400	0.238	1.41	13.4	9.80
ABGS-3	6,270	12,000	ND	ND	21.20	7.87	72.0	384	1.50	0.50	0.261	0.434	32.9	16.5
ABGS-4	8,100	4,760	ND	ND	3.74	16.8	133	73	0.299	1.30	0.353	0.190	9.46	27.4
ABGS-5	5,070	5,060	ND	ND	6.46	19.9	77.5	89.9	0.396	1.60	0.990	0.208	12.2	33.1
ABGS-6	8,610	7,590	0.420	ND	10.2	12.0	329	273	0.595	0.700	3.18	1.31	17.1	18.4
ABGS-7	8,900	6,450	0.360	ND	7.69	14.3	141	147	0.594	0.500	0.714	0.911	19.0	11.0
ABGS-8	8,150	5,330	ND	ND	5.45	8.69	154	138	0.398	0.500	0.666	0.750	11.8	10.7
ABGS-9	9,990	12,300	0.340	ND	18.8	20.5	162	324	0.799	1.10	0.917	1.18	26.7	34.2
ABGS-10	9,910	11,200	0.340	ND	13.5	19.3	160	320	0.894	1.10	0.942	0.960	29.7	34.3
ABGS-11	9,320	6,550	ND	ND	13.3	27.4	118	324	0.793	1.50	0.554	0.499	27.2	45.7

Table 6b
Levels of Metals (continued) Detected in Sediment, Ammunition Burning Ground, Rounds 1 and 2 (in mg/kg). (ND = Not Detected)

Sampling Site	Cu DL = 0.5/1.0		Pb DL = 0.1/4.0		Mg DL = 10/20		Mn DL = 0.5/0.6		Hg DL = 0.1		Ni DL = 0.5/1.1		Se DL = 0.2	
	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2
ABGS-1	12.4	12.3	23.2	26.1	932	752	1,600	1,670	ND	ND	29.1	30.7	0.59	0.41
ABGS-2	8.82	34.2	15.1	38.0	1,130	1,380	1,040	350	ND	0.135	14.1	12.7	0.29	ND
ABGS-3	12.8	42.7	30.9	113	591	4,430	1,920	879	ND	0.361	43.4	18.9	0.59	ND
ABGS-4	25.2	10.0	58.8	20.4	1,730	394	463	1,400	ND	ND	11.4	32.3	ND	0.31
ABGS-5	39.1	12.9	37.7	33.5	2,030	392	362	2,140	0.428	ND	15.7	44.8	ND	0.47
ABGS-6	62.7	53.6	67.6	75.56	2,490	1,800	867	1,040	ND	0.121	18.6	19.0	0.27	ND
ABGS-7	35.7	36.7	39.9	44.6	1,700	1,540	697	560	ND	0.121	17.5	14.1	0.27	ND
ABGS-8	32.6	36.3	48.3	39.9	1,600	1,360	573	525	ND	ND	13.5	13.0	0.24	ND
ABGS-9	36.1	60.5	50.8	76.2	1,570	919	1,340	1,570	ND	ND	26.6	28.8	0.38	ND
ABGS-10	41.6	58.9	61.2	85.0	1,170	848	1,150	1,490	ND	0.121	23.5	26.0	0.32	.23
ABGS-11	19.1	22.5	24.7	30.5	595	352	1,050	3,080	ND	ND	17.4	52.3	0.22	ND

Table 6c
Levels of Metals (continued) and Nutrients Detected in Sediment, Ammunition Burning Ground, Rounds 1 and 2 (in mg/kg). (ND = Not Detected)

Sampling Site	Ag DL = 0.1/1.0		Tl DL = 0.2		V DL = 1.0		Zn DL = 1.00		NO_2[1]		NO_3[1]	
	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1[2]	Rnd 2	Rnd 1	Rnd 2
ABGS-1	0.17	ND	ND	ND	39.1	32.9	63.7	81.4	0.345	ND	ND	ND
ABGS-2	0.21	ND	ND	ND	17.1	11.5	50.1	151	1.45	ND	6.27	12.3
ABGS-3	0.18	ND	ND	ND	38.0	16.9	70.4	127	1.40	ND	8.90	17.5
ABGS-4	0.24	ND	ND	ND	9.4	28.4	66.5	71.9	1.63	ND	6.44	13.9
ABGS-5	0.24	ND	ND	ND	11.6	36.7	154	92.2	1.17	ND	7.23	17.0
ABGS-6	0.58	ND	ND	ND	16.4	18.7	276	196	1.84	1.02	10.7	14.7
ABGS-7	0.77	ND	ND	ND	17.6	14.3	133	133	1.03	ND	10.3	15.9
ABGS-8	0.33	ND	ND	ND	12.0	12.7	118	123	0.97	ND	9.48	21.1
ABGS-9	0.31	ND	0.22	ND	19.9	32.8	173	216	2.08	ND	9.92	21.4
ABGS-10	0.33	ND	ND	ND	24.3	31.5	184	273	3.07	ND	7.72	13.1
ABGS-11	0.24	ND	ND	ND	23.0	42.0	130	142	2.27	ND	7.20	17.5

[1] DLs varied with sample size: DL nitrite ~ 1; DL nitrate ~ 0.3 to 1 mg/kg.
[2] All of the reported nitrite occurrences are presumed to be sampling artifacts.

Table 6d
Levels of Explosives Detected in Sediment, Ammunition Burning Ground, Rounds 1 and 2 (in mg/kg)
(ND = Not Detected)

Sampling Site	RDX DL = 1.00		HMX DL = 2.20		TNT DL = 0.25		TNB DL = 0.25		2,4-DNT DL = 0.25	
	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2	Rnd 1	Rnd 2
ABGS-1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
ABGS-2	ND	ND	ND	ND	ND	0.094J	ND	0.05J	ND	ND
ABGS-3	ND	0.405J	ND	1.7J	ND	1.02	ND	0.2J	ND	0.53
ABGS-4	ND	ND	10.2	ND	0.18J	ND	ND	ND	ND	ND
ABGS-5	ND	ND	ND	ND	0.26	ND	ND	ND	ND	ND
ABGS-6	ND	1.78	1.37J	1.24J	0.14J	0.14J	ND	ND	ND	0.105J
ABGS-7	ND	ND	1.46J	0.25J	0.12J	0.07J	ND	0.07J	ND	ND
ABGS-8	ND	ND	2.90	0.85J	1.13	0.995	ND	ND	ND	ND
ABGS-9	ND	ND	0.32J	0.17J	0.17J	0.795	ND	0.085J	ND	ND
ABGS-10	ND	ND	0.78J	0.145J	0.11J	0.675	ND	0.085J	ND	ND
ABGS-11	ND	ND	ND	ND	0.27	0.18J	ND	ND	ND	ND

Table 7
Comparison of Detected Organic Compounds and Corresponding QC Samples (Bottom Sediment)

Sample Site	Sampling Round	Detected Compound[1]	Amount Detected (MG/L)[2]	QC Sample and Amount (MG/L)	Artifact?
			Explosives		
ABGS-4	1	HMX	**10.2**	ND	No
ABGS-6	1	HMX	1.37J	ND	No
ABGS-7	1	HMX	1.46J	ND	No
ABGS-8	1	HMX	**2.90**	ND	No
ABGS-9	1	HMX	0.32J	ND	No
ABGS-10	1	HMX	0.78J	ND	No
ABGS-4	1	TNT	0.18J	ND	No
ABGS-5	1	TNT	**0.26**	ND	No
ABGS-6	1	TNT	0.14J	ND	No
ABGS-7	1	TNT	0.12J	ND	No
ABGS-8	1	TNT	**1.13**	ND	No
ABGS-9	1	TNT	0.17J	ND	No
ABGS-10	1	TNT	0.11J	ND	No
ABGS-11	1	TNT	**0.27**	ND	No
ABGS-2	2	TNB	0.050J	ND	No
ABGS-3	2	TNB	0.200J	ND	No
ABGS-7	2	TNB	0.070J	ND	No
ABGS-9	2	TNB	0.085J	ND	No
ABGS-10	2	TNB	0.085J	ND	No
ABGS-3	2	HMX	1.70J	ND	No
ABGS-6	2	HMX	1.24J	ND	No
ABGS-7	2	HMX	0.25J	ND	No
ABGS-8	2	HMX	0.85J	ND	No

(Sheet 1 of 8)

[1] Abbreviations: MECl = Methylene Chloride; 12DClETA = 1,2-Dichloroethane; 4ME2PE = 4-Methyl-2-Pentanone; Bis2EHPh = Bis(2-Ethylhexyl)Phthalate; DiNOcPh = Di-Ni-Octylphthalate; DiBuPh = Dibutylphthalate; DiBrClME = Dibromochloromethane; BrDiClME = Bromodichloromethane; 2,4-DNTOL = 2,4-Dinitrotoluene; NNDPHAM = N-Nitrosodiphenyl Amine; BAANTHR = Benzo(a)Anthracene; BBFLANT = Benzo(b)Fluoroanthene; BKFLANT = Benzo(k)Fluoroanthene.
[2] Bold numbers are amounts detected greater than the DL.

Table 7 (Continued)

Sample Site	Sampling Round	Detected Compound*	Amount Detected (MG/L)**	QC Sample and Amount (MG/L)	Artifact?
Explosives (Continued)					
ABGS-9	2	HMX	0.170J	ND	No
ABGS-10	2	HMX	0.145J	ND	No
ABGS-3	2	RDX	0.405J	ND	No
ABGS-6	2	RDX	1.78	ND	No
ABGS-2	2	TNT	0.094J	ND	No
ABGS-3	2	TNT	1.02	ND	No
ABGS-6	2	TNT	0.140J	ND	No
ABGS-7	2	TNT	0.070J	ND	No
ABGS-8	2	TNT	0.995	ND	No
ABGS-9	2	TNT	0.795	ND	No
ABGS-10	2	TNT	0.675	ND	No
ABGS-11	2	TNT	0.180J	ND	No
ABGS-3	2	2,4-DNT	0.530	ND	No
ABGS-6	2	2,4-DNT	0.105J	ND	No
Volatiles					
ABGS-1	1	MECl	0.131	Field Blank, 0.005 Rinsate, 0.005 Method Blank, 0.005	No
ABGS-2	1	MECl	0.152	As above	No
ABGS-3	1	MECl	0.095	As above	No
ABGS-4	1	MECl	0.091	As above	No
ABGS-5	1	MECl	0.058	As above	No
ABGS-6	1	MECl	0.382	As above	No
ABGS-7	1	MECl	0.034	As above	Yes
ABGS-8	1	MECl	0.025	As above, w/ Method Blank = 0.004J	Yes
ABGS-9	1	MECl	0.125	As above	No
ABGS-10	1	MECl	0.071	As above	No
ABGS-11	1	MECl	0.038	As above	Yes
ABGS-2	1	Chloroform	0.010	Field Blank, 0.001J	No
ABGS-3	1	Chloroform	0.006J	Field Blank, 0.001J	Yes

(Sheet 2 of 8)

Table 7 (Continued)

Sample Site	Sampling Round	Detected Compound*	Amount Detected (MG/L)**	QC Sample and Amount (MG/L)	Artifact?
Volatiles (Continued)					
ABGS-4	1	Chloroform	0.004J	Field Blank, 0.001J	Yes
ABGS-5	1	Chloroform	0.002J	Field Blank, 0.001J	No
ABGS-9	1	Chloroform	**0.021**	Field Blank, 0.001J	No
ABGS-10	1	Chloroform	**0.037**	Field Blank, 0.001J	No
ABGS-11	1	Chloroform	**0.015**	Field Blank, 0.001J	No
ABGS-7	1	111-TCA	**0.014**	ND	No
ABGS-8	1	111-TCA	0.004J	ND	No
ABGS-9	1	111-TCA	**0.008**	ND	No
ABGS-10	1	111-TCA	**0.012**	ND	No
ABGS-11	1	111-TCA	**0.010**	ND	No
ABGS-2	1	BrDiClME	0.003J	ND	No
ABGS-4	1	BrDiClME	0.002J	ND	No
ABGS-9	1	BrDiClME	0.006J	ND	No
ABGS-10	1	BrDiClME	**0.014**	ND	No
ABGS-11	1	BrDiClME	0.004J	ND	No
ABGS-9	1	DiBrClME	0.002J	ND	No
ABGS-10	1	DiBrClME	0.006J	ND	No
ABGS-11	1	DiBrClME	0.001J	ND	No
ABGS-7	1	Bromoform	0.003J	ND	No
ABGS-1	1	Acetone	0.131J	Field Blank, 0.009J Rinsate, 0.019J Method Blank, 0.023J	Yes
ABGS-2	1	Acetone	0.071J	As above, w/ Method Blank = 0.007J	Yes
ABGS-3	1	Acetone	0.073J	As ABGS-1, above	Yes
ABGS-4	1	Acetone	0.088J	As above	Yes
ABGS-5	1	Acetone	**0.175**	As above	Yes
ABGS-6	1	Acetone	0.117J	As above	Yes
ABGS-7	1	Acetone	**0.206**	As above, w/ Method Blank = 0.031J	Yes
ABGS-8	1	Acetone	**0.118**	As above	Yes
ABGS-9	1	Acetone	0.069J	As above	Yes

(Sheet 3 of 8)

Table 7 (Continued)

Sample Site	Sampling Round	Detected Compound*	Amount Detected (MG/L)**	QC Sample and Amount (MG/L)	Artifact?
Volatiles (Continued)					
ABGS-10	1	Acetone	0.058J	As above	Yes
ABGS-11	1	Acetone	0.049J	As above	Yes
ABGS-2	1	Carbondisulfide	**0.005**	ND	No
ABGS-5	1	2-Butanone	0.006J	ND	No
ABGS-7	1	2-Butanone	0.013J	ND	No
ABGS-7	1	Toluene	0.003J	ND	No
ABGS-8	1	Toluene	0.002J	ND	No
ABGS-9	1	Toluene	0.002J	ND	No
ABGS-10	1	Toluene	0.001J	ND	No
ABGS-7	1	Ethylbenzene	0.001J	ND	No
ABGS-8	1	T-Xylene	0.003J	ND	No
ABGS-1	2	MECl	**0.0027J**	Rinsate, 0.0010J Method Blank, 0.0016J	Yes
ABGS-2	2	MECl	0.0082J	As above	Yes
ABGS-3	2	MECl	0.0031J	As above	Yes
ABGS-5	2	MECl	0.0048J	As above	Yes
ABGS-6	2	MECl	**0.015**	As above, w/ Method Blank = 0.0005J	No
ABGS-7	2	MECl	0.0042J	As above	Yes
ABGS-8	2	MECl	**0.0086**	As above	Yes
ABGS-9	2	MECl	**0.0063**	As above	Yes
ABGS-11	2	MECl	0.0032J	As above	Yes
ABGS-2	2	Chloroform	0.0049J	ND[3]	No
ABGS-3	2	Chloroform	**0.011**	ND	No
ABGS-4	2	Chloroform	**0.011**	ND	No
ABGS-5	2	Chloroform	**0.0059**	ND	No
ABGS-7	2	Chloroform	**0.015**	ND	No
ABGS-8	2	Chloroform	**0.031**	ND	No
ABGS-9	2	Chloroform	**0.039**	ND	No
ABGS-10	2	Chloroform	0.0051J	ND	No

(Sheet 4 of 8)

[3] There was no field blank for Round 2. Round 1 field bank showed chloroform at 0.001J mG/L.

Table 7 (Continued)

Sample Site	Sampling Round	Detected Compound*	Amount Detected (MG/L)**	QC Sample and Amount (MG/L)	Artifact?
Volatiles (Continued)					
ABGS-11	2	Chloroform	0.035	ND	No
ABGS-3	2	BrDiClME	0.0009J	ND	No
ABGS-4	2	BrDiClME	0.0014J	ND	No
ABGS-7	2	BrDiClME	0.0026J	ND	No
ABGS-8	2	BrDiClME	0.0062J	ND	No
ABGS-9	2	BrDiClME	0.0073J	ND	No
ABGS-11	2	BrDiClME	0.0065J	ND	No
ABGS-8	2	DiBrClME	0.0021J	ND	No
ABGS-9	2	DiBrClME	0.0021J	ND	No
ABGS-1,2,4,5,6,8	2	Acetone	0.0066-0.013J	Rinsate, 0.013J Method Blank, 0.0035J Method Blank, 0.00076J	Yes
ABGS-6	2	2-Butanone	0.0022J	ND	No
ABGS-6	2	T-Xylene	0.0011J	ND	No
Semivolatiles					
ABGS-11	1	2,4-DNTOL	1.1	ND	No
ABGS-11	1	NNDPHAM	0.11J	ND	No
ABGS-1	1	DiBuPh	0.37J	Rinsate, 0.0006J Method Blank, 0.42J	Yes
ABGS-2	1	DiBuPh	0.078J	As above, w/ Method Blank = 0.054J	Yes?
ABGS-3	1	DiBuPh	0.22J	As above, w/ Method Blank = 0.42J	Yes
ABGS-4	1	DiBuPh	0.74J	As above	Yes?
ABGS-5	1	DiBuPh	0.16J	As above	Yes
ABGS-6	1	DiBuPh	0.16J	As above, w/ Method Blank = 0.38J	Yes
ABGS-7	1	DiBuPh	0.048J	As above	Yes
ABGS-8	1	DiBuPh	0.035J	As above	Yes
ABGS-9	1	DiBuPh	0.20J	As above	Yes
ABGS-10	1	DiBuPh	0.065J	As above	Yes
ABGS-11	1	DiBuPh	0.043J	As above	Yes
ABGS-5	1	Phenanthrene	0.048J	ND	No

Table 7 (Continued)

Sample Site	Sampling Round	Detected Compound*	Amount Detected (MG/L)**	QC Sample and Amount (MG/L)	Artifact?
Semivolatiles (Continued)					
ABGS-6	1	Phenanthrene	0.021J	ND	No
ABGS-9	1	Hexachlorobenzene	0.11J	ND	No
ABGS-5	1	Fluoranthrene	0.056J	ND	No
ABGS-5	1	Pyrene	0.041J	ND	No
ABGS-1	1	Bis2EHPh	0.22J	Method Blank, 0.25J	Yes
ABGS-2	1	Bis2EHPh	0.027J	Method Blank, 0.029J	Yes
ABGS-3	1	Bis2EHPh	0.24J	Method Blank, 0.25J	Yes
ABGS-4	1	Bis2EHPh	0.83J	As above	Yes?
ABGS-5	1	Bis2EHPh	0.052J	As above	Yes
ABGS-6	1	Bis2EHPh	0.039J	Method Blank, 0.41J	Yes
ABGS-7	1	Bis2EHPh	0.047J	As above	Yes
ABGS-10	1	Bis2EHPh	0.047J	As above	Yes
ABGS-11	1	Bis2EHPh	0.29J	As above	Yes
ABGS-5	1	Chrysene	0.028J	ND	No
ABGS-5	1	BAANTHR	0.019J	ND	No
ABGS-5	1	BBFLANT	0.033J	ND	No
ABGS-5	1	BKFLANT	0.021J	ND	No
ABGS-3	2	2,4-DNTOL	0.55J	ND	No
ABGS-11	2	2,4-DNTOL	2.3	ND	No
ABGS-11	2	NNDPHAM	0.34J	ND	No
ABGS-2	2	DiBuPh	0.14J	Method Blank, 0.26J	Yes
ABGS-3	2	DiBuPh	0.43J	Method Blank, 0.26J	Yes?
ABGS-5	2	DiBuPh	0.15J	Method Blank, 0.069J	No?
ABGS-6	2	DiBuPh	0.48J	Method Blank, 0.26J	Yes?
ABGS-8	2	DiBuPh	0.82J	As above	No?
ABGS-9	2	DiBuPh	0.11J	ND	No
ABGS-11	2	DiBuPh	0.074J	ND	No
Pesticides/Herbicides					
ABGS-6	1	PPDDE	0.0065	ND	No
ABGS-7	1	PPDDE	0.0032J	ND	No

(Sheet 6 of 8)

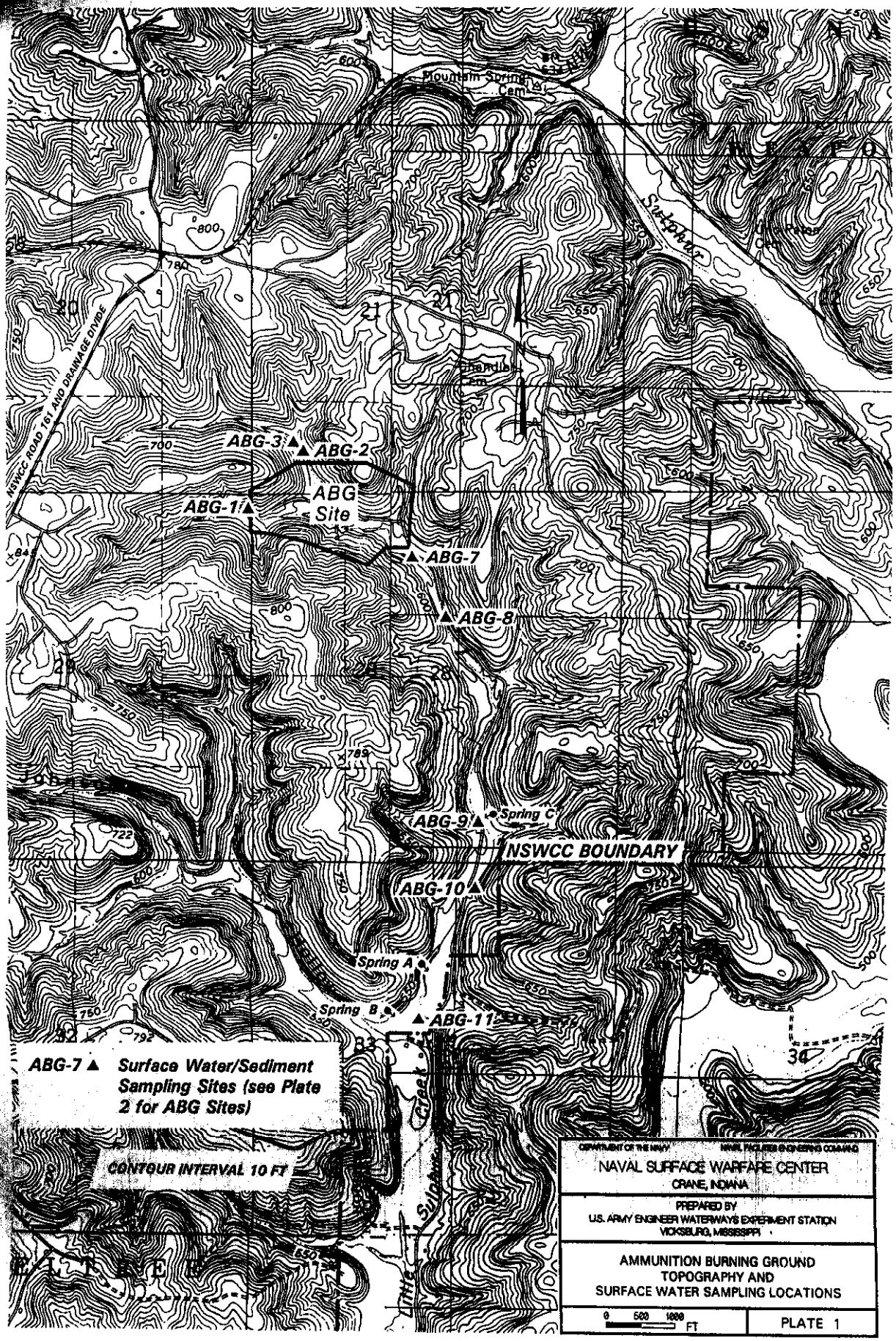
Table 7 (Continued)

Sample Site	Sampling Round	Detected Compound*	Amount Detected (MG/L)**	QC Sample and Amount (MG/L)	Artifact?
Pesticides/Herbicides (Continued)					
ABGS-8	1	PPDDE	0.00049J	ND	No
ABGS-9	1	PPDDE	0.001J	ND	No
ABGS-10	1	PPDDE	0.00082J	ND	No
ABGS-10	1	PPDDT	0.0013J	ND	No
ABGS-7	1	Heptachlor	0.0024J	ND	No
ABGS-8	1	Heptachlor	0.0017J	ND	No
ABGS-10	1	Heptachlor	0.00044J	Method Blank, 0.0010J	Yes
ABGS-11	1	Heptachlor	0.0012J	Method Blank, 0.0010J	Yes
ABGS-7	1	Dieldrin	**0.0032**	ND	No
ABGS-8	1	Dieldrin	0.00088J	ND	No
ABGS-10	1	Dieldrin	0.0013J	Method Blank, 0.00076J	No?
ABGS-11	1	Dieldrin	0.0065J	Method Blank, 0.00076J	No?
ABGS-7	1	Endosulfan	0.0074J	ND	No
ABGS-1	1	PCB-1232	0.0023J	ND	No
ABGS-4	1	PCB-1254	0.021J	Method Blank, 0.021J	Yes
ABGS-9	1	PCB-1254	0.028J	Method Blank, 0.021J	Yes
ABGS-5	1	g-Chlordane	0.004J	ND	No
ABGS-7	1	g-Chlordane	0.0011J	ND	No
ABGS-7	1	a-Chlordane	0.0009J	ND	No
ABGS-1	2	B-BHC	0.0012J	Method Blank, 0.00064J	No?
ABGS-2	2	B-BHC	0.00096J	As above	Yes
ABGS-4	2	B-BHC	0.0011J	As above	No?
ABGS-6	2	A-BHC	0.0022J	ND	No
ABGS-7	2	A-BHC	**0.0041**	ND	No
ABGS-8	2	A-BHC	**0.0029**	ND	No
ABGS-10	2	A-BHC	**0.0039**	ND	No
ABGS-11	2	A-BHC	**0.0044**	ND	No
ABGS-7	2	D-BHC	0.00093J	ND	No
ABGS-1	2	PPDDE	0.0010J	ND	No
ABGS-2	2	PPDDE	0.00044J	ND	No

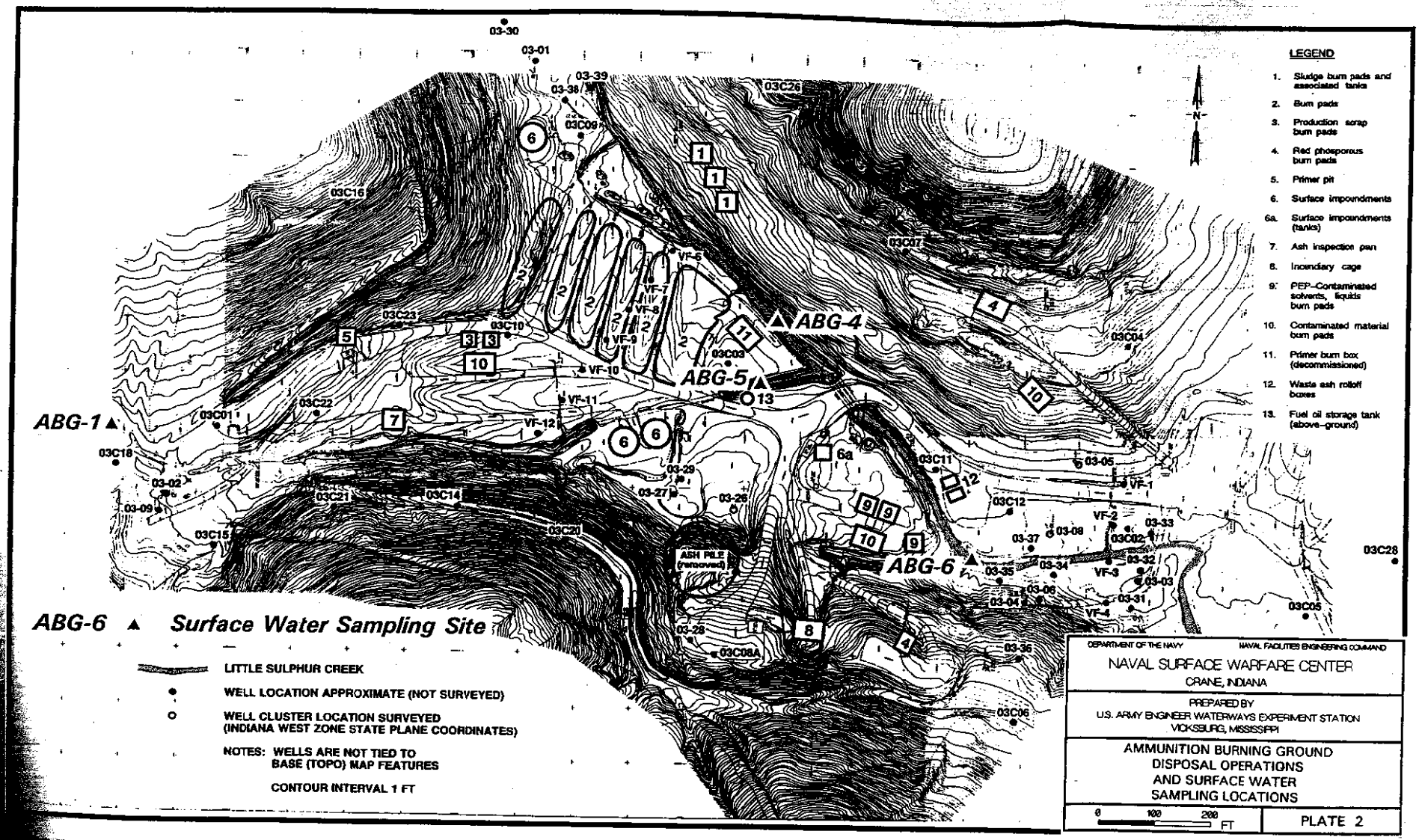
Table 7 (Concluded)

Sample Site	Sampling Round	Detected Compound*	Amount Detected (MG/L)**	QC Sample and Amount (MG/L)	Artifact?
Pesticides/Herbicides (Continued)					
ABGS-3	2	PPDDE	0.00079J	ND	No
ABGS-5	2	PPDDE	0.00035J	ND	No
ABGS-6	2	PPDDE	0.00074J	ND	No
ABGS-7	2	PPDDE	0.0015J	ND	No
ABGS-8	2	PPDDE	0.0023J	ND	No
ABGS-9	2	PPDDE	0.00041J	ND	No
ABGS-5	2	PPDDT	0.0019J	ND	No
ABGS-7	2	PPDDT	0.0021J	ND	No
ABGS-8	2	PPDDT	0.0027J	ND	No
ABGS-1	2	Heptachlor	0.0012J	ND	No
ABGS-5	2	Heptachlor	0.0016J	Method Blank, 0.0014J	Yes
ABGS-6	2	Heptachlor	**0.0036**	As above	No?
ABGS-7	2	Heptachlor	**0.0028**	As above	No?
ABGS-8	2	Heptachlor	**0.0040**	As above	No?
ABGS-9	2	Heptachlor	**0.0024**	As above	No?
ABGS-10	2	Heptachlor	**0.0055**	As above	No?
ABGS-11	2	Heptachlor	**0.0026**	As above	No?
ABGS-8	2	Dieldrin	0.00031J	Method Blank, 0.0026	Yes
ABGS-7	2	Endosulfan	0.0096J	ND	No
ABGS-7	2	Endrin	0.00065J	ND	No
ABGS-8	2	PCB-1254	0.046J	ND	No
ABGS-1 thru 4	2	a-Chlordane	0.00092-0.0016J	Method Blank, 0.0013J	Yes
ABGS-5 thru 8,11	2	a-Chlordane	0.00042-0.0013J	Method Blank, 0.0010J	Yes
ABGS-1	2	g-Chlordane	0.00066J	ND	No

(Sheet 8 of 8)


Mountain Spring Cem
Sulphur
NSWCC ROAD 161 AND DRAINAGE DIVIDE
ABG-3
ABG-2
ABG-1
ABG Site
ABG-7
ABG-8
ABG-9
Spring C
NSWCC BOUNDARY
ABG-10
Spring A
Spring B
ABG-11
ABG-7 ▲ Surface Water/Sediment Sampling Sites (see Plate 2 for ABG Sites)
CONTOUR INTERVAL 10 FT
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL SURFACE WARFARE CENTER
CRANE, INDIANA
PREPARED BY
U.S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION
VICKSBURG, MISSISSIPPI
AMMUNITION BURNING GROUND
TOPOGRAPHY AND
SURFACE WATER SAMPLING LOCATIONS
0 500 1000 FT
PLATE 1

▲ ABG-2


LEGEND
1. Sludge burn pads and associated tanks
2. Burn pads
3. Production scrap burn pads
4. Red phosporous burn pads
5. Primer pit
6. Surface impoundments
6a. Surface impoundments (tanks)
7. Ash inspection pan
8. Incendiary cage
9. PEP-Contaminated solvents, liquids burn pads
10. Contaminated material burn pads
11. Primer burn box (decommissioned)
12. Waste ash rolloff boxes
13. Fuel oil storage tank (above-ground)
ABG-1
ABG-4
ABG-5
ABG-6
ASH PILE (removed)
ABG-6 ▲ Surface Water Sampling Site
LITTLE SULPHUR CREEK
WELL LOCATION APPROXIMATE (NOT SURVEYED)
WELL CLUSTER LOCATION SURVEYED (INDIANA WEST ZONE STATE PLANE COORDINATES)
NOTES: WELLS ARE NOT TIED TO BASE (TOPO) MAP FEATURES
CONTOUR INTERVAL 1 FT
DEPARTMENT OF THE NAVY
NAVAL FACILITIES ENGINEERING COMMAND
NAVAL SURFACE WARFARE CENTER
CRANE, INDIANA
PREPARED BY
U.S. ARMY ENGINEER WATERWAYS EXPERIMENT STATION
VICKSBURG, MISSISSIPPI
AMMUNITION BURNING GROUND
DISPOSAL OPERATIONS
AND SURFACE WATER
SAMPLING LOCATIONS
0 100 200 FT
PLATE 2

Appendix A
Parameters Detected in Surface Water and Sediment

Key:

ABGS [xx] = sediment sample
ABGW [xx] = water sample
03/28/92 = Round 1
07/17/92 = Round 2

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	UNIT
ABGS 01	03/28/92	METHYLENE CHLORIDE	B	0.13100	MG/KG
ABGS 01	03/28/92	ACETONE	B	0.13100	MG/KG
ABGS 01	03/28/92	DIBUTYLPHTHALATE	B	0.37000	MG/KG
ABGS 01	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.22000	MG/KG
ABGS 01	03/28/92	NITRITE NITROGEN		0.34500	MG/KG
ABGS 01	03/28/92	PCB-1232	J	0.00230	MG/KG
ABGS 01	03/28/92	ARSENIC		24.40000	MG/KG
ABGS 01	03/28/92	BERYLLIUM		1.50000	MG/KG
ABGS 01	03/28/92	CADMIUM		0.24900	MG/KG
ABGS 01	03/28/92	CHROMIUM		29.60000	MG/KG
ABGS 01	03/28/92	COPPER		12.40000	MG/KG
ABGS 01	03/28/92	LEAD		23.20000	MG/KG
ABGS 01	03/28/92	NICKEL		29.10000	MG/KG
ABGS 01	03/28/92	SELENIUM		0.59000	MG/KG
ABGS 01	03/28/92	SILVER	B	0.17000	MG/KG
ABGS 01	03/28/92	ZINC		63.70000	MG/KG
ABGS 01	03/28/92	ALUMINUM		8730.00000	MG/KG
ABGS 01	03/28/92	BARIUM		89.70000	MG/KG
ABGS 01	03/28/92	CALCIUM		662.00000	MG/KG
ABGS 01	03/28/92	COBALT		27.80000	MG/KG
ABGS 01	03/28/92	IRON		41200.0000	MG/KG
ABGS 01	03/28/92	MAGNESIUM		932.00000	MG/KG
ABGS 01	03/28/92	MANGANESE		1600.00000	MG/KG
ABGS 01	03/28/92	POTASSIUM		619.00000	MG/KG
ABGS 01	03/28/92	SODIUM	B	43.60000	MG/KG
ABGS 01	03/28/92	VANADIUM		39.10000	MG/KG
ABGS 02	03/28/92	METHYLENE CHLORIDE	B	0.15200	MG/KG
ABGS 02	03/28/92	CHLOROFORM		0.01000	MG/KG
ABGS 02	03/28/92	BROMODICHLOROMETHANE	J	0.00300	MG/KG
ABGS 02	03/28/92	ACETONE	B	0.07100	MG/KG
ABGS 02	03/28/92	CARBONDISULFIDE		0.00500	MG/KG
ABGS 02	03/28/92	DIBUTYLPHTHALATE	B	0.07800	MG/KG
ABGS 02	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.02700	MG/KG
ABGS 02	03/28/92	NITRITE NITROGEN		1.45000	MG/KG
ABGS 02	03/28/92	NITRATE NITROGEN		6.27000	MG/KG
ABGS 02	03/28/92	ARSENIC		6.55000	MG/KG
ABGS 02	03/28/92	BERYLLIUM		0.49600	MG/KG
ABGS 02	03/28/92	CADMIUM		0.23800	MG/KG
ABGS 02	03/28/92	CHROMIUM		13.40000	MG/KG
ABGS 02	03/28/92	COPPER		8.82000	MG/KG
ABGS 02	03/28/92	LEAD		15.10000	MG/KG
ABGS 02	03/28/92	NICKEL		14.10000	MG/KG
ABGS 02	03/28/92	SELENIUM	B	0.29000	MG/KG
ABGS 02	03/28/92	SILVER	B	0.21000	MG/KG
ABGS 02	03/28/92	ZINC		50.10000	MG/KG
ABGS 02	03/28/92	ALUMINUM		6900.00000	MG/KG
ABGS 02	03/28/92	BARIUM		91.40000	MG/KG
ABGS 02	03/28/92	CALCIUM		1330.00000	MG/KG
ABGS 02	03/28/92	COBALT		8.82000	MG/KG
ABGS 02	03/28/92	IRON		19300.0000	MG/KG
ABGS 02	03/28/92	MAGNESIUM		1130.00000	MG/KG
ABGS 02	03/28/92	MANGANESE		1040.00000	MG/KG
ABGS 02	03/28/92	POTASSIUM		782.00000	MG/KG
ABGS 02	03/28/92	SODIUM	B	61.40000	MG/KG
ABGS 02	03/28/92	VANADIUM		17.10000	MG/KG
ABGS 03	03/28/92	METHYLENE CHLORIDE	B	0.09500	MG/KG
ABGS 03	03/28/92	CHLOROFORM	J	0.00600	MG/KG

ABGS 03	03/28/92	ACETONE	B	0.07300	MG/KG
ABGS 03	03/28/92	DIBUTYLPHTHALATE	B	0.22000	MG/KG
ABGS 03	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.24000	MG/KG
ABGS 03	03/28/92	NITRITE NITROGEN		1.40000	MG/KG
ABGS 03	03/28/92	NITRATE NITROGEN		8.90000	MG/KG
ABGS 03	03/28/92	ARSENIC		21.20000	MG/KG
ABGS 03	03/28/92	BERYLLIUM		1.50000	MG/KG
ABGS 03	03/28/92	CADMIUM		0.26100	MG/KG
ABGS 03	03/28/92	CHROMIUM		32.90000	MG/KG
ABGS 03	03/28/92	COPPER		12.80000	MG/KG
ABGS 03	03/28/92	LEAD		30.90000	MG/KG
ABGS 03	03/28/92	NICKEL		43.40000	MG/KG
ABGS 03	03/28/92	SELENIUM		0.59000	MG/KG
ABGS 03	03/28/92	SILVER	B	0.18000	MG/KG
ABGS 03	03/28/92	ZINC		70.40000	MG/KG
ABGS 03	03/28/92	ALUMINUM		6270.00000	MG/KG
ABGS 03	03/28/92	BARIUM		72.00000	MG/KG
ABGS 03	03/28/92	CALCIUM		554.00000	MG/KG
ABGS 03	03/28/92	COBALT		32.80000	MG/KG
ABGS 03	03/28/92	IRON		52200.0000	MG/KG
ABGS 03	03/28/92	MAGNESIUM		591.00000	MG/KG
ABGS 03	03/28/92	MANGANESE		1920.00000	MG/KG
ABGS 03	03/28/92	POTASSIUM	B	474.00000	MG/KG
ABGS 03	03/28/92	SODIUM	B	49.70000	MG/KG
ABGS 03	03/28/92	VANADIUM		38.00000	MG/KG
ABGS 04	03/28/92	METHYLENE CHLORIDE	B	0.09100	MG/KG
ABGS 04	03/28/92	CHLOROFORM	J	0.00400	MG/KG
ABGS 04	03/28/92	BROMODICHLOROMETHANE	J	0.00200	MG/KG
ABGS 04	03/28/92	ACETONE	B	0.08800	MG/KG
ABGS 04	03/28/92	DIBUTYLPHTHALATE	B	0.74000	MG/KG
ABGS 04	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.83000	MG/KG
ABGS 04	03/28/92	HMX		10.20000	MG/KG
ABGS 04	03/28/92	TNT	J	0.18000	MG/KG
ABGS 04	03/28/92	CYANIDE	B	0.30000	MG/KG
ABGS 04	03/28/92	NITRITE NITROGEN		1.63000	MG/KG
ABGS 04	03/28/92	NITRATE NITROGEN		6.44000	MG/KG
ABGS 04	03/28/92	PCB-1254	B	0.02100	MG/KG
ABGS 04	03/28/92	ARSENIC		3.74000	MG/KG
ABGS 04	03/28/92	BERYLLIUM	B	0.29900	MG/KG
ABGS 04	03/28/92	CADMIUM		0.35300	MG/KG
ABGS 04	03/28/92	CHROMIUM		9.46000	MG/KG
ABGS 04	03/28/92	COPPER		25.20000	MG/KG
ABGS 04	03/28/92	LEAD		58.80000	MG/KG
ABGS 04	03/28/92	NICKEL		11.40000	MG/KG
ABGS 04	03/28/92	SILVER	B	0.24000	MG/KG
ABGS 04	03/28/92	ZINC		66.50000	MG/KG
ABGS 04	03/28/92	ALUMINUM		8100.00000	MG/KG
ABGS 04	03/28/92	BARIUM		133.00000	MG/KG
ABGS 04	03/28/92	CALCIUM		7110.00000	MG/KG
ABGS 04	03/28/92	COBALT		4.88000	MG/KG
ABGS 04	03/28/92	IRON		11000.0000	MG/KG
ABGS 04	03/28/92	MAGNESIUM		1730.00000	MG/KG
ABGS 04	03/28/92	MANGANESE		463.00000	MG/KG
ABGS 04	03/28/92	POTASSIUM		850.00000	MG/KG
ABGS 04	03/28/92	SODIUM	B	61.60000	MG/KG
ABGS 04	03/28/92	VANADIUM		9.36000	MG/KG
ABGS 05	03/28/92	METHYLENE CHLORIDE	B	0.05800	MG/KG
ABGS 05	03/28/92	CHLOROFORM	J	0.00200	MG/KG
ABGS 05	03/28/92	ACETONE	B	0.17500	MG/KG
ABGS 05	03/28/92	2-BUTANONE	J	0.00600	MG/KG

ABGS 05	03/28/92	PHENANTHRENE	J	0.04800	MG/KG
ABGS 05	03/28/92	DIBUTYLPHTHALATE	B	0.05800	MG/KG
ABGS 05	03/28/92	FLUORANTHENE	J	0.05600	MG/KG
ABGS 05	03/28/92	PYRENE	J	0.04100	MG/KG
ABGS 05	03/28/92	CHRYSENE	J	0.02800	MG/KG
ABGS 05	03/28/92	BENZO(A)ANTHRACENE	J	0.01900	MG/KG
ABGS 05	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.05200	MG/KG
ABGS 05	03/28/92	BENZO(B)FLUORANTHENE	J	0.03300	MG/KG
ABGS 05	03/28/92	BENZO(K)FLUORANTHENE	J	0.02100	MG/KG
ABGS 05	03/28/92	TNT		0.26000	MG/KG
ABGS 05	03/28/92	NITRITE NITROGEN		1.17000	MG/KG
ABGS 05	03/28/92	NITRATE NITROGEN		7.23000	MG/KG
ABGS 05	03/28/92	G-CHLORDANE		0.00400	MG/KG
ABGS 05	03/28/92	ARSENIC		6.46000	MG/KG
ABGS 05	03/28/92	BERYLLIUM	B	0.39600	MG/KG
ABGS 05	03/28/92	CADMIUM		0.99000	MG/KG
ABGS 05	03/28/92	CHROMIUM		12.20000	MG/KG
ABGS 05	03/28/92	COPPER		39.10000	MG/KG
ABGS 05	03/28/92	LEAD		37.70000	MG/KG
ABGS 05	03/28/92	MERCURY		0.42800	MG/KG
ABGS 05	03/28/92	NICKEL		15.70000	MG/KG
ABGS 05	03/28/92	SILVER	B	0.24000	MG/KG
ABGS 05	03/28/92	ZINC		154.00000	MG/KG
ABGS 05	03/28/92	ALUMINUM		5070.00000	MG/KG
ABGS 05	03/28/92	BARIUM		77.50000	MG/KG
ABGS 05	03/28/92	CALCIUM		7850.00000	MG/KG
ABGS 05	03/28/92	COBALT		5.55000	MG/KG
ABGS 05	03/28/92	IRON		17500.0000	MG/KG
ABGS 05	03/28/92	MAGNESIUM		2030.00000	MG/KG
ABGS 05	03/28/92	MANGANESE		362.00000	MG/KG
ABGS 05	03/28/92	POTASSIUM		750.00000	MG/KG
ABGS 05	03/28/92	SODIUM	B	54.70000	MG/KG
ABGS 05	03/28/92	VANADIUM		11.60000	MG/KG
ABGS 06	03/28/92	METHYLENE CHLORIDE	B	0.38200	MG/KG
ABGS 06	03/28/92	ACETONE	B	0.11700	MG/KG
ABGS 06	03/28/92	PHENANTHRENE	J	0.02100	MG/KG
ABGS 06	03/28/92	DIBUTYLPHTHALATE	B	0.16000	MG/KG
ABGS 06	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.03900	MG/KG
ABGS 06	03/28/92	HMX	J	1.37000	MG/KG
ABGS 06	03/28/92	TNT	J	0.14000	MG/KG
ABGS 06	03/28/92	CYANIDE	B	0.30000	MG/KG
ABGS 06	03/28/92	NITRITE NITROGEN		1.84000	MG/KG
ABGS 06	03/28/92	NITRATE NITROGEN		10.70000	MG/KG
ABGS 06	03/28/92	PPDDE		0.00650	MG/KG
ABGS 06	03/28/92	ANTIMONY	B	0.42000	MG/KG
ABGS 06	03/28/92	ARSENIC		10.20000	MG/KG
ABGS 06	03/28/92	BERYLLIUM		0.59500	MG/KG
ABGS 06	03/28/92	CADMIUM		3.18000	MG/KG
ABGS 06	03/28/92	CHROMIUM		17.10000	MG/KG
ABGS 06	03/28/92	COPPER		62.70000	MG/KG
ABGS 06	03/28/92	LEAD		67.60000	MG/KG
ABGS 06	03/28/92	NICKEL		18.60000	MG/KG
ABGS 06	03/28/92	SELENIUM	B	0.27000	MG/KG
ABGS 06	03/28/92	SILVER	B	0.58000	MG/KG
ABGS 06	03/28/92	ZINC		276.00000	MG/KG
ABGS 06	03/28/92	ALUMINUM		8610.00000	MG/KG
ABGS 06	03/28/92	BARIUM		329.00000	MG/KG
ABGS 06	03/28/92	CALCIUM		13200.0000	MG/KG
ABGS 06	03/28/92	COBALT		11.40000	MG/KG
ABGS 06	03/28/92	IRON		22400.0000	MG/KG

ABGS 06	03/28/92	MAGNESIUM		2490.00000	MG/KG
ABGS 06	03/28/92	MANGANESE		867.00000	MG/KG
ABGS 06	03/28/92	POTASSIUM		930.00000	MG/KG
ABGS 06	03/28/92	SODIUM	B	67.60000	MG/KG
ABGS 06	03/28/92	VANADIUM		16.40000	MG/KG
ABGS 07	03/28/92	METHYLENE CHLORIDE	B	0.03400	MG/KG
ABGS 07	03/28/92	1,1,1-TRICHLOROETHANE		0.01400	MG/KG
ABGS 07	03/28/92	BROMOFORM	J	0.00300	MG/KG
ABGS 07	03/28/92	TOLUENE	J	0.00300	MG/KG
ABGS 07	03/28/92	ETHYLBENZENE	J	0.00100	MG/KG
ABGS 07	03/28/92	ACETONE	B	0.20600	MG/KG
ABGS 07	03/28/92	2-BUTANONE	J	0.01300	MG/KG
ABGS 07	03/28/92	DIBUTYLPHTHALATE	B	0.04800	MG/KG
ABGS 07	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.04700	MG/KG
ABGS 07	03/28/92	HMX	J	1.46000	MG/KG
ABGS 07	03/28/92	TNT	J	0.12000	MG/KG
ABGS 07	03/28/92	NITRITE NITROGEN		1.03000	MG/KG
ABGS 07	03/28/92	NITRATE NITROGEN		10.30000	MG/KG
ABGS 07	03/28/92	PPDDD	J	0.00100	MG/KG
ABGS 07	03/28/92	PPDDE	J	0.00320	MG/KG
ABGS 07	03/28/92	HEPTACHLOR	J	0.00240	MG/KG
ABGS 07	03/28/92	DIELDRIN		0.00320	MG/KG
ABGS 07	03/28/92	ENDOSULFAN SULFATE	J	0.00740	MG/KG
ABGS 07	03/28/92	A-CHLORDANE	J	0.00090	MG/KG
ABGS 07	03/28/92	G-CHLORDANE	B	0.00110	MG/KG
ABGS 07	03/28/92	ANTIMONY	B	0.36000	MG/KG
ABGS 07	03/28/92	ARSENIC		7.69000	MG/KG
ABGS 07	03/28/92	BERYLLIUM		0.59400	MG/KG
ABGS 07	03/28/92	CADMIUM		0.71400	MG/KG
ABGS 07	03/28/92	CHROMIUM		19.00000	MG/KG
ABGS 07	03/28/92	COPPER		35.70000	MG/KG
ABGS 07	03/28/92	LEAD		39.90000	MG/KG
ABGS 07	03/28/92	NICKEL		17.50000	MG/KG
ABGS 07	03/28/92	SELENIUM	B	0.27000	MG/KG
ABGS 07	03/28/92	SILVER	B	0.77000	MG/KG
ABGS 07	03/28/92	ZINC		133.00000	MG/KG
ABGS 07	03/28/92	ALUMINUM		8900.00000	MG/KG
ABGS 07	03/28/92	BARIUM		141.00000	MG/KG
ABGS 07	03/28/92	CALCIUM		6370.00000	MG/KG
ABGS 07	03/28/92	COBALT		8.62000	MG/KG
ABGS 07	03/28/92	IRON		24900.0000	MG/KG
ABGS 07	03/28/92	MAGNESIUM		1700.00000	MG/KG
ABGS 07	03/28/92	MANGANESE		697.00000	MG/KG
ABGS 07	03/28/92	POTASSIUM		799.00000	MG/KG
ABGS 07	03/28/92	SODIUM	B	214.00000	MG/KG
ABGS 07	03/28/92	VANADIUM		17.60000	MG/KG
ABGS 08	03/28/92	DIBUTYLPHTHALATE	B	0.03500	MG/KG
ABGS 08	03/28/92	HMX		2.90000	MG/KG
ABGS 08	03/28/92	TNT		1.13000	MG/KG
ABGS 08	03/28/92	NITRITE NITROGEN		0.97000	MG/KG
ABGS 08	03/28/92	NITRATE NITROGEN		9.48000	MG/KG
ABGS 08	03/28/92	METHYLENE CHLORIDE	B	0.02500	MG/KG
ABGS 08	03/28/92	1,1,1-TRICHLOROETHANE	J	0.00400	MG/KG
ABGS 08	03/28/92	TOLUENE	J	0.00200	MG/KG
ABGS 08	03/28/92	ACETONE	B	0.11800	MG/KG
ABGS 08	03/28/92	T-XYLENE	J	0.00300	MG/KG
ABGS 08	03/28/92	PPDDE	J	0.00049	MG/KG
ABGS 08	03/28/92	HEPTACHLOR	J	0.00170	MG/KG
ABGS 08	03/28/92	DIELDRIN	J	0.00088	MG/KG
ABGS 08	03/28/92	PCB-1248	J	0.00130	MG/KG

ABGS 08	03/28/92	ARSENIC		5.45000	MG/KG
ABGS 08	03/28/92	BERYLLIUM	B	0.39800	MG/KG
ABGS 08	03/28/92	CADMIUM		0.66600	MG/KG
ABGS 08	03/28/92	CHROMIUM		11.80000	MG/KG
ABGS 08	03/28/92	COPPER		32.60000	MG/KG
ABGS 08	03/28/92	LEAD		48.30000	MG/KG
ABGS 08	03/28/92	NICKEL		13.50000	MG/KG
ABGS 08	03/28/92	SELENIUM	B	0.24000	MG/KG
ABGS 08	03/28/92	SILVER	B	0.33000	MG/KG
ABGS 08	03/28/92	ZINC		118.00000	MG/KG
ABGS 08	03/28/92	ALUMINUM		8150.00000	MG/KG
ABGS 08	03/28/92	BARIUM		154.00000	MG/KG
ABGS 08	03/28/92	CALCIUM		6010.00000	MG/KG
ABGS 08	03/28/92	COBALT		6.48000	MG/KG
ABGS 08	03/28/92	IRON		14400.0000	MG/KG
ABGS 08	03/28/92	MAGNESIUM		1600.00000	MG/KG
ABGS 08	03/28/92	MANGANESE		573.00000	MG/KG
ABGS 08	03/28/92	POTASSIUM		919.00000	MG/KG
ABGS 08	03/28/92	SODIUM	B	74.00000	MG/KG
ABGS 08	03/28/92	VANADIUM		12.00000	MG/KG
ABGS 09	03/28/92	HEXACHLOROBENZENE	J	0.11000	MG/KG
ABGS 09	03/28/92	DIBUTYLPHTHALATE	B	0.20000	MG/KG
ABGS 09	03/28/92	HMX	J	0.32000	MG/KG
ABGS 09	03/28/92	TNT	J	0.17000	MG/KG
ABGS 09	03/28/92	CYANIDE	B	0.50000	MG/KG
ABGS 09	03/28/92	NITRITE NITROGEN		2.08000	MG/KG
ABGS 09	03/28/92	NITRATE NITROGEN		9.92000	MG/KG
ABGS 09	03/28/92	METHYLENE CHLORIDE	B	0.12500	MG/KG
ABGS 09	03/28/92	CHLOROFORM		0.02100	MG/KG
ABGS 09	03/28/92	1,1,1-TRICHLOROETHANE		0.00800	MG/KG
ABGS 09	03/28/92	BROMODICHLOROMETHANE	J	0.00600	MG/KG
ABGS 09	03/28/92	DIBROMOCHLOROMETHANE	J	0.00200	MG/KG
ABGS 09	03/28/92	TOLUENE	J	0.00200	MG/KG
ABGS 09	03/28/92	ACETONE	B	0.06900	MG/KG
ABGS 09	03/28/92	PPDDE	J	0.00100	MG/KG
ABGS 09	03/28/92	PCB-1254	B	0.02800	MG/KG
ABGS 09	03/28/92	ANTIMONY	B	0.34000	MG/KG
ABGS 09	03/28/92	ARSENIC		18.80000	MG/KG
ABGS 09	03/28/92	BERYLLIUM		0.79900	MG/KG
ABGS 09	03/28/92	CADMIUM		0.91700	MG/KG
ABGS 09	03/28/92	CHROMIUM		26.70000	MG/KG
ABGS 09	03/28/92	COPPER		36.10000	MG/KG
ABGS 09	03/28/92	LEAD		50.80000	MG/KG
ABGS 09	03/28/92	NICKEL		26.60000	MG/KG
ABGS 09	03/28/92	SELENIUM	B	0.38000	MG/KG
ABGS 09	03/28/92	SILVER	B	0.31000	MG/KG
ABGS 09	03/28/92	THALLIUM	B	0.22000	MG/KG
ABGS 09	03/28/92	ZINC		173.00000	MG/KG
ABGS 09	03/28/92	ALUMINUM		9990.00000	MG/KG
ABGS 09	03/28/92	BARIUM		162.00000	MG/KG
ABGS 09	03/28/92	CALCIUM		8940.00000	MG/KG
ABGS 09	03/28/92	COBALT		15.90000	MG/KG
ABGS 09	03/28/92	IRON		38200.0000	MG/KG
ABGS 09	03/28/92	MAGNESIUM		1570.00000	MG/KG
ABGS 09	03/28/92	MANGANESE		1340.00000	MG/KG
ABGS 09	03/28/92	POTASSIUM		869.00000	MG/KG
ABGS 09	03/28/92	SODIUM	B	59.30000	MG/KG
ABGS 09	03/28/92	VANADIUM		19.90000	MG/KG
ABGS 10	03/28/92	DIBUTYLPHTHALATE	B	0.06500	MG/KG
ABGS 10	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.04700	MG/KG

ABGS 10	03/28/92	HMX	J	0.78000	MG/KG
ABGS 10	03/28/92	TNT	J	0.11000	MG/KG
ABGS 10	03/28/92	NITRITE NITROGEN		3.07000	MG/KG
ABGS 10	03/28/92	NITRATE NITROGEN		7.72000	MG/KG
ABGS 10	03/28/92	METHYLENE CHLORIDE	B	0.07100	MG/KG
ABGS 10	03/28/92	CHLOROFORM		0.03700	MG/KG
ABGS 10	03/28/92	1,1,1-TRICHLOROETHANE		0.01200	MG/KG
ABGS 10	03/28/92	BROMODICHLOROMETHANE		0.01400	MG/KG
ABGS 10	03/28/92	DIBROMOCHLOROMETHANE	J	0.00600	MG/KG
ABGS 10	03/28/92	TOLUENE	J	0.00100	MG/KG
ABGS 10	03/28/92	ACETONE	B	0.05800	MG/KG
ABGS 10	03/28/92	PPDDE	J	0.00082	MG/KG
ABGS 10	03/28/92	PPDDT	J	0.00130	MG/KG
ABGS 10	03/28/92	HEPTACHLOR	B	0.00044	MG/KG
ABGS 10	03/28/92	DIELDRIN	B	0.00130	MG/KG
ABGS 10	03/28/92	ANTIMONY	B	0.34000	MG/KG
ABGS 10	03/28/92	ARSENIC		13.50000	MG/KG
ABGS 10	03/28/92	BERYLLIUM		0.89400	MG/KG
ABGS 10	03/28/92	CADMIUM		0.94200	MG/KG
ABGS 10	03/28/92	CHROMIUM		29.70000	MG/KG
ABGS 10	03/28/92	COPPER		41.60000	MG/KG
ABGS 10	03/28/92	LEAD		61.20000	MG/KG
ABGS 10	03/28/92	NICKEL		23.50000	MG/KG
ABGS 10	03/28/92	SELENIUM	B	0.32000	MG/KG
ABGS 10	03/28/92	SILVER	B	0.33000	MG/KG
ABGS 10	03/28/92	ZINC		184.00000	MG/KG
ABGS 10	03/28/92	ALUMINUM		9910.00000	MG/KG
ABGS 10	03/28/92	BARIUM		160.00000	MG/KG
ABGS 10	03/28/92	CALCIUM		4310.00000	MG/KG
ABGS 10	03/28/92	COBALT		13.20000	MG/KG
ABGS 10	03/28/92	IRON		43100.0000	MG/KG
ABGS 10	03/28/92	MAGNESIUM		1170.00000	MG/KG
ABGS 10	03/28/92	MANGANESE		1150.00000	MG/KG
ABGS 10	03/28/92	POTASSIUM		659.00000	MG/KG
ABGS 10	03/28/92	SODIUM	B	51.50000	MG/KG
ABGS 10	03/28/92	VANADIUM		24.30000	MG/KG
ABGS 11	03/28/92	2,4-DINITROTOLUENE		1.10000	MG/KG
ABGS 11	03/28/92	N-NITROSODIPHENYL AMINE	J	0.11000	MG/KG
ABGS 11	03/28/92	DIBUTYLPHTHALATE	B	0.04300	MG/KG
ABGS 11	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.29000	MG/KG
ABGS 11	03/28/92	TNT		0.27000	MG/KG
ABGS 11	03/28/92	NITRITE NITROGEN		2.27000	MG/KG
ABGS 11	03/28/92	NITRATE NITROGEN		7.20000	MG/KG
ABGS 11	03/28/92	METHYLENE CHLORIDE	B	0.03800	MG/KG
ABGS 11	03/28/92	CHLOROFORM		0.01500	MG/KG
ABGS 11	03/28/92	1,1,1-TRICHLOROETHANE		0.01000	MG/KG
ABGS 11	03/28/92	BROMODICHLOROMETHANE	J	0.00400	MG/KG
ABGS 11	03/28/92	DIBROMOCHLOROMETHANE	J	0.00100	MG/KG
ABGS 11	03/28/92	ACETONE	B	0.04900	MG/KG
ABGS 11	03/28/92	HEPTACHLOR	B	0.00120	MG/KG
ABGS 11	03/28/92	DIELDRIN	B	0.00650	MG/KG
ABGS 11	03/28/92	ARSENIC		13.30000	MG/KG
ABGS 11	03/28/92	BERYLLIUM		0.79300	MG/KG
ABGS 11	03/28/92	CADMIUM		0.55400	MG/KG
ABGS 11	03/28/92	CHROMIUM		27.20000	MG/KG
ABGS 11	03/28/92	COPPER		19.10000	MG/KG
ABGS 11	03/28/92	LEAD		24.70000	MG/KG
ABGS 11	03/28/92	NICKEL		17.40000	MG/KG
ABGS 11	03/28/92	SELENIUM	B	0.22000	MG/KG
ABGS 11	03/28/92	SILVER	B	0.24000	MG/KG

ABGS 11	03/28/92	ZINC		130.00000	MG/KG
ABGS 11	03/28/92	ALUMINUM	*	9320.00000	MG/KG
ABGS 11	03/28/92	BARIUM		118.00000	MG/KG
ABGS 11	03/28/92	CALCIUM		1170.00000	MG/KG
ABGS 11	03/28/92	COBALT		9.02000	MG/KG
ABGS 11	03/28/92	IRON		36700.0000	MG/KG
ABGS 11	03/28/92	MAGNESIUM		595.00000	MG/KG
ABGS 11	03/28/92	MANGANESE		1050.00000	MG/KG
ABGS 11	03/28/92	POTASSIUM		465.00000	MG/KG
ABGS 11	03/28/92	SODIUM	B	49.30000	MG/KG
ABGS 11	03/28/92	VANADIUM		23.00000	MG/KG

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	UNIT
ABGW 01	03/28/92	NITRITE NITROGEN		0.00500	MG/L
ABGW 01	03/28/92	METHYLENE CHLORIDE	B	0.00900	MG/L
ABGW 01	03/28/92	ACETONE	B	0.02000	MG/L
ABGW 01	03/28/92	NICKEL	B	0.00600	MG/L
ABGW 01	03/28/92	ALUMINUM	B	0.02100	MG/L
ABGW 01	03/28/92	BARIUM	B	0.04200	MG/L
ABGW 01	03/28/92	CALCIUM		6.96000	MG/L
ABGW 01	03/28/92	IRON	B	0.05700	MG/L
ABGW 01	03/28/92	MAGNESIUM		5.09000	MG/L
ABGW 01	03/28/92	MANGANESE	B	0.00500	MG/L
ABGW 01	03/28/92	POTASSIUM	B	1.17000	MG/L
ABGW 01	03/28/92	SODIUM	B	2.97000	MG/L
ABGW 02	03/28/92	NITRATE NITROGEN		0.14400	MG/L
ABGW 02	03/28/92	METHYLENE CHLORIDE	B	0.00500	MG/L
ABGW 02	03/28/92	1,2-DICHLOROETHANE	J	0.00200	MG/L
ABGW 02	03/28/92	ACETONE	B	0.01500	MG/L
ABGW 02	03/28/92	METHYLENE CHLORIDE	B	0.01100	MG/L
ABGW 02	03/28/92	ACETONE	B	0.01900	MG/L
ABGW 02	03/28/92	STYRENE	J	0.00200	MG/L
ABGW 02	03/28/92	CHROMIUM	B	0.00500	MG/L
ABGW 02	03/28/92	BARIUM	B	0.04100	MG/L
ABGW 02	03/28/92	CALCIUM		12.00000	MG/L
ABGW 02	03/28/92	IRON	B	0.02100	MG/L
ABGW 02	03/28/92	MAGNESIUM		5.66000	MG/L
ABGW 02	03/28/92	POTASSIUM	B	0.89800	MG/L
ABGW 02	03/28/92	SODIUM	B	3.89000	MG/L
ABGW 03	03/28/92	NITRATE NITROGEN		0.13500	MG/L
ABGW 03	03/28/92	METHYLENE CHLORIDE	B	0.00200	MG/L
ABGW 03	03/28/92	ACETONE	B	0.01000	MG/L
ABGW 03	03/28/92	BARIUM	B	0.04100	MG/L
ABGW 03	03/28/92	CALCIUM		12.40000	MG/L
ABGW 03	03/28/92	IRON	B	0.02800	MG/L
ABGW 03	03/28/92	MAGNESIUM		5.78000	MG/L
ABGW 03	03/28/92	POTASSIUM	B	1.02000	MG/L
ABGW 03	03/28/92	SODIUM	B	3.99000	MG/L
ABGW 04	03/28/92	NITRITE NITROGEN		0.00700	MG/L
ABGW 04	03/28/92	NITRATE NITROGEN		0.23600	MG/L
ABGW 04	03/28/92	METHYLENE CHLORIDE	B	0.00300	MG/L
ABGW 04	03/28/92	ACETONE	B	0.00600	MG/L
ABGW 04	03/28/92	BARIUM	B	0.04500	MG/L
ABGW 04	03/28/92	CALCIUM		13.80000	MG/L
ABGW 04	03/28/92	IRON		0.10500	MG/L
ABGW 04	03/28/92	MAGNESIUM		6.04000	MG/L
ABGW 04	03/28/92	POTASSIUM	B	1.02000	MG/L
ABGW 04	03/28/92	SODIUM	B	3.84000	MG/L
ABGW 05	03/28/92	NITRITE NITROGEN		0.01100	MG/L
ABGW 05	03/28/92	NITRATE NITROGEN		0.22600	MG/L
ABGW 05	03/28/92	METHYLENE CHLORIDE	B	0.00500	MG/L
ABGW 05	03/28/92	CHLOROFORM	J	0.00100	MG/L
ABGW 05	03/28/92	ACETONE	B	0.01000	MG/L
ABGW 05	03/28/92	ALUMINUM	B	0.03800	MG/L
ABGW 05	03/28/92	BARIUM	B	0.04600	MG/L
ABGW 05	03/28/92	CALCIUM		12.60000	MG/L
ABGW 05	03/28/92	IRON		0.19600	MG/L
ABGW 05	03/28/92	MAGNESIUM		7.12000	MG/L
ABGW 05	03/28/92	MANGANESE	B	0.00700	MG/L
ABGW 05	03/28/92	POTASSIUM	B	1.37000	MG/L
ABGW 05	03/28/92	SODIUM	B	3.84000	MG/L

ABGW 06	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.00200	MG/L
ABGW 06	03/28/92	NITRATE NITROGEN		0.20700	MG/L
ABGW 06	03/28/92	METHYLENE CHLORIDE	B	0.01000	MG/L
ABGW 06	03/28/92	ACETONE	B	0.00900	MG/L
ABGW 06	03/28/92	ALUMINUM	B	0.02600	MG/L
ABGW 06	03/28/92	BARIUM	B	0.04700	MG/L
ABGW 06	03/28/92	CALCIUM		14.20000	MG/L
ABGW 06	03/28/92	IRON	B	0.09800	MG/L
ABGW 06	03/28/92	MAGNESIUM		6.66000	MG/L
ABGW 06	03/28/92	MANGANESE	B	0.00600	MG/L
ABGW 06	03/28/92	POTASSIUM	B	1.11000	MG/L
ABGW 06	03/28/92	SODIUM	B	3.68000	MG/L
ABGW 07	03/28/92	BIS(2-ETHYLHEXYL)PHTHALATE	J	0.00190	MG/L
ABGW 07	03/28/92	DI-N-OCTYLPHTHALATE	J	0.00090	MG/L
ABGW 07	03/28/92	NITRITE NITROGEN		0.00500	MG/L
ABGW 07	03/28/92	NITRATE NITROGEN		0.03600	MG/L
ABGW 07	03/28/92	METHYLENE CHLORIDE	B	0.01000	MG/L
ABGW 07	03/28/92	ACETONE	B	0.00400	MG/L
ABGW 07	03/28/92	CHROMIUM	B	0.00800	MG/L
ABGW 07	03/28/92	ALUMINUM	B	0.03300	MG/L
ABGW 07	03/28/92	BARIUM	B	0.05100	MG/L
ABGW 07	03/28/92	CALCIUM		14.30000	MG/L
ABGW 07	03/28/92	IRON	B	0.08100	MG/L
ABGW 07	03/28/92	MAGNESIUM		6.44000	MG/L
ABGW 07	03/28/92	MANGANESE	B	0.00500	MG/L
ABGW 07	03/28/92	POTASSIUM	B	1.30000	MG/L
ABGW 07	03/28/92	SODIUM	B	3.66000	MG/L
ABGW 08	03/28/92	METHYLENE CHLORIDE	B	0.01800	MG/L
ABGW 08	03/28/92	ACETONE	B	0.00800	MG/L
ABGW 08	03/28/92	DIBUTYLPHTHALATE	B	0.00060	MG/L
ABGW 08	03/28/92	NITRITE NITROGEN		0.00600	MG/L
ABGW 08	03/28/92	NITRATE NITROGEN		0.02900	MG/L
ABGW 08	03/28/92	CHROMIUM	B	0.00500	MG/L
ABGW 08	03/28/92	BARIUM	B	0.04500	MG/L
ABGW 08	03/28/92	CALCIUM		14.50000	MG/L
ABGW 08	03/28/92	IRON	B	0.05500	MG/L
ABGW 08	03/28/92	MAGNESIUM		6.54000	MG/L
ABGW 08	03/28/92	POTASSIUM	B	1.08000	MG/L
ABGW 08	03/28/92	SODIUM	B	3.87000	MG/L
ABGW 09	03/28/92	METHYLENE CHLORIDE	B	0.01600	MG/L
ABGW 09	03/28/92	ACETONE	B	0.00500	MG/L
ABGW 09	03/28/92	HMX		0.04500	MG/L
ABGW 09	03/28/92	DIBUTYLPHTHALATE	B	0.00060	MG/L
ABGW 09	03/28/92	NITRITE NITROGEN		0.00800	MG/L
ABGW 09	03/28/92	NITRATE NITROGEN		0.10800	MG/L
ABGW 09	03/28/92	BARIUM	B	0.11900	MG/L
ABGW 09	03/28/92	CALCIUM		35.00000	MG/L
ABGW 09	03/28/92	MAGNESIUM		6.21000	MG/L
ABGW 09	03/28/92	POTASSIUM	B	1.14000	MG/L
ABGW 09	03/28/92	SODIUM	B	2.72000	MG/L
ABGW 10	03/28/92	METHYLENE CHLORIDE	B	0.00800	MG/L
ABGW 10	03/28/92	ACETONE	B	0.00500	MG/L
ABGW 10	03/28/92	4-METHYL-2-PENTANONE	J	0.00100	MG/L
ABGW 10	03/28/92	NITRITE NITROGEN		0.01000	MG/L
ABGW 10	03/28/92	NITRATE NITROGEN		0.10100	MG/L
ABGW 10	03/28/92	CHROMIUM		0.01000	MG/L
ABGW 10	03/28/92	ALUMINUM	B	0.04700	MG/L
ABGW 10	03/28/92	BARIUM	B	0.04700	MG/L
ABGW 10	03/28/92	CALCIUM		20.90000	MG/L
ABGW 10	03/28/92	IRON	B	0.06400	MG/L

ABGW 10	03/28/92	MAGNESIUM		5.41000	MG/L
ABGW 10	03/28/92	MANGANESE		0.00800	MG/L
ABGW 10	03/28/92	POTASSIUM	B	1.19000	MG/L
ABGW 10	03/28/92	SODIUM	B	3.28000	MG/L
ABGW 11	03/28/92	METHYLENE CHLORIDE	B	0.00600	MG/L
ABGW 11	03/28/92	ACETONE	B	0.01100	MG/L
ABGW 11	03/28/92	DIBUTYLPHTHALATE	B	0.00060	MG/L
ABGW 11	03/28/92	NITRITE NITROGEN		0.00600	MG/L
ABGW 11	03/28/92	NITRATE NITROGEN		0.02200	MG/L
ABGW 11	03/28/92	CHROMIUM		0.00600	MG/L
ABGW 11	03/28/92	ALUMINUM	B	0.05400	MG/L
ABGW 11	03/28/92	BARIUM	B	0.03400	MG/L
ABGW 11	03/28/92	CALCIUM		22.70000	MG/L
ABGW 11	03/28/92	IRON		0.13600	MG/L
ABGW 11	03/28/92	MAGNESIUM		6.21000	MG/L
ABGW 11	03/28/92	MANGANESE	B	0.01300	MG/L
ABGW 11	03/28/92	POTASSIUM	B	1.15000	MG/L
ABGW 11	03/28/92	SODIUM	B	3.74000	MG/L
ABGWR1	03/28/92	LEAD	B	0.00170	MG/L
ABGWR2	03/28/92	CHROMIUM	B	0.00500	MG/L
ABGWR2	03/28/92	LEAD	B	0.00120	MG/L

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	UNIT
ABGS 01	07/17/92	B-BHC	B	0.00120	MG/KG
ABGS 01	07/17/92	PPDDE	J	0.00100	MG/KG
ABGS 01	07/17/92	HEPTACHLOR	J	0.00120	MG/KG
ABGS 01	07/17/92	A-CHLORDANE	B	0.00160	MG/KG
ABGS 01	07/17/92	G-CHLORDANE	J	0.00066	MG/KG
ABGS 01	07/17/92	2,4,5-TP		0.07000	MG/KG
ABGS 01	07/17/92	METHYLENE CHLORIDE	B	0.00270	MG/KG
ABGS 01	07/17/92	ACETONE	B	0.01300	MG/KG
ABGS 01	07/17/92	ARSENIC		17.50000	MG/KG
ABGS 01	07/17/92	BERYLLIUM		1.50000	MG/KG
ABGS 01	07/17/92	CADMIUM	B	0.14100	MG/KG
ABGS 01	07/17/92	CHROMIUM		33.50000	MG/KG
ABGS 01	07/17/92	COPPER		12.30000	MG/KG
ABGS 01	07/17/92	LEAD		26.10000	MG/KG
ABGS 01	07/17/92	NICKEL		30.70000	MG/KG
ABGS 01	07/17/92	SELENIUM	B	0.41000	MG/KG
ABGS 01	07/17/92	ZINC		81.40000	MG/KG
ABGS 01	07/17/92	ALUMINUM		6590.00000	MG/KG
ABGS 01	07/17/92	BARIUM		86.00000	MG/KG
ABGS 01	07/17/92	CALCIUM		549.00000	MG/KG
ABGS 01	07/17/92	COBALT		33.00000	MG/KG
ABGS 01	07/17/92	IRON		63300.0000	MG/KG
ABGS 01	07/17/92	MAGNESIUM		752.00000	MG/KG
ABGS 01	07/17/92	MANGANESE		1670.00000	MG/KG
ABGS 01	07/17/92	POTASSIUM		821.00000	MG/KG
ABGS 01	07/17/92	SODIUM	B	47.90000	MG/KG
ABGS 01	07/17/92	VANADIUM		32.90000	MG/KG
ABGS 02	07/17/92	NITRATE NITROGEN		12.30000	MG/KG
ABGS 02	07/17/92	B-BHC	B	0.00096	MG/KG
ABGS 02	07/17/92	PPDDE	J	0.00044	MG/KG
ABGS 02	07/17/92	A-CHLORDANE	B	0.00130	MG/KG
ABGS 02	07/17/92	2,4,5-TP		0.07000	MG/KG
ABGS 02	07/17/92	DIBUTYLPHTHALATE	B	0.14000	MG/KG
ABGS 02	07/17/92	METHYLENE CHLORIDE	B	0.00820	MG/KG
ABGS 02	07/17/92	CHLOROFORM	J	0.00490	MG/KG
ABGS 02	07/17/92	ACETONE	B	0.00980	MG/KG
ABGS 02	07/17/92	TNB	J	0.05000	MG/KG
ABGS 02	07/17/92	TNT	J	0.09400	MG/KG
ABGS 02	07/17/92	ARSENIC		5.51000	MG/KG
ABGS 02	07/17/92	BERYLLIUM	B	0.40000	MG/KG
ABGS 02	07/17/92	CADMIUM		1.41000	MG/KG
ABGS 02	07/17/92	CHROMIUM		9.80000	MG/KG
ABGS 02	07/17/92	COPPER		34.20000	MG/KG
ABGS 02	07/17/92	LEAD		38.00000	MG/KG
ABGS 02	07/17/92	NICKEL		12.70000	MG/KG
ABGS 02	07/17/92	ZINC		151.00000	MG/KG
ABGS 02	07/17/92	ALUMINUM		4660.00000	MG/KG
ABGS 02	07/17/92	BARIUM		80.10000	MG/KG
ABGS 02	07/17/92	CALCIUM		6960.00000	MG/KG
ABGS 02	07/17/92	COBALT		7.60000	MG/KG
ABGS 02	07/17/92	IRON		16200.0000	MG/KG
ABGS 02	07/17/92	MAGNESIUM		1380.00000	MG/KG
ABGS 02	07/17/92	MANGANESE		350.00000	MG/KG
ABGS 02	07/17/92	POTASSIUM		828.00000	MG/KG
ABGS 02	07/17/92	SODIUM	B	52.10000	MG/KG
ABGS 02	07/17/92	VANADIUM		11.50000	MG/KG
ABGS 03	07/17/92	NITRATE NITROGEN		17.50000	MG/KG
ABGS 03	07/17/92	PPDDE	J	0.00079	MG/KG

ABGS 03	07/17/92	A-CHLORDANE	B	0.00140	MG/KG
ABGS 03	07/17/92	2,4,5-TP		0.07000	MG/KG
ABGS 03	07/17/92	DINOSEB	J	0.00035	MG/KG
ABGS 03	07/17/92	2,4-DINITROTOLUENE	J	0.55000	MG/KG
ABGS 03	07/17/92	DIBUTYLPHTHALATE	B	0.43000	MG/KG
ABGS 03	07/17/92	METHYLENE CHLORIDE	B	0.00310	MG/KG
ABGS 03	07/17/92	CHLOROFORM		0.01100	MG/KG
ABGS 03	07/17/92	BROMODICHLOROMETHANE	J	0.00090	MG/KG
ABGS 03	07/17/92	HMX	J	1.70000	MG/KG
ABGS 03	07/17/92	RDX	J	0.40500	MG/KG
ABGS 03	07/17/92	TNB	J	0.20000	MG/KG
ABGS 03	07/17/92	TNT		1.02000	MG/KG
ABGS 03	07/17/92	2,4-DNT		0.53000	MG/KG
ABGS 03	07/17/92	ARSENIC		7.87000	MG/KG
ABGS 03	07/17/92	BERYLLIUM		0.50000	MG/KG
ABGS 03	07/17/92	CADMIUM	B	0.43400	MG/KG
ABGS 03	07/17/92	CHROMIUM		16.50000	MG/KG
ABGS 03	07/17/92	COPPER		42.70000	MG/KG
ABGS 03	07/17/92	LEAD		113.00000	MG/KG
ABGS 03	07/17/92	NICKEL		18.90000	MG/KG
ABGS 03	07/17/92	ZINC		127.00000	MG/KG
ABGS 03	07/17/92	ALUMINUM		12000.0000	MG/KG
ABGS 03	07/17/92	BARIUM		384.00000	MG/KG
ABGS 03	07/17/92	CALCIUM		26400.0000	MG/KG
ABGS 03	07/17/92	COBALT		15.40000	MG/KG
ABGS 03	07/17/92	IRON		22800.0000	MG/KG
ABGS 03	07/17/92	MAGNESIUM		4430.00000	MG/KG
ABGS 03	07/17/92	MANGANESE		879.00000	MG/KG
ABGS 03	07/17/92	POTASSIUM		1270.00000	MG/KG
ABGS 03	07/17/92	SODIUM	B	82.70000	MG/KG
ABGS 03	07/17/92	VANADIUM		16.90000	MG/KG
ABGS 04	07/17/92	NITRATE NITROGEN		13.90000	MG/KG
ABGS 04	07/17/92	B-BHC	B	0.00110	MG/KG
ABGS 04	07/17/92	A-CHLORDANE	B	0.00092	MG/KG
ABGS 04	07/17/92	2,4,5-T	J	0.00055	MG/KG
ABGS 04	07/17/92	2,4,5-TP		0.07000	MG/KG
ABGS 04	07/17/92	METHYLENE CHLORIDE	B	0.00480	MG/KG
ABGS 04	07/17/92	CHLOROFORM		0.01100	MG/KG
ABGS 04	07/17/92	BROMODICHLOROMETHANE	J	0.00140	MG/KG
ABGS 04	07/17/92	ACETONE	B	0.00860	MG/KG
ABGS 04	07/17/92	ARSENIC		16.80000	MG/KG
ABGS 04	07/17/92	BERYLLIUM		1.30000	MG/KG
ABGS 04	07/17/92	CADMIUM	B	0.19000	MG/KG
ABGS 04	07/17/92	CHROMIUM		27.40000	MG/KG
ABGS 04	07/17/92	COPPER		10.00000	MG/KG
ABGS 04	07/17/92	LEAD		20.40000	MG/KG
ABGS 04	07/17/92	NICKEL		32.30000	MG/KG
ABGS 04	07/17/92	SELENIUM	B	0.31000	MG/KG
ABGS 04	07/17/92	ZINC		71.90000	MG/KG
ABGS 04	07/17/92	ALUMINUM		4760.00000	MG/KG
ABGS 04	07/17/92	BARIUM		73.00000	MG/KG
ABGS 04	07/17/92	CALCIUM		616.00000	MG/KG
ABGS 04	07/17/92	COBALT		22.90000	MG/KG
ABGS 04	07/17/92	IRON		58100.0000	MG/KG
ABGS 04	07/17/92	MAGNESIUM	B	394.00000	MG/KG
ABGS 04	07/17/92	MANGANESE		1400.00000	MG/KG
ABGS 04	07/17/92	POTASSIUM		628.00000	MG/KG
ABGS 04	07/17/92	SODIUM	B	39.30000	MG/KG
ABGS 04	07/17/92	VANADIUM		28.40000	MG/KG
ABGS 05	07/17/92	NITRATE NITROGEN		17.00000	MG/KG

ABGS 05	07/17/92	PPDDE	J	0.00035	MG/KG
ABGS 05	07/17/92	PPDDT	J	0.00190	MG/KG
ABGS 05	07/17/92	HEPTACHLOR	B	0.00160	MG/KG
ABGS 05	07/17/92	DIELDRIN	B	0.00530	MG/KG
ABGS 05	07/17/92	A-CHLORDANE	B	0.00057	MG/KG
ABGS 05	07/17/92	2,4,5-TP		0.07000	MG/KG
ABGS 05	07/17/92	DIBUTYLPHTHALATE	B	0.15000	MG/KG
ABGS 05	07/17/92	METHYLENE CHLORIDE	B	0.00520	MG/KG
ABGS 05	07/17/92	CHLOROFORM		0.00590	MG/KG
ABGS 05	07/17/92	ACETONE	B	0.00770	MG/KG
ABGS 05	07/17/92	ARSENIC		19.90000	MG/KG
ABGS 05	07/17/92	BERYLLIUM		1.60000	MG/KG
ABGS 05	07/17/92	CADMIUM	B	0.20800	MG/KG
ABGS 05	07/17/92	CHROMIUM		33.10000	MG/KG
ABGS 05	07/17/92	COPPER		12.90000	MG/KG
ABGS 05	07/17/92	LEAD		33.50000	MG/KG
ABGS 05	07/17/92	NICKEL		44.80000	MG/KG
ABGS 05	07/17/92	SELENIUM	B	0.47000	MG/KG
ABGS 05	07/17/92	ZINC		92.20000	MG/KG
ABGS 05	07/17/92	ALUMINUM		5060.00000	MG/KG
ABGS 05	07/17/92	BARIUM		89.90000	MG/KG
ABGS 05	07/17/92	CALCIUM		554.00000	MG/KG
ABGS 05	07/17/92	COBALT		37.00000	MG/KG
ABGS 05	07/17/92	IRON		61100.0000	MG/KG
ABGS 05	07/17/92	MAGNESIUM	B	392.00000	MG/KG
ABGS 05	07/17/92	MANGANESE		2140.00000	MG/KG
ABGS 05	07/17/92	POTASSIUM		592.00000	MG/KG
ABGS 05	07/17/92	SODIUM	B	39.80000	MG/KG
ABGS 05	07/17/92	VANADIUM		36.70000	MG/KG
ABGS 06	07/17/92	NITRITE NITROGEN		1.02000	MG/KG
ABGS 06	07/17/92	NITRATE NITROGEN		14.70000	MG/KG
ABGS 06	07/17/92	A-BHC	J	0.00220	MG/KG
ABGS 06	07/17/92	PPDDE	J	0.00074	MG/KG
ABGS 06	07/17/92	HEPTACHLOR	B	0.00360	MG/KG
ABGS 06	07/17/92	A-CHLORDANE	B	0.00042	MG/KG
ABGS 06	07/17/92	2,4,5-TP		0.07000	MG/KG
ABGS 06	07/17/92	DIBUTYLPHTHALATE	B	0.48000	MG/KG
ABGS 06	07/17/92	METHYLENE CHLORIDE	B	0.01500	MG/KG
ABGS 06	07/17/92	ACETONE	B	0.00770	MG/KG
ABGS 06	07/17/92	2-BUTANONE	J	0.00220	MG/KG
ABGS 06	07/17/92	T-XYLENE		0.00110	MG/KG
ABGS 06	07/17/92	HMX	J	1.24000	MG/KG
ABGS 06	07/17/92	RDX		1.78000	MG/KG
ABGS 06	07/17/92	TNT	J	0.14000	MG/KG
ABGS 06	07/17/92	2,4-DNT	J	0.10500	MG/KG
ABGS 06	07/17/92	ARSENIC		12.00000	MG/KG
ABGS 06	07/17/92	BERYLLIUM		0.70000	MG/KG
ABGS 06	07/17/92	CADMIUM		1.31000	MG/KG
ABGS 06	07/17/92	CHROMIUM		18.40000	MG/KG
ABGS 06	07/17/92	COPPER		53.60000	MG/KG
ABGS 06	07/17/92	LEAD		75.50000	MG/KG
ABGS 06	07/17/92	NICKEL		19.00000	MG/KG
ABGS 06	07/17/92	ZINC		196.00000	MG/KG
ABGS 06	07/17/92	ALUMINUM		7590.00000	MG/KG
ABGS 06	07/17/92	BARIUM		273.00000	MG/KG
ABGS 06	07/17/92	CALCIUM		8310.00000	MG/KG
ABGS 06	07/17/92	COBALT		15.10000	MG/KG
ABGS 06	07/17/92	IRON		30500.0000	MG/KG
ABGS 06	07/17/92	MAGNESIUM		1800.00000	MG/KG
ABGS 06	07/17/92	MANGANESE		1040.00000	MG/KG

ABGS 06	07/17/92	POTASSIUM		898.00000	MG/KG
ABGS 06	07/17/92	SODIUM	B	50.40000	MG/KG
ABGS 06	07/17/92	VANADIUM		18.70000	MG/KG
ABGS 07	07/17/92	NITRATE NITROGEN		15.90000	MG/KG
ABGS 07	07/17/92	A-BHC		0.00410	MG/KG
ABGS 07	07/17/92	D-BHC	J	0.00093	MG/KG
ABGS 07	07/17/92	PPDDD	B	0.00320	MG/KG
ABGS 07	07/17/92	PPDDE	J	0.00150	MG/KG
ABGS 07	07/17/92	PPDDT	J	0.00210	MG/KG
ABGS 07	07/17/92	HEPTACHLOR	B	0.00280	MG/KG
ABGS 07	07/17/92	ENDOSULFAN SULFATE	J	0.00960	MG/KG
ABGS 07	07/17/92	ENDRIN	J	0.00065	MG/KG
ABGS 07	07/17/92	A-CHLORDANE	B	0.00120	MG/KG
ABGS 07	07/17/92	2,4,5-TP	B	0.00530	MG/KG
ABGS 07	07/17/92	METHYLENE CHLORIDE	B	0.00420	MG/KG
ABGS 07	07/17/92	CHLOROFORM		0.01500	MG/KG
ABGS 07	07/17/92	BROMODICHLOROMETHANE	J	0.00260	MG/KG
ABGS 07	07/17/92	HMX	J	0.25000	MG/KG
ABGS 07	07/17/92	TNB	J	0.07000	MG/KG
ABGS 07	07/17/92	TNT	J	0.07000	MG/KG
ABGS 07	07/17/92	ARSENIC		14.30000	MG/KG
ABGS 07	07/17/92	BERYLLIUM		0.50000	MG/KG
ABGS 07	07/17/92	CADMIUM		0.91100	MG/KG
ABGS 07	07/17/92	CHROMIUM		11.00000	MG/KG
ABGS 07	07/17/92	COPPER		36.70000	MG/KG
ABGS 07	07/17/92	LEAD		44.60000	MG/KG
ABGS 07	07/17/92	NICKEL		14.10000	MG/KG
ABGS 07	07/17/92	ZINC		133.00000	MG/KG
ABGS 07	07/17/92	ALUMINUM		6450.00000	MG/KG
ABGS 07	07/17/92	BARIUM		147.00000	MG/KG
ABGS 07	07/17/92	CALCIUM		6340.00000	MG/KG
ABGS 07	07/17/92	COBALT		10.10000	MG/KG
ABGS 07	07/17/92	IRON		14800.0000	MG/KG
ABGS 07	07/17/92	MAGNESIUM		1540.00000	MG/KG
ABGS 07	07/17/92	MANGANESE		560.00000	MG/KG
ABGS 07	07/17/92	POTASSIUM		1070.00000	MG/KG
ABGS 07	07/17/92	SODIUM	B	56.40000	MG/KG
ABGS 07	07/17/92	VANADIUM		14.30000	MG/KG
ABGS 08	07/17/92	NITRATE NITROGEN		21.10000	MG/KG
ABGS 08	07/17/92	A-BHC		0.00290	MG/KG
ABGS 08	07/17/92	PPDDE	J	0.00230	MG/KG
ABGS 08	07/17/92	PPDDT	J	0.00270	MG/KG
ABGS 08	07/17/92	HEPTACHLOR	B	0.00400	MG/KG
ABGS 08	07/17/92	DIELDRIN	B	0.00031	MG/KG
ABGS 08	07/17/92	PCB-1254	J	0.04600	MG/KG
ABGS 08	07/17/92	A-CHLORDANE	B	0.00130	MG/KG
ABGS 08	07/17/92	2,4,5-TP	B	0.00460	MG/KG
ABGS 08	07/17/92	DIBUTYLPHTHALATE	B	0.82000	MG/KG
ABGS 08	07/17/92	METHYLENE CHLORIDE	B	0.00860	MG/KG
ABGS 08	07/17/92	CHLOROFORM		0.03100	MG/KG
ABGS 08	07/17/92	BROMODICHLOROMETHANE	J.	0.00620	MG/KG
ABGS 08	07/17/92	DIBROMOCHLOROMETHANE	J	0.00210	MG/KG
ABGS 08	07/17/92	ACETONE	B	0.00660	MG/KG
ABGS 08	07/17/92	HMX	J	0.85000	MG/KG
ABGS 08	07/17/92	TNT		0.99500	MG/KG
ABGS 08	07/17/92	ARSENIC		8.69000	MG/KG
ABGS 08	07/17/92	BERYLLIUM		0.50000	MG/KG
ABGS 08	07/17/92	CADMIUM		0.75000	MG/KG
ABGS 08	07/17/92	CHROMIUM		10.70000	MG/KG
ABGS 08	07/17/92	COPPER		36.30000	MG/KG

ABGS 08	07/17/92	LEAD		39.90000	MG/KG
ABGS 08	07/17/92	NICKEL		13.00000	MG/KG
ABGS 08	07/17/92	ZINC		123.00000	MG/KG
ABGS 08	07/17/92	ALUMINUM		5330.00000	MG/KG
ABGS 08	07/17/92	BARIUM		138.00000	MG/KG
ABGS 08	07/17/92	CALCIUM		5970.00000	MG/KG
ABGS 08	07/17/92	COBALT		8.79000	MG/KG
ABGS 08	07/17/92	IRON		15000.0000	MG/KG
ABGS 08	07/17/92	MAGNESIUM		1360.00000	MG/KG
ABGS 08	07/17/92	MANGANESE		525.00000	MG/KG
ABGS 08	07/17/92	POTASSIUM		986.00000	MG/KG
ABGS 08	07/17/92	SODIUM	B	57.70000	MG/KG
ABGS 08	07/17/92	VANADIUM		12.70000	MG/KG
ABGS 09	07/17/92	NITRATE NITROGEN		21.40000	MG/KG
ABGS 09	07/17/92	PPDDE	J	0.00041	MG/KG
ABGS 09	07/17/92	HEPTACHLOR	B	0.00240	MG/KG
ABGS 09	07/17/92	2,4,5-TP	B	0.00630	MG/KG
ABGS 09	07/17/92	DIBUTYLPHTHALATE	J	0.11000	MG/KG
ABGS 09	07/17/92	METHYLENE CHLORIDE	B	0.00630	MG/KG
ABGS 09	07/17/92	CHLOROFORM		0.03900	MG/KG
ABGS 09	07/17/92	BROMODICHLOROMETHANE	J	0.00730	MG/KG
ABGS 09	07/17/92	DIBROMOCHLOROMETHANE	J	0.00210	MG/KG
ABGS 09	07/17/92	HMX	J	0.17000	MG/KG
ABGS 09	07/17/92	TNB	J	0.08500	MG/KG
ABGS 09	07/17/92	TNT		0.79500	MG/KG
ABGS 09	07/17/92	CYANIDE	B	0.33600	MG/KG
ABGS 09	07/17/92	ARSENIC		20.50000	MG/KG
ABGS 09	07/17/92	BERYLLIUM		1.10000	MG/KG
ABGS 09	07/17/92	CADMIUM		1.18000	MG/KG
ABGS 09	07/17/92	CHROMIUM		34.20000	MG/KG
ABGS 09	07/17/92	COPPER		60.50000	MG/KG
ABGS 09	07/17/92	LEAD		76.20000	MG/KG
ABGS 09	07/17/92	NICKEL		28.80000	MG/KG
ABGS 09	07/17/92	ZINC		216.00000	MG/KG
ABGS 09	07/17/92	ALUMINUM		12300.0000	MG/KG
ABGS 09	07/17/92	BARIUM		324.00000	MG/KG
ABGS 09	07/17/92	CALCIUM		3060.00000	MG/KG
ABGS 09	07/17/92	COBALT		23.40000	MG/KG
ABGS 09	07/17/92	IRON		46100.0000	MG/KG
ABGS 09	07/17/92	MAGNESIUM		919.00000	MG/KG
ABGS 09	07/17/92	MANGANESE		1570.00000	MG/KG
ABGS 09	07/17/92	POTASSIUM		652.00000	MG/KG
ABGS 09	07/17/92	SODIUM	B	63.80000	MG/KG
ABGS 09	07/17/92	VANADIUM		32.80000	MG/KG
ABGS 10	07/17/92	NITRATE NITROGEN		13.10000	MG/KG
ABGS 10	07/17/92	A-BHC		0.00390	MG/KG
ABGS 10	07/17/92	HEPTACHLOR	B	0.00550	MG/KG
ABGS 10	07/17/92	2,4,5-TP	B	0.00600	MG/KG
ABGS 10	07/17/92	CHLOROFORM	J	0.00510	MG/KG
ABGS 10	07/17/92	HMX	J	0.14500	MG/KG
ABGS 10	07/17/92	TNB	J	0.08500	MG/KG
ABGS 10	07/17/92	TNT		0.67500	MG/KG
ABGS 10	07/17/92	CYANIDE	B	0.29200	MG/KG
ABGS 10	07/17/92	ARSENIC		19.30000	MG/KG
ABGS 10	07/17/92	BERYLLIUM		1.10000	MG/KG
ABGS 10	07/17/92	CADMIUM		0.96000	MG/KG
ABGS 10	07/17/92	CHROMIUM		34.30000	MG/KG
ABGS 10	07/17/92	COPPER		58.90000	MG/KG
ABGS 10	07/17/92	LEAD		85.00000	MG/KG
ABGS 10	07/17/92	NICKEL		26.00000	MG/KG

ABGS 10	07/17/92	SELENIUM	B	0.23000	MG/KG
ABGS 10	07/17/92	ZINC		273.00000	MG/KG
ABGS 10	07/17/92	ALUMINUM		11200.0000	MG/KG
ABGS 10	07/17/92	BARIUM		320.00000	MG/KG
ABGS 10	07/17/92	CALCIUM		2890.00000	MG/KG
ABGS 10	07/17/92	COBALT		20.80000	MG/KG
ABGS 10	07/17/92	IRON		46300.0000	MG/KG
ABGS 10	07/17/92	MAGNESIUM		848.00000	MG/KG
ABGS 10	07/17/92	MANGANESE		1490.00000	MG/KG
ABGS 10	07/17/92	POTASSIUM		654.00000	MG/KG
ABGS 10	07/17/92	SODIUM	B	53.30000	MG/KG
ABGS 10	07/17/92	VANADIUM		31.50000	MG/KG
ABGS 11	07/17/92	NITRATE NITROGEN		17.50000	MG/KG
ABGS 11	07/17/92	A-BHC		0.00440	MG/KG
ABGS 11	07/17/92	HEPTACHLOR	B	0.00260	MG/KG
ABGS 11	07/17/92	A-CHLORDANE	B	0.00067	MG/KG
ABGS 11	07/17/92	2,4,5-TP	B	0.00770	MG/KG
ABGS 11	07/17/92	2,4-DINITROTOLUENE		2.30000	MG/KG
ABGS 11	07/17/92	N-NITROSODIPHENYL AMINE	J	0.34000	MG/KG
ABGS 11	07/17/92	DIBUTYLPHTHALATE	J	0.07400	MG/KG
ABGS 11	07/17/92	METHYLENE CHLORIDE	B	0.00320	MG/KG
ABGS 11	07/17/92	CHLOROFORM		0.03500	MG/KG
ABGS 11	07/17/92	BROMODICHLOROMETHANE		0.00650	MG/KG
ABGS 11	07/17/92	TNT	J	0.18000	MG/KG
ABGS 11	07/17/92	ARSENIC		27.40000	MG/KG
ABGS 11	07/17/92	BERYLLIUM		1.50000	MG/KG
ABGS 11	07/17/92	CADMIUM	B	0.49900	MG/KG
ABGS 11	07/17/92	CHROMIUM		45.70000	MG/KG
ABGS 11	07/17/92	COPPER		22.50000	MG/KG
ABGS 11	07/17/92	LEAD		30.50000	MG/KG
ABGS 11	07/17/92	NICKEL		52.30000	MG/KG
ABGS 11	07/17/92	ZINC		142.00000	MG/KG
ABGS 11	07/17/92	ALUMINUM		6550.00000	MG/KG
ABGS 11	07/17/92	BARIUM		324.00000	MG/KG
ABGS 11	07/17/92	CALCIUM		716.00000	MG/KG
ABGS 11	07/17/92	COBALT		35.50000	MG/KG
ABGS 11	07/17/92	IRON		80700.0000	MG/KG
ABGS 11	07/17/92	MAGNESIUM	B	352.00000	MG/KG
ABGS 11	07/17/92	MANGANESE		3080.00000	MG/KG
ABGS 11	07/17/92	POTASSIUM		515.00000	MG/KG
ABGS 11	07/17/92	SODIUM	B	39.30000	MG/KG
ABGS 11	07/17/92	VANADIUM		42.00000	MG/KG

WELLNUMBER	DATESAMPLE	PARAMETER	VALUE_A	AMTDET_A	UNIT
ABGW 01	07/17/92	SULFIDE		0.02100	
ABGW 01	07/17/92	METHYLENE CHLORIDE	B	0.00080	MG/L
ABGW 01	07/17/92	ACETONE	B	0.00140	MG/L
ABGW 01	07/17/92	A-CHLORDANE	B	0.00001	MG/L
ABGW 01	07/17/92	NITRATE NITROGEN		0.13900	MG/L
ABGW 01	07/17/92	ALUMINUM	B	0.03200	MG/L
ABGW 01	07/17/92	BARIUM	B	0.04500	MG/L
ABGW 01	07/17/92	CALCIUM		6.30000	MG/L
ABGW 01	07/17/92	MAGNESIUM	B	3.50000	MG/L
ABGW 01	07/17/92	MANGANESE	B	0.00500	MG/L
ABGW 01	07/17/92	POTASSIUM	B	1.46000	MG/L
ABGW 01	07/17/92	SODIUM	B	2.25000	MG/L
ABGW 02	07/17/92	METHYLENE CHLORIDE	B	0.00030	MG/L
ABGW 02	07/17/92	NITRATE NITROGEN		0.17200	MG/L
ABGW 02	07/17/92	ALUMINUM	B	0.07500	MG/L
ABGW 02	07/17/92	BARIUM	B	0.04600	MG/L
ABGW 02	07/17/92	CALCIUM		9.62000	MG/L
ABGW 02	07/17/92	COBALT	B	0.02300	MG/L
ABGW 02	07/17/92	IRON		0.15700	MG/L
ABGW 02	07/17/92	MAGNESIUM	B	4.40000	MG/L
ABGW 02	07/17/92	MANGANESE		0.02300	MG/L
ABGW 02	07/17/92	POTASSIUM	B	1.60000	MG/L
ABGW 02	07/17/92	SODIUM	B	2.24000	MG/L
ABGW 03	07/17/92	SULFIDE		0.03700	
ABGW 03	07/17/92	METHYLENE CHLORIDE	B	0.00120	MG/L
ABGW 03	07/17/92	ACETONE	B	0.00270	MG/L
ABGW 03	07/17/92	NITRATE NITROGEN		0.10400	MG/L
ABGW 03	07/17/92	ALUMINUM	B	0.10200	MG/L
ABGW 03	07/17/92	BARIUM	B	0.05300	MG/L
ABGW 03	07/17/92	CALCIUM		12.20000	MG/L
ABGW 03	07/17/92	COBALT	B	0.02700	MG/L
ABGW 03	07/17/92	IRON		0.10800	MG/L
ABGW 03	07/17/92	MAGNESIUM	B	4.31000	MG/L
ABGW 03	07/17/92	MANGANESE		0.01600	MG/L
ABGW 03	07/17/92	POTASSIUM	B	1.33000	MG/L
ABGW 03	07/17/92	SODIUM	B	3.61000	MG/L
ABGW 04	07/17/92	SULFIDE		0.02700	
ABGW 04	07/17/92	METHYLENE CHLORIDE	B	0.00120	MG/L
ABGW 04	07/17/92	ACETONE	B	0.00300	MG/L
ABGW 04	07/17/92	A-CHLORDANE	B	0.00002	MG/L
ABGW 04	07/17/92	NITRATE NITROGEN		0.06400	MG/L
ABGW 04	07/17/92	ALUMINUM	B	0.07200	MG/L
ABGW 04	07/17/92	BARIUM	B	0.04800	MG/L
ABGW 04	07/17/92	CALCIUM		11.30000	MG/L
ABGW 04	07/17/92	IRON	B	0.08400	MG/L
ABGW 04	07/17/92	MAGNESIUM	B	4.17000	MG/L
ABGW 04	07/17/92	MANGANESE	B	0.01400	MG/L
ABGW 04	07/17/92	POTASSIUM	B	1.20000	MG/L
ABGW 04	07/17/92	SODIUM	B	3.66000	MG/L
ABGW 05	07/17/92	SULFIDE		0.03600	
ABGW 05	07/17/92	METHYLENE CHLORIDE	B	0.00100	MG/L
ABGW 05	07/17/92	ACETONE	B	0.00240	MG/L
ABGW 05	07/17/92	B-BHC	B	0.00001	MG/L
ABGW 05	07/17/92	A-CHLORDANE	B	0.00002	MG/L
ABGW 05	07/17/92	NITRATE NITROGEN		0.06200	MG/L
ABGW 05	07/17/92	ALUMINUM	B	0.07100	MG/L
ABGW 05	07/17/92	BARIUM	B	0.04500	MG/L
ABGW 05	07/17/92	CALCIUM		11.40000	MG/L

ABGW 05	07/17/92	IRON		0.08200	MG/L
ABGW 05	07/17/92	MAGNESIUM	B	4.04000	MG/L
ABGW 05	07/17/92	MANGANESE	B	0.01800	MG/L
ABGW 05	07/17/92	POTASSIUM		1.21000	MG/L
ABGW 05	07/17/92	SODIUM	B	3.60000	MG/L
ABGW 06	07/17/92	SULFIDE	B	0.03600	
ABGW 06	07/17/92	METHYLENE CHLORIDE		0.00100	MG/L
ABGW 06	07/17/92	B-BHC	B	0.00002	MG/L
ABGW 06	07/17/92	HEPTACHLOR	B	0.00001	MG/L
ABGW 06	07/17/92	A-CHLORDANE	B	0.00002	MG/L
ABGW 06	07/17/92	BIS(2-ETHYLHEXYL)PHTHALATE	B	0.01300	MG/L
ABGW 06	07/17/92	NITRATE NITROGEN		0.10900	MG/L
ABGW 06	07/17/92	ALUMINUM		0.07300	MG/L
ABGW 06	07/17/92	BARIUM	B	0.05500	MG/L
ABGW 06	07/17/92	CALCIUM	B	11.90000	MG/L
ABGW 06	07/17/92	IRON		0.09600	MG/L
ABGW 06	07/17/92	MAGNESIUM	B	4.45000	MG/L
ABGW 06	07/17/92	MANGANESE	B	0.01900	MG/L
ABGW 06	07/17/92	POTASSIUM		1.43000	MG/L
ABGW 06	07/17/92	SODIUM	B	3.25000	MG/L
ABGW 07	07/17/92	SULFIDE	B	0.05300	
ABGW 07	07/17/92	HMX		0.03500	MG/L
ABGW 07	07/17/92	RDX		0.03700	MG/L
ABGW 07	07/17/92	2,4-DNT		0.00900	MG/L
ABGW 07	07/17/92	METHYLENE CHLORIDE	J	0.00120	MG/L
ABGW 07	07/17/92	B-BHC	B	0.00003	MG/L
ABGW 07	07/17/92	A-CHLORDANE	B	0.00001	MG/L
ABGW 07	07/17/92	NITRATE NITROGEN	B	1.09000	MG/L
ABGW 07	07/17/92	CADMIUM		0.00033	MG/L
ABGW 07	07/17/92	COPPER	B	0.01200	MG/L
ABGW 07	07/17/92	LEAD	B	0.03400	MG/L
ABGW 07	07/17/92	ZINC		0.12400	MG/L
ABGW 07	07/17/92	ALUMINUM		0.77700	MG/L
ABGW 07	07/17/92	BARIUM		0.12400	MG/L
ABGW 07	07/17/92	CALCIUM	B	27.60000	MG/L
ABGW 07	07/17/92	IRON		0.77400	MG/L
ABGW 07	07/17/92	MAGNESIUM		6.73000	MG/L
ABGW 07	07/17/92	MANGANESE		0.13300	MG/L
ABGW 07	07/17/92	POTASSIUM		4.07000	MG/L
ABGW 07	07/17/92	SODIUM	B	4.87000	MG/L
ABGW 08	07/17/92	SULFIDE	B	0.03800	
ABGW 08	07/17/92	HMX		0.02500	MG/L
ABGW 08	07/17/92	RDX		0.02400	MG/L
ABGW 08	07/17/92	2,4-DNT		0.00400	MG/L
ABGW 08	07/17/92	METHYLENE CHLORIDE	J	0.00300	MG/L
ABGW 08	07/17/92	ACETONE	B	0.00270	MG/L
ABGW 08	07/17/92	A-CHLORDANE	B	0.00004	MG/L
ABGW 08	07/17/92	NITRATE NITROGEN	B	0.49200	MG/L
ABGW 08	07/17/92	LEAD		0.01580	MG/L
ABGW 08	07/17/92	ZINC		0.06500	MG/L
ABGW 08	07/17/92	ALUMINUM		0.44700	MG/L
ABGW 08	07/17/92	BARIUM		0.09100	MG/L
ABGW 08	07/17/92	CALCIUM	B	22.70000	MG/L
ABGW 08	07/17/92	IRON		0.44100	MG/L
ABGW 08	07/17/92	MAGNESIUM		5.89000	MG/L
ABGW 08	07/17/92	MANGANESE		0.07600	MG/L
ABGW 08	07/17/92	POTASSIUM		2.62000	MG/L
ABGW 08	07/17/92	SODIUM	B	4.32000	MG/L
ABGW 09	07/17/92	SULFIDE	B	0.03200	
ABGW 09	07/17/92	METHYLENE CHLORIDE	B	0.00190	MG/L

ABGW 09	07/17/92	ACETONE	B	0.00150	MG/L
ABGW 09	07/17/92	HEPTACHLOR	B	0.00002	MG/L
ABGW 09	07/17/92	A-CHLORDANE	B	0.00002	MG/L
ABGW 09	07/17/92	NITRATE NITROGEN		0.08200	MG/L
ABGW 09	07/17/92	LEAD	B	0.00190	MG/L
ABGW 09	07/17/92	ALUMINUM	B	0.16800	MG/L
ABGW 09	07/17/92	BARIUM	B	0.07000	MG/L
ABGW 09	07/17/92	CALCIUM		17.70000	MG/L
ABGW 09	07/17/92	IRON		0.17400	MG/L
ABGW 09	07/17/92	MAGNESIUM	B	4.64000	MG/L
ABGW 09	07/17/92	MANGANESE		0.01600	MG/L
ABGW 09	07/17/92	POTASSIUM	B	1.55000	MG/L
ABGW 09	07/17/92	SODIUM	B	3.31000	MG/L
ABGW 10	07/17/92	SULFIDE		0.05700	
ABGW 10	07/17/92	METHYLENE CHLORIDE	B	0.00170	MG/L
ABGW 10	07/17/92	A-CHLORDANE	B	0.00002	MG/L
ABGW 10	07/17/92	NITRATE NITROGEN		0.11600	MG/L
ABGW 10	07/17/92	LEAD	B	0.00120	MG/L
ABGW 10	07/17/92	ALUMINUM	B	0.14800	MG/L
ABGW 10	07/17/92	BARIUM	B	0.05900	MG/L
ABGW 10	07/17/92	CALCIUM		20.70000	MG/L
ABGW 10	07/17/92	IRON		0.15700	MG/L
ABGW 10	07/17/92	MAGNESIUM	B	4.17000	MG/L
ABGW 10	07/17/92	MANGANESE		0.01700	MG/L
ABGW 10	07/17/92	POTASSIUM	B	1.58000	MG/L
ABGW 10	07/17/92	SODIUM	B	2.37000	MG/L
ABGW 11	07/17/92	SULFIDE		0.07100	
ABGW 11	07/17/92	HMX	J	0.01400	MG/L
ABGW 11	07/17/92	METHYLENE CHLORIDE	B	0.00060	MG/L
ABGW 11	07/17/92	A-CHLORDANE	B	0.00001	MG/L
ABGW 11	07/17/92	NITRATE NITROGEN		0.12200	MG/L
ABGW 11	07/17/92	LEAD	B	0.00110	MG/L
ABGW 11	07/17/92	ALUMINUM	B	0.13300	MG/L
ABGW 11	07/17/92	BARIUM	B	0.06800	MG/L
ABGW 11	07/17/92	CALCIUM		22.70000	MG/L
ABGW 11	07/17/92	IRON		0.13800	MG/L
ABGW 11	07/17/92	MAGNESIUM	B	4.52000	MG/L
ABGW 11	07/17/92	MANGANESE		0.01900	MG/L
ABGW 11	07/17/92	POTASSIUM	B	1.63000	MG/L
ABGW 11	07/17/92	SODIUM	B	2.45000	MG/L

IN5 170 023 498

Appendix B
Results of Analysis of Surface Water and Sediment Samples, Round 1 (March 1992)

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 28, 1992 (ROUND 1) Lab Sample ID: 19316 - 19320

1) Analysis: BNA Date Extracted/Digested: 4/2/92

2) Analysis: Water Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

RK

JOB FILE: 19316 DATE: 13 APR 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9:

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	234	235	236	237	238	239
PPM.....	PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH

SAMP #	DESCRIPTION									ROW
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		1
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		2
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		3
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		4
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		5
	3/28/92	%REC	19.0	55.5				79.5		
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		6
	(19316-19320)	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		240	241	242	243	244	245
	PPM.....		246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC
SAMP #	DESCRIPTION							
19316	ABGR2	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19317	ABG 8	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19318	ABG 9	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19319	ABG 10	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19320	ABG 11	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	3/28/92	%REC			44.9		118.5	
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
BL#01	SVBLK01	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	(19316-19320)	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 19316

DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 01 MAY 9

		COLUMN.....	13	14	15	16	17	18	
		ANALYTE.....	246	247	248	249	250	251	
		PPM.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION								RO
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	21.2%	11.2%	
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	21.6%	12.2%	2
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	21.5%	12.2%	3
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	29.7%	16.7%	4
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	22.9%	12.3%	5
	3/28/92	%REC					32.4	18.8	
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	30.8%	16.8%	6
	(19316-19320)	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (21-100))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (10-94))

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	252	263	264	265	266	267	
	PPM.....	246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR	
SAMP #	DESCRIPTION							RO
19316	ABGR2	CONC 53.9%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19317	ABG 8	CONC 56.2%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19318	ABG 9	CONC 44.4%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19319	ABG 10	CONC 63.9%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19320	ABG 11	CONC 57.9%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
	3/28/92	%REC 94.7			58.6			
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
BL#01	SVBLK01	CONC 52.2%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
	(19316-19320)	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	

246TBP-S 2,4,6-Tribromophenol(Surrogate (10-123))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 19316 DATE: 13 APR 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9:

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		268	269	270	271	272	273
	PPM.....		BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ
SAMP #	DESCRIPTION							ROL
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	1
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	2
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	3
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	4
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	5
	3/28/92	%REC			129.0			
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	6
	(19316-19320)	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		284	285	286	287	288	289
	PPM.....		BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB
SAMP #	DESCRIPTION							RO
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC			53.8			56.1
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	(19316-19320)	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 19316 DATE: 13 APR 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9:

		COLUMN.....	37	38	39	40	41	42	
		ANALYTE.....	290	291	292	293	294	295	
		PPM.....	NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION								RO
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
	3/28/92	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
	(19316-19320)	%REC							
		DUPL							
		OID	08952097	08952097	08952097	08952097	08952097	08952097	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

	COLUMN.....		43	44	45	46	47	48
	ANALYTE.....		296	297	298	299	300	301
	PPM.....		ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET
SAMP #	DESCRIPTION							RO
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC	79.9					
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	(19316-19320)	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9.

	COLUMN.....		49	50	51	52	53	54
	ANALYTE.....		302	303	304	305	306	307
	PPM.....		HCLBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE
SAMP #	DESCRIPTION							RO
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	0.0006 BJ	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	0.0006 BJ	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	0.0006 BJ	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/28/92	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	0.0006 BJ	<0.010 U	<0.010 U
	3/28/92	%REC						115.0
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	0.0011 J	<0.010 U	<0.010 U
	(19316-19320)	%REC						
		DUPL						
		OID	08952097	08952097	08952097	08952097	08952097	08952097

HCLBEN	Hexachlorobenzene	PHENAN	Phenanthrene
ANTRAC	Anthracene	DBuPHTH	Dibutylphthalate
FLANTHE	Fluoranthene	PYRENE	Pyrene

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

			COLUMN.....	55	56	57	58	59	60	
			ANALYTE.....	308	309	310	311	312	313	
			PPM.....	BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT	
SAMP #	DESCRIPTION									RO
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U		1
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U		2
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U		3
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U		4
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U		5
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U		6
	(19316-19320)	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

COLUMN.....	61	62	63	64	65	66
ANALYTE.....	314	315	316	317	318	319
PPM.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE

SAMP #	DESCRIPTION									RO
19316	ABGR2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		1
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19317	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		2
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19318	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		3
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19319	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		4
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
19320	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		5
	3/28/92	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U		6
	(19316-19320)	%REC								
		DUPL								
		OID	08952097	08952097	08952097	08952097	08952097	08952097		

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 19316 DATE: 13 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

	COLUMN.....	67	68	69	70	71	72	
	ANALYTE.....	320	321	322	323	324	325	
	PPM.....	4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL	
SAMP #	DESCRIPTION							RO
19316	ABGR2	CONC <0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U	1
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19317	ABG 8	CONC <0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U	2
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19318	ABG 9	CONC <0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U	3
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19319	ABG 10	CONC <0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U	4
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
19320	ABG 11	CONC <0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U	5
	3/28/92	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	
BL#01	SVBLK01	CONC <0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U	6
	(19316-19320)	%REC						
		DUPL						
		OID 08952097	08952097	08952097	08952097	08952097	08952097	

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 19316

DATE: 13 APR 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 13) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2GD82E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 31 MAR 9:
EST. COMP. DATE: 01 MAY 9:

COLUMN.....		73	74	75
ANALYTE.....		326	327	328
PPM.....		NB-D5-S	2FLBP-S	PTERP-S
SAMP #	DESCRIPTION			
19316	ABGR2	CONC 39.4%	40.8%	83.4%
	3/28/92	%REC		
		DUPL		
		OID 08952097	08952097	08952097
19317	ABG 8	CONC 37.2%	37.1%	84.1%
	3/28/92	%REC		
		DUPL		
		OID 08952097	08952097	08952097
19318	ABG 9	CONC 35.1%	33.5%	69.0%
	3/28/92	%REC		
		DUPL		
		OID 08952097	08952097	08952097
19319	ABG 10	CONC 45.4%	47.7%	102%
	3/28/92	%REC		
		DUPL		
		OID 08952097	08952097	08952097
19320	ABG 11	CONC 42.5%	46.8%	101%
	3/28/92	%REC 56.6	64.8	124
		DUPL		
		OID 08952097	08952097	08952097
BL#01	SVBLK01	CONC 48.6%	47.2%	104%
	(19316-19320)	%REC		
		DUPL		
		OID 08952097	08952097	08952097

NB-D5-S Nitrobenzene-D5(Surrogate (35-114))
2FLBP-S 2-Fluorobiphenyl(Surrogate (43-116))
PTERP-S p-Terphenyl-D14(Surrogate (33-141))

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 4/9/92

ANALYST: R. Karn INSTRUMENT: 95-HP5985B

PROBLEM: Low 2-fluorobiphenyl surrogate recovery

SAMPLE NUMBER(S) AFFECTED: 19316-8

RECOMMENDED CORRECTIVE ACTION: Monitor this surrogate to see if a continuing problem exists.

CORRECTIVE ACTION TAKEN BY ANALYST: all other QC is OK; however, most of the BN's Acid surrogates are on the low side. The surrogates will be monitored to see if a problem exists or

COMMENTS: this was just a momentary problem or matrix effect. All areas, etc. were checked. Three matrix spike compounds had high recovery

DATE CORRECTIVE ACTION TAKEN: 4/7/92

REVIEWED BY: Richard Karn

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19390 - 19400

1) Analysis: Metals Date Extracted/Digested: 4/27/92

2) Analysis: Sediment Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value belo instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

COLUMN.....		1	2	3	4	5	6	
ANALYTE.....		1	2	3	4	5	6	
MG/KG.....		SB	AS	BE	CD	CR	CU	
SAMP #	DESCRIPTION							RC
19390	ABG 1	CONC	<0.30 U	24.4	1.50	0.249	29.6	12.4
	3/27/92	%REC						
		DUPL						
		OID	04352236	04352230	01202182	04352219	01202182	01202182
19391	ABG 2	CONC	<0.30 U	6.55	0.496	0.238	13.4	8.82
	3/27/92	%REC						
		DUPL						
		OID	04352236	04352230	01202182	04352219	01202182	01202182
19392	ABG 3	CONC	<0.30 U	21.2	1.50	0.261	32.9	12.8
	3/27/92	%REC						
		DUPL						
		OID	04352236	04352230	01202182	04352219	01202182	01202182
19393	ABG 4	CONC	<0.30 U	3.74	0.299 B	0.353	9.46	25.2
	3/27/92	%REC						
		DUPL						
		OID	04352236	04352230	01202182	04352219	01202182	01202182
19394	ABG 5	CONC	<0.30 U	6.46	0.396 B	0.990	12.2	39.1
	3/27/92	%REC						
		DUPL						
		OID	04352236	04352230	01202182	04352219	01202182	01202182
19395	ABG 6	CONC	0.42 B	10.2	0.595	3.18	17.1	62.7
	3/27/92	%REC						
		DUPL						
		OID	04352236	04352230	01202182	04352219	01202182	01202182

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	1	2	3	4	5	6	
		MG/KG.....	SB	AS	BE	CD	CR	CU	
SAMP #	DESCRIPTION								RC
19396	ABG 7	CONC	0.36 B	7.69	0.594	0.714	19.0	35.7	
	3/27/92	%REC							
		DUPL							
		OID	04352236	04352230	01202182	04352219	01202182	01202182	
19397	ABG 8	CONC	<0.30 U	5.45	0.398 B	0.666	11.8	32.6	
	3/28/92	%REC							
		DUPL							
		OID	04352236	04352230	01202182	04352219	01202182	01202182	
19398	ABG 9	CONC	0.34 B	18.8	0.799	0.917	26.7	36.1	
	3/28/92	%REC							
		DUPL							
		OID	04352236	04352230	01202182	04352219	01202182	01202182	
19399	ABG 10	CONC	0.34 B	13.5	0.894	0.942	29.7	41.6	1
	3/28/92	%REC							
		DUPL							
		OID	04352236	04352230	01202182	04352219	01202182	01202182	
19400	ABG 11	CONC	<0.30 U	13.3	0.793	0.554	27.2	19.1	1
	3/28/92	%REC							
		DUPL							
		OID	04352236	04352230	01202182	04352219	01202182	01202182	
BL#01	METHOD BLANK 01	CONC	<0.30 U	<0.20 U	<0.1 U	<0.020 U	0.9 B	<0.5 U	1
		%REC							
		DUPL							
		OID	04352236	04352230	01202182	04352219	01202182	01202182	

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 3 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

COLUMN.....			1		2		3		4		5		6		
ANALYTE.....			1		2		3		4		5		6		
MG/KG.....			SB		AS		BE		CD		CR		CU		
SAMP #	DESCRIPTION														RC
BL#02	DUPLICATE	CONC	<0.30 U		6.59	#1	0.299 B		0.252 B	#1	10.1		25.2		1
	DIGEST (19393)	%REC													
		DUPL													
		OID	04352236		04352230		01202182		01352219		01202182		01202182		
BL#03	DUPLICATE	CONC	<0.30 U		12.8		0.792		0.509		27.0		21.2		1
	DIGEST	%REC													
	(19400)	DUPL													
		OID	04352236		04352230		01202182		04352219		01202182		01202182		
BL#04	EXTERNAL QA	CONC	0.49 B		20.5		0.597		3.61		89.3		103.0		1
		%REC													
		DUPL													
		OID	04352236		04352230		01202182		04352219		01202182		01202182		

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

FOOTNOTES:
#1 Duplicate digest for the first digest is 19391 instead of 19393 for As, Cd, Pb, Se, and Tl.

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 4 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

COLUMN.....		7	8	9	10	11	12
ANALYTE.....		7	8	9	10	11	12
MG/KG.....		PB	HG	NI	SE	AG	TL
SAMP #	DESCRIPTION						RC
19390	ABG 1	CONC 23.2	<0.100 U	29.1	0.59	0.17 B	<0.20 U
	3/27/92	%REC					
		DUPL	<0.100 U				
		OID 04352234	09652120	01202182	04352230	04352272	04352232
19391	ABG 2	CONC 15.1	<0.100 U	14.1	0.29 B	0.21 BW	<0.20 U
	3/27/92	%REC					
		DUPL	<0.100 U				
		OID 04352234	09652120	01202182	04352230	04352272	04352232
19392	ABG 3	CONC 30.9	<0.100 U	43.4	0.59	0.18 B	<0.20 U
	3/27/92	%REC					
		DUPL	<0.100 U				
		OID 04352234	09652120	01202182	04352230	04352272	04352232
19393	ABG 4	CONC 58.8	<0.100 U	11.4	<0.20 U	0.24 B	<0.20 U
	3/27/92	%REC					
		DUPL	<0.100 U				
		OID 04352234	09652120	01202182	04352230	04352272	04352232
19394	ABG 5	CONC 37.7	0.428	15.7	<0.20 U	0.24 B	<0.20 U
	3/27/92	%REC					
		DUPL	0.428				
		OID 04352234	09652120	01202182	04352230	04352272	04352232
19395	ABG 6	CONC 67.6	<0.100 U	18.6	0.27 B	0.58 B	<0.20 U
	3/27/92	%REC					
		DUPL	<0.100 U				
		OID 04352234	09652120	01202182	04352230	04352272	04352232

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 5 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		7	8	9	10	11	12
	MG/KG.....		PB	HG	NI	SE	AG	TL
SAMP #	DESCRIPTION							RO
19396	ABG 7	CONC	39.9	<0.100 U	17.5	0.27 BW	0.77 B	<0.20 UW
	3/27/92	%REC						
		DUPL		<0.100 U				
		OID	04352234	09652120	01202182	04352230	04352272	04352232
19397	ABG 8	CONC	48.3	<0.100 U	13.5	0.24 BW	0.33 B	<0.20 U
	3/28/92	%REC						
		DUPL		<0.100 U				
		OID	04352234	09652120	01202182	04352230	04352272	04352232
19398	ABG 9	CONC	50.8	<0.100 U	26.6	0.38 B	0.31 B	0.22 B
	3/28/92	%REC						
		DUPL		<0.100 U				
		OID	04352234	09652120	01202182	04352230	04352272	04352232
19399	ABG 10	CONC	61.2	<0.100 U	23.5	0.32 BW	0.33 B	<0.20 UW
	3/28/92	%REC						
		DUPL		<0.100 U				
		OID	04352234	09652120	01202182	04352230	04352272	04352232
19400	ABG 11	CONC	24.7	<0.100 U	17.4	0.22 B	0.24 B	<0.20 U
	3/28/92	%REC		103				
		DUPL		<0.100 U				
		OID	04352234	09652120	01202120	04352230	04352272	04352232
BL#01	METHOD BLANK 01	CONC	0.59	N/A	<0.50 U	<0.20 U	0.20 B	<0.20 U
		%REC						
		DUPL						
		OID	04352234	09652120	01202182	04352230	04352272	04352232

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 19390 DATE: 06 OCT 5

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 6 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 5
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 5

COLUMN.....			7		8		9		10		11	12
ANALYTE.....			7		8		9		10		11	12
MG/KG.....			PB		HG		NI		SE		AG	TL
SAMP #	DESCRIPTION											RC
BL#02	DUPLICATE	CONC	15.5	#1	N/A	11.1		0.24 B	#1	0.34 B	<0.20 U	#1 1
	DIGEST (19393)	%REC										
		DUPL										
		QID	04352234		09652120	01202182		04352230		04352272	04352232	
BL#03	DUPLICATE	CONC	25.1		N/A	17.2		0.27 B		0.21 B	<0.20 U	1
	DIGEST	%REC										
	(19400)	DUPL										
		QID	04352234		09652120	09652120		04352230		04352272	04352232	
BL#04	EXTERNAL QA	CONC	157		N/A	40.7		0.88		0.50 B	0.68 B	1
		%REC										
		DUPL										
		QID	04352234		09652120	01202182		04352230		04352272	04352232	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

FOOTNOTES:
#1 Duplicate digest for the first digest is 19391 instead of 19393 for As, Cd, Pb, Se, and Tl.

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 7 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		13	24	25	27	29	30
	MG/KG.....		ZN	AL	BA	CA	CO	FE
SAMP #	DESCRIPTION							RC
19390	ABG 1	CONC	63.7	8730	89.7	662	27.8	41200
	3/27/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19391	ABG 2	CONC	50.1	6900	91.4	1330	8.82	19300
	3/27/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19392	ABG 3	CONC	70.4	6270	72.0	554	32.8	52200
	3/27/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19393	ABG 4	CONC	66.5	8100	133	7110	4.88	11000
	3/27/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19394	ABG 5	CONC	154	5070	77.5	7850	5.55	17500
	3/27/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19395	ABG 6	CONC	276	8610	329	13200	11.4	22400
	3/27/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 8 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		13	24	25	27	29	30
	MG/KG.....		ZN	AL	BA	CA	CO	FE
SAMP #	DESCRIPTION							RC
19396	ABG 7	CONC	133	8900	141	6370	8.62	24900
	3/27/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19397	ABG 8	CONC	118	8150	154	6010	6.48	14400
	3/28/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19398	ABG 9	CONC	173	9990	162	8940	15.9	38200
	3/28/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19399	ABG 10	CONC	184	9910	160	4310	13.2	43100
	3/28/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
19400	ABG 11	CONC	130	9320 *	118	1170	9.02	36700
	3/28/92	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
BL#01	METHOD BLANK 01	CONC	7.0	31.5	<2.0 U	220 B	<2.0 U	8.7 B
		%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 9 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		13	24	25	27	29	30
	MG/KG.....		ZN	AL	BA	CA	CO	FE
SAMP #	DESCRIPTION							RC
BL#02	DUPLICATE	CONC	65.2	7180	137	7050	4.28	11500 1
	DIGEST (19393)	%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
BL#03	DUPLICATE	CONC	156	7690 *	110	1160	9.61	39200 1
	DIGEST	%REC						
	(19400)	DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190
BL#04	EXTERNAL QA	CONC	426	10500	76.9	22100	10.1	32300 1
		%REC						
		DUPL						
		OID	01202184	01202189	01202188	01202191	01202182	01202190

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 10 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		31	32	34	35	37	39
	MG/KG.....		MG	MN	K	NA	V	SN
SAMP #	DESCRIPTION							RO
19390	ABG 1	CONC	932	1600	619	43.6 B	39.1	<4.99 U
	3/27/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19391	ABG 2	CONC	1130	1040	782	61.4 B	17.1	<4.96 U
	3/27/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19392	ABG 3	CONC	591	1920	474 B	49.7 B	38.0	<4.98 U
	3/27/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19393	ABG 4	CONC	1730	463	850	61.6 B	9.36	<4.98 U
	3/27/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19394	ABG 5	CONC	2030	362	750	54.7 B	11.6	<4.95 U
	3/27/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19395	ABG 6	CONC	2490	867	930	67.6 B	16.4	<4.94 U
	3/27/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 11 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

		COLUMN.....	19	20	21	22	23	24
		ANALYTE.....	31	32	34	35	37	39
		MG/KG.....	MG	MN	K	NA	V	SN
SAMP #	DESCRIPTION							RC
19396	ABG 7	CONC	1700	697	799	214 B	17.6	<4.95 U
	3/27/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19397	ABG 8	CONC	1600	573	919	74.0 B	12.0	<4.98 U
	3/28/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19398	ABG 9	CONC	1570	1340	869	59.3 B	19.9	<5.00 U
	3/28/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19399	ABG 10	CONC	1170	1150	659	51.5 B	24.3	<4.96 U 1
	3/28/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
19400	ABG 11	CONC	595	1050	465	49.3 B	23.0	<4.96 U 1
	3/28/92	%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188
BL#01	METHOD BLANK 01	CONC	<10.0 U	<0.5 U	0.280 B	34.9 B	<1.0 U	<5.0 U 1
		%REC						
		DUPL						
		OID	01202191	01202184	01202188	01202200	01202182	01202188

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

JOB FILE: 19390 DATE: 06 OCT 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 12 OF 12) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 15 MAY 9

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	31	32	34	35	37	39
MG/KG.....	MG	MN	K	NA	V	SN

SAMP #	DESCRIPTION								RC
BL#02	DUPLICATE	CONC	1710	440	855	59.0	8.77	<4.98 U	1
	DIGEST (19393)	%REC							
		DUPL							
		OID	01202191	01202184	01202188	01202200	01202182	01202188	
BL#03	DUPLICATE	CONC	5.85	1040	436	45.5	23.0	<4.95 U	1
	DIGEST	%REC							
	(19400)	DUPL							
		OID	01202191	01202184	01202188	01202200	01202182	01202188	
BL#04	EXTERNAL QA	CONC	8690	508	1390	129	20.0	<4.98 U	1
		%REC							
		DUPL							
		OID	01202191	01202184	01202188	01202200	01202182	01202188	

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19162 - 19170

1) Analysis: Metals Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19162 DATE: 23 JUN 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: HNO3_ TYPE OF SAMPLE: WATER EST. COMP. DATE: 08 MAY 92

	COLUMN.....	1	2	3	4	5	6	
	ANALYTE.....	1	2	3	4	5	6	
	PPM.....	SB	AS	BE	CD	CR	CU	
SAMP #	DESCRIPTION							ROW
19162	ABG 1	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	1
	3/27/92	%REC							
		DUPL							
		OID	04352162	04352154	01202153	04352157	01202153	01202153	
19163	ABG 2	CONC	<0.0030 UW	<0.0020 U	<0.001 U	<0.00020 U	0.005 B	<0.005 U	2
	3/27/92	%REC							
		DUPL							
		OID	04352162	04352154	01202153	04352157	01202153	01202153	
19164	ABG 3	CONC	<0.0030 UW	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	3
	3/27/92	%REC							
		DUPL							
		OID	04352162	04352154	01202153	04352157	01202153	01202153	
19165	ABG 4	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	4
	3/27/92	%REC	113.3	96.5	96.0	101.6	104.0	97.6	
		DUPL	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	
		OID	04352162	04352154	01202153	04352157	01202153	01202153	
19166	ABG 5	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	5
	3/27/92	%REC							
		DUPL							
		OID	04352162	04352154	01202153	04352157	01202153	01202153	
19167	ABG 6	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	6
	3/27/92	%REC							
		DUPL							
		OID	04352162	04352154	01202153	04352157	01202153	01202153	

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 19162 DATE: 23 JUN 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: HNO3_ TYPE OF SAMPLE: WATER EST. COMP. DATE: 08 MAY 92

	COLUMN.....	1	2	3	4	5	6	
	ANALYTE.....	1	2	3	4	5	6	
	PPM.....	SB	AS	BE	CD	CR	CU	
SAMP #	DESCRIPTION							ROW
19168	ABG 7	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	0.008 B	<0.005 U	7
	3/27/92	%REC						
		DUPL						
		OID 04352162	04352154	01202153	04352157	01202153	01202153	
19169	FB5	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	0.013 B	8
	3/27/92	%REC						
		DUPL						
		OID 04352162	04352154	01202153	04352157	01202153	01202153	
19170	ABGR1	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	9
	3/27/92	%REC						
		DUPL						
		OID 04352162	04352154	01202153	04352157	01202153	01202153	

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 28, 1992 (ROUND 1) Lab Sample ID: 19331 - 19335

1) Analysis: Metals Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19331 DATE: 24 JUL 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 92
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 09 MAY 92

	COLUMN.....	1	2	3	4	5	6	
	ANALYTE.....	1	2	3	4	5	6	
	PPM.....	SB	AS	BE	CD	CR	CU	
SAMP #	DESCRIPTION							ROW
19331	ABGR2	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	0.005 B	<0.005 U	1
	3/28/92	%REC						
		DUPL						
		OID 04352162	04352154	01202175	04352157	01202175	01202175	
19332	ABG 8	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	0.005 B	<0.005 U	2
	3/28/92	%REC						
		DUPL						
		OID 04352162	04352154	01202175	04352157	01202175	01202175	
19333	ABG 9	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	3
	3/28/92	%REC						
		DUPL						
		OID 04352162	04352154	01202175	04352157	01202175	01202175	
19334	ABG 10	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	0.010	<0.005 U	4
	3/28/92	%REC						
		DUPL						
		OID 04352162	04352154	01202175	04352157	01202175	01202175	
19335	ABG 11	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	0.006	<0.005 U	5
	3/28/92	%REC 107.0	97.5	100.0	95.0	113.0	105.2	
		DUPL <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	
		OID 04352162	04352154	01202175	04352157	01202175	01202175	

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 19162 DATE: 23 JUN 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: HNO3

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 08 MAY 92

	COLUMN.....	7	8	9	10	11	12	
	ANALYTE.....	7	8	9	10	11	12	
	PPM.....	PB	HG	NI	SE	AG	TL	
SAMP #	DESCRIPTION							ROW
19162	ABG 1	CONC <0.0010 U	<0.0002 U	0.006 B	<0.0020 U	<0.0010 U	<0.0020 U	1
	3/27/92	%REC	111.0					
		DUPL	<0.0004 U					
		OID 04352156	09652112	01202153	04352155	04352160	04352153	
19163	ABG 2	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.00204	<0.0010 U	<0.0020 U	2
	3/27/92	%REC						
		DUPL						
		OID 04352156	09652112	01202153	04352155	04352160	04352153	
19164	ABG 3	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.00204	<0.0010 U	<0.0020 U	3
	3/27/92	%REC						
		DUPL						
		OID 04352156	09652112	01202153	04352155	04352160	04352153	
19165	ABG 4	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	4
	3/27/92	%REC 97.5		99.2	113.0	106.0	96.5	
		DUPL <0.0010 U		<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	
		OID 04352156	09652112	01202153	04352155	04352160	04352153	
19166	ABG 5	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	5
	3/27/92	%REC						
		DUPL						
		OID 04352156	09652112	01202153	04352155	04352160	04352153	
19167	ABG 6	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	6
	3/27/92	%REC						
		DUPL						
		OID 04352156	09652112	01202153	04352155	04352160	04352153	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 19162 DATE: 23 JUN 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: HNO3_ TYPE OF SAMPLE: WATER EST. COMP. DATE: 08 MAY 92

	COLUMN.....	7	8	9	10	11	12	
	ANALYTE.....	7	8	9	10	11	12	
	PPM.....	PB	HG	NI	SE	AG	TL	
SAMP #	DESCRIPTION							ROW
19168	ABG 7	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	7
	3/27/92	%REC						
		DUPL						
		OID 04352156	09652112	01202153	04352155	04352160	04352153	
19169	FB5	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	8
	3/27/92	%REC						
		DUPL						
		OID 04352156	09652112	01202153	04352155	04352160	04352153	
19170	ABGR1	CONC 0.0017 B	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	9
	3/27/92	%REC	99.0					
		DUPL	<0.0004 U					
		OID 04352156	09652112	01202153	04352155	04352160	04352153	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 19331 DATE: 24 JUL 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 92
CHEM. PRESERVATIVE: HNO3_ TYPE OF SAMPLE: WATER EST. COMP. DATE: 09 MAY 92

	COLUMN.....	7	8	9	10	11	12	
	ANALYTE.....	7	8	9	10	11	12	
	PPM.....	PB	HG	NI	SE	AG	TL	
SAMP #	DESCRIPTION							ROW
19331	ABGR2	CONC 0.0012 B	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	1
	3/28/92	%REC						
		DUPL						
		OID 04352156	09652112	01202175	04352155	04352160	04352153	
19332	ABG 8	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	2
	3/28/92	%REC						
		DUPL						
		OID 04352156	09652112	01202175	04352155	04352160	04352153	
19333	ABG 9	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	3
	3/28/92	%REC						
		DUPL						
		OID 04352156	09652112	01202175	04352155	04352160	04352153	
19334	ABG 10	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	4
	3/28/92	%REC						
		DUPL						
		OID 04352156	09652112	01202175	04352155	04352160	04352153	
19335	ABG 11	CONC <0.0010 U	<0.0002 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	5
	3/28/92	%REC 91.0	99.0	106.4	103.0	111.0	92.0	
		DUPL <0.0010 U	<0.0004 U	<0.006 U	<0.0020 U	<0.0010 U	<0.0020 U	
		OID 04352156	09652112	01202175	04352155	04352160	04352153	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 19162 DATE

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE:
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE:

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		13	24	25	27	29	30
	PPM.....		ZN	AL	BA	CA	CO	FE
SAMP #	DESCRIPTION							
19162	ABG 1	CONC	<0.010 U	0.021 B	0.042 B	6.96	<0.020 U	0.057 B
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154
19163	ABG 2	CONC	<0.010 U	<0.020 U	0.041 B	12.0	<0.020 U	0.021 B
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154
19164	ABG 3	CONC	<0.010 U	<0.020 U	0.041 B	12.4	<0.020 U	0.028 B
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154
19165	ABG 4	CONC	<0.010 U	<0.020 U	0.045 B	13.8	<0.020 U	0.105
	3/27/92	%REC	104.8	104.0	100.0		95.0	101.0
		DUPL	<0.010 U	0.020 B	0.046 B	13.8	<0.020 U	0.095 B
		OID	01202153	01202154	01202154	01202155	01202153	01202154
19166	ABG 5	CONC	<0.010 U	0.038 B	0.046 B	12.6	<0.020 U	0.196
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154
19167	ABG 6	CONC	<0.010 U	0.026 B	0.047 B	14.2	<0.020 U	0.098 B
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 19162

DATE: 23 JUN 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: HNO3_

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 08 MAY 92

COLUMN.....		13	14	15	16	17	18	
ANALYTE.....		13	24	25	27	29	30	
PPM.....		ZN	AL	BA	CA	CO	FE	
SAMP #	DESCRIPTION							ROW
19168	ABG 7	CONC	<0.010 U	0.033 B	0.051 B	14.3	<0.020 U	0.081 B	7
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154	
19169	F85	CONC	<0.010 U	<0.020 U	<0.010 U	<0.200 U	<0.020 U	<0.020 U	8
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154	
19170	ABGR1	CONC	<0.010 U	<0.020 U	<0.010 U	<0.200 U	<0.020 U	<0.020 U	9
	3/27/92	%REC						
		DUPL						
		OID	01202153	01202154	01202154	01202155	01202153	01202154	

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 19331 DATE: 24 JUL 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 92
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 09 MAY 92

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	13	24	25	27	29	30	
	PPM.....	ZN	AL	BA	CA	CO	FE	
SAMP #	DESCRIPTION							ROW
19331	ABGR2	CONC <0.010 U	<0.030 U	<0.020 UN	<0.100	<0.020 U	<0.040 U	1
	3/28/92	%REC						
		DUPL						
		OID 01202175	01202176	01202182	01202182	01202175	01202178	
19332	ABG 8	CONC <0.010 U	<0.030 U	0.045 BN	14.5	<0.020 U	0.055 B	2
	3/28/92	%REC						
		DUPL						
		OID 01202175	01202176	01202182	01202182	01202175	01202178	
19333	ABG 9	CONC <0.010 U	<0.030 U	0.119 BN	35.0	<0.020 U	<0.040 U	3
	3/28/92	%REC						
		DUPL						
		OID 01202175	01202176	01202182	01202182	01202175	01202178	
19334	ABG 10	CONC <0.010 U	0.047 B	0.047 BN	20.9	<0.020 U	0.064 B	4
	3/28/92	%REC						
		DUPL						
		OID 01202175	01202176	01202182	01202182	01202175	01202178	
19335	ABG 11	CONC <0.010 U	0.054 B	0.034 BN	22.7	<0.020 U	0.136	5
	3/28/92	%REC 109.0	88.5	70.0		103.4	106.0	
		DUPL <0.010 U	0.050 B	0.033 BN	22.3	<0.020 U	0.120	
		OID 01202175	01202176	01202182	01202182	01202175	01202178	

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 19162 DATE: 23 JUN 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: HNO3_ TYPE OF SAMPLE: WATER EST. COMP. DATE: 08 MAY 92

	COLUMN.....		19	20	21	22	23	24	
	ANALYTE.....		31	32	34	35	37	39	
	PPM.....		MG	MN	K	NA	V	SN	
SAMP #	DESCRIPTION								ROW
19162	ABG 1	CONC	5.09	0.005 B	1.17 B	2.97 B	<0.010 U	<0.060 U	1
	3/27/92	%REC							
		DUPL							
		OID	01202155	01202153	01202154	04252154	01202153	01202155	
19163	ABG 2	CONC	5.66	<0.005 U	0.898 B	3.89 B	<0.010 U	<0.060 U	2
	3/27/92	%REC							
		DUPL							
		OID	01202155	01202153	01202154	04252154	01202153	01202155	
19164	ABG 3	CONC	5.78	<0.005 U	1.02 B	3.99 B	<0.010 U	<0.060 U	3
	3/27/92	%REC							
		DUPL							
		OID	01202155	01202153	01202154	04252154	01202153	01202155	
19165	ABG 4	CONC	6.04	<0.005 U	1.02 B	3.84 B	<0.010 U	<0.060 U	4
	3/27/92	%REC		98.6			100.6		
		DUPL		0.006 B	1.01 B		<0.010 U	<0.060 U	
		OID	01202155	01202153	01202154	04252154	01202153	01202155	
19166	ABG 5	CONC	7.12	0.007 B	1.37 B	3.84 B	<0.010 U	<0.060 U	5
	3/27/92	%REC							
		DUPL				3.77 B			
		OID	01202155	01202153	01202154	04252154	01202153	01202155	
19167	ABG 6	CONC	6.66	0.006 B	1.11 B	3.68 B	<0.010 U	<0.060 U	6
	3/27/92	%REC							
		DUPL							
		OID	01202155	01202153	01202154	04252154	01202153	01202155	

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

JOB FILE: 19162 DATE: 23 JUN 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: HNO3. TYPE OF SAMPLE: WATER EST. COMP. DATE: 08 MAY 92

	COLUMN.....		19	20	21	22	23	24	
	ANALYTE.....		31	32	34	35	37	39	
	PPM.....		MG	MN	K	NA	V	SN	
SAMP #	DESCRIPTION								ROW
19168	ABG 7	CONC	6.44	0.005 B	1.30 B	3.66 B	<0.010 U	<0.060 U	7
	3/27/92	%REC							
		DUPL							
		OID	01202155	01202153	01202154	04252154	01202153	01202155	
19169	FB5	CONC	<0.100 U	<0.005 U	<0.200 U	<0.100 U	<0.010 U	<0.060 U	8
	3/27/92	%REC							
		DUPL							
		OID	01202155	01202153	01202154	04252154	01202153	01202155	
19170	ABGR1	CONC	<0.100 U	<0.005 U	<0.200 U	<0.100 U	<0.010 U	<0.060 U	9
	3/27/92	%REC							
		DUPL							
		OID	01202155	01202153	01202154	04252154	01202153	01202155	

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

JOB FILE: 19331 DATE: 24 JUL 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 92
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 09 MAY 92

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	31	32	34	35	37	39
PPM.....	MG	MN	K	NA	V	SN

SAMP #	DESCRIPTION								ROW
19331	ABGR2	CONC	<0.100 U	<0.005 U	<0.200 U	<0.200 U	<0.010 U	<0.050 U	1
	3/28/92	%REC							
		DUPL							
		OID	01202182	01202175	01202182	01252203	01202175	01202177	
19332	ABG 8	CONC	6.54	<0.005 U	1.08 B	3.87 B	<0.010 U	<0.050 U	2
	3/28/92	%REC							
		DUPL							
		OID	01202182	01202175	01202182	01252203	01202175	01202177	
19333	ABG 9	CONC	6.21	<0.005 U	1.14 B	2.72 B	<0.010 U	<0.050 U	3
	3/28/92	%REC							
		DUPL							
		OID	01202182	01202175	01202182	01252203	01202175	01202177	
19334	ABG 10	CONC	5.41	0.008	1.19 B	3.28 B	<0.010 U	<0.050 U	4
	3/28/92	%REC							
		DUPL							
		OID	01202182	01202175	01202182	01252203	01202175	01202177	
19335	ABG 11	CONC	6.21	0.013 B	1.15 B	3.74 B	<0.0010 U	<0.050 U	5
	3/28/92	%REC		108.0			110.0		
		DUPL	6.15	0.013 B	1.24 B	3.78 B	<0.0010 U	<0.050 U	
		OID	01202182	01202175	01202182	01252203	01202175	01202177	

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19180 - 19188

1) Analysis: Nutrients (NO_2, NO_3) Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19180 DATE: 19 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: H_2SO_4

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

COLUMN.....	1	2
ANALYTE.....	69	70
PPM.....	NO2-N	NO3-N

SAMP #	DESCRIPTION				ROW
19180	ABG 1 3/27/92	CONC	0.005	<0.020 U	1
		%REC			
		DUPL			
		OID	20452115	20452113	
19181	ABG 2 3/27/92	CONC	<0.005 U	0.144	2
		%REC			
		DUPL			
		OID	20452115	20452113	
19182	ABG 3 3/27/92	CONC	<0.005 U	0.135	3
		%REC			
		DUPL			
		OID	20452115	20452113	
19183	ABG 4 3/27/92	CONC	0.007	0.236	4
		%REC			
		DUPL			
		OID	20452115	20452113	
19184	ABG 5 3/27/92	CONC	0.011	0.226	5
		%REC			
		DUPL			
		OID	20452115	20452113	
19185	ABG 6 3/27/92	CONC	<0.005 U	0.207	6
		%REC			
		DUPL			
		OID	20452115	20452113	

NO2-N Nitrite Nitrogen NO3-N Nitrate Nitrogen

JOB FILE: 19180 DATE: 19 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
JOB NUMBER: RD2G082E1170001
RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: H2SO4
TYPE OF SAMPLE: WATER
EST. COMP. DATE: 01 MAY 92

COLUMN.....	1	2
ANALYTE.....	69	70
PPM.....	NO2-N	NO3-N

SAMP #	DESCRIPTION				ROW
19186	ABG 7	CONC	0.005	0.036	7
	3/27/92	%REC			
		DUPL			
		OID	20452115	20452113	
19187	FB5	CONC	0.006	0.037	8
	3/27/92	%REC			
		DUPL			
		OID	20452115	20452113	
19188	ABGR1	CONC	0.010	<0.020 U	9
	3/27/92	%REC			
		DUPL			
		OID	20452115	20452113	

NO2-N Nitrite Nitrogen
NO3-N Nitrate Nitrogen

IN5 170 023 498

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 28, 1992 (ROUND 1) Lab Sample ID: 19341 - 19395

1) Analysis: Nutrients (NO_2, NO_3) Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19341 DATE: 19 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 1) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 92
CHEM. PRESERVATIVE: H_2SO_4 TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

COLUMN.....	1	2
ANALYTE.....	69	70
PPM.....	NO2-N	NO3-N

SAMP #	DESCRIPTION				ROW
19341	ABGR2	CONC	0.013	0.109	1
	3/28/92	%REC			
		DUPL			
		OID	20452113	20452113	
19342	ABG 8	CONC	0.006	0.029	2
	3/28/92	%REC			
		DUPL			
		OID	20452113	20452113	
19343	ABG 9	CONC	0.008	0.108	3
	3/28/92	%REC			
		DUPL			
		OID	20452113	20452113	
19344	ABG 10	CONC	0.010	0.101	4
	3/28/92	%REC			
		DUPL			
		OID	20452113	20452113	
19345	ABG 11	CONC	0.006	0.022	5
	3/28/92	%REC	87.2	107.0	
		DUPL	0.010	<0.020 U	
		OID	20452113	20452113	

NO2-N Nitrite Nitrogen NO3-N Nitrate Nitrogen

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19171 - 19179

1) Analysis: Cyanide, sulfide Date Extracted/Digested: N/A (H2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19171 DATE: 12 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: NAOH TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 92

COLUMN.....		1	2
ANALYTE.....		85	106
PPM.....		CN	SULFIDE
SAMP #	DESCRIPTION				ROW
19171	ABG 1	CONC	<0.005 U	<0.020 U	1
	3/27/92	%REC	103.0		
		DUPL	<0.005 U		
		OID	57402097	20452121	
19172	ABG 2	CONC	<0.005 U	<0.020 U	2
	3/27/92	%REC			
		DUPL			
		OID	57402097	20452121	
19173	ABG 3	CONC	<0.005 U	<0.020 U	3
	3/27/92	%REC			
		DUPL			
		OID	57402097	20452121	
19174	ABG 4	CONC	<0.005 U	<0.020 U	4
	3/27/92	%REC			
		DUPL			
		OID	57402097	20452121	
19175	ABG 5	CONC	<0.005 U	<0.020 U	5
	3/27/92	%REC			
		DUPL			
		OID	57402097	20452121	
19176	ABG 6	CONC	<0.005 U	<0.020 U	6
	3/27/92	%REC			
		DUPL			
		OID	57402097	20452121	

CN Cyanide SULFIDE Sulfide

JOB FILE: 19171 DATE: 12 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: NAOHL TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 92

COLUMN.....	1	2
ANALYTE.....	85	106
PPM.....	CN	SULFIDE

SAMP #	DESCRIPTION				ROW
19177	ABG 7	CONC	<0.005 U	<0.020 U	7
	3/27/92	%REC	102.0		
		DUPL	<0.005 U		
		OID	57402097	20452121	
19178	FB5	CONC	<0.005 U	<0.020 U	8
	3/27/92	%REC			
		DUPL			
		OID	57402097	20452121	
19179	ABGR1	CONC	<0.005 U	<0.020 U	9
	3/27/92	%REC			
		DUPL			
		OID	57402097	20452121	

CN Cyanide SULFIDE Sulfide

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 28, 1992 (ROUND 1) Lab Sample ID: 19336 - 19340

1) Analysis: Cyanide, Sulfide Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19336 DATE: 12 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 1) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 92
CHEM. PRESERVATIVE: NAOH TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 92

COLUMN.....		1	2
ANALYTE.....		85	106
PPM.....		CN	SULFIDE
SAMP #	DESCRIPTION			ROW
19336	ABGR2	CONC	<0.005 U	<0.020 U	1
	3/28/92	%REC			
		DUPL			
		OID	57402099	20452121	
19337	ABG 8	CONC	<0.005 U	<0.020 U	2
	3/28/92	%REC			
		DUPL			
		OID	57402099	20452121	
19338	ABG 9	CONC	<0.005 U	<0.020 U	3
	3/28/92	%REC			
		DUPL			
		OID	57402099	20452121	
19339	ABG 10	CONC	<0.005 U	<0.020 U	4
	3/28/92	%REC			
		DUPL			
		OID	57402099	20452121	
19340	ABG 11	CONC	<0.005 U	<0.020 U	5
	3/28/92	%REC	104.0	98.0	
		DUPL	<0.005 U	<0.020 U	
		OID	57402099	20452121	

CN Cyanide SULFIDE Sulfide

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19126 - 19134

1) Analysis: Explosives Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19126 DATE: 24 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	900	901	902	903	904	905
PPM.....	HMX	RDX	TNB	DNB	TETRYL	TNT

SAMP #	DESCRIPTION								RO
19126	ABG 1	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U	
	3/27/92	%REC	99.5	101.0	104.0			108.9	
		DUPL	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U	
		OID	52702088	52702088	52702088	52702088	52702088	52702088	
19127	ABG 2	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U	
	3/27/92	%REC							
		DUPL							
		OID	52702088	52702088	52702088	52702088	52702088	52702088	
19128	ABG 3	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U	
	3/27/92	%REC							
		DUPL							
		OID	52702088	52702088	52702088	52702088	52702088	52702088	
19129	ABG 4	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U	
	3/27/92	%REC							
		DUPL							
		OID	52702088	52702088	52702088	52702088	52702088	52702088	
19130	ABG 5	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U	
	3/27/92	%REC							
		DUPL							
		OID	52702088	52702088	52702088	52702088	52702088	52702088	
19131	ABG 6	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U	
	3/27/92	%REC	97.0	97.0	101.0			105.9	
		DUPL							
		OID	52702088	52702088	52702088	52702088	52702088	52702088	

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 19126 DATE: 24 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		900	901	902	903	904	905
	PPM.....		HMX	RDX	TNB	DNB	TETRYL	TNT
SAMP #	DESCRIPTION							RO
19132	ABG 7	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
	3/27/92	%REC						
		DUPL						
		OID	52702088	52702088	52702088	52702088	52702088	52702088
19133	FB5	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
	3/27/92	%REC						
		DUPL						
		OID	52702088	52702088	52702088	52702088	52702088	52702088
19134	ABGR1	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
	3/27/92	%REC						
		DUPL						
		OID	52702088	52702088	52702088	52702088	52702088	52702088
BL#01	EXP-BLK01	CONC	<0.020 U	<0.020	<0.020	<0.020 U	<0.050 U	<0.020
	(19126-19134)	%REC	91.0	92.0	97.0			103.5
		DUPL						
		OID	52702088	52702088	52702088	52702088	52702088	52702088

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 19126

DATE: 24 APR 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9:
EST. COMP. DATE: 01 MAY 9:

COLUMN.....	7	8
ANALYTE.....	906	907
PPM.....	2,4-DNT	2,6-DNT

SAMP #	DESCRIPTION				RO
19126	ABG 1	CONC	<0.020 U	<0.020 U	
	3/27/92	%REC			
		DUPL	<0.020 U	<0.020 U	
		OID	52702088	52702088	
19127	ABG 2	CONC	<0.020 U	<0.020 U	2
	3/27/92	%REC			
		DUPL			
		OID	52702088	52702088	
19128	ABG 3	CONC	<0.020 U	<0.020 U	3
	3/27/92	%REC			
		DUPL			
		OID	52702088	52702088	
19129	ABG 4	CONC	<0.020 U	<0.020 U	4
	3/27/92	%REC			
		DUPL			
		OID	52702088	52702088	
19130	ABG 5	CONC	<0.020 U	<0.020 U	5
	3/27/92	%REC			
		DUPL			
		OID	52702088	52702088	
19131	ABG 6	CONC	<0.020 U	<0.020 U	6
	3/27/92	%REC			
		DUPL			
		OID	52702088	52702088	

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

JOB FILE: 19126 DATE: 24 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 9

	COLUMN.....	7	8
	ANALYTE.....	906	907
	PPM.....	2,4-DNT	2,6-DNT
SAMP #	DESCRIPTION		
19132	ABG 7	CONC <0.020 U	<0.020 U
	3/27/92	%REC	
		DUPL	
		OID 52702088	52702088
19133	FB5	CONC <0.020 U	<0.020 U
	3/27/92	%REC	
		DUPL	
		OID 52702088	52702088
19134	ABGR1	CONC <0.020 U	<0.020 U
	3/27/92	%REC	
		DUPL	
		OID 52702088	52702088
BL#01	EXP-BLK01	CONC <0.020 U	<0.020 U
	(19126-19134)	%REC	
		DUPL	
		OID 52702088	52702088

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 28, 1992 (ROUND 1) Lab Sample ID: 19311 - 19315

1) Analysis: Explosives Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value bel instrument detection limit.

B - Indicates analyte is found in th associated blank as well as in the sample.

E - Identifies compounds whose conce trations exceed the calibration rang of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

RF

JOB FILE: 19311

DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 01 MAY 9

		COLUMN.....	1	2	3	4	5	6
		ANALYTE.....	900	901	902	903	904	905
		PPM.....	HMX	RDX	TNB	DNB	TETRYL	TNT
SAMP #	DESCRIPTION							
19311	ABGR2 3/28/92	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
		%REC						
		DUPL						
		OID	52702091	52702091	52702091	52702091	52702091	52702091
19312	ABG 8 3/28/92	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
		%REC						
		DUPL						
		OID	52702091	52702091	52702091	52702091	52702091	52702091
19313	ABG 9 3/28/92	CONC	0.045	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
		%REC						
		DUPL						
		OID	52702091	52702091	52702091	52702091	52702091	52702091
19314	ABG 10 3/28/92	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
		%REC						
		DUPL						
		OID	52702091	52702091	52702091	52702091	52702091	52702091
19315	ABG 11 3/28/92	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
		%REC	99.0	106.0	104.0			107.9
		DUPL						
		OID	52702091	52702091	52702091	52702091	52702091	52702091
BL#01	EXP-BLK01 (19311-19315)	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	<0.050 U	<0.020 U
		%REC	96.5	102.5	103.0			105.9
		DUPL						
		OID	52702091	52702091	52702091	52702091	52702091	52702091

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 19311

DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 01 MAY 9

		COLUMN.....	7	8
		ANALYTE.....	906	907
		PPM.....	2,4-DNT	2,6-DNT
SAMP #	DESCRIPTION			
19311	ABGR2 3/28/92	CONC	<0.020 U	<0.020 U
		%REC		
		DUPL		
		OID	52702091	52702091
19312	ABG 8 3/28/92	CONC	<0.020 U	<0.020 U
		%REC		
		DUPL		
		OID	52702091	52702091
19313	ABG 9 3/28/92	CONC	<0.020 U	<0.020 U
		%REC		
		DUPL		
		OID	52702091	52702091
19314	ABG 10 3/28/92	CONC	<0.020 U	<0.020 U
		%REC		
		DUPL		
		OID	52702091	52702091
19315	ABG 11 3/28/92	CONC	<0.020 U	<0.020 U
		%REC		
		DUPL		
		OID	52702091	52702091
BL#01	EXP-BLK01 (19311-19315)	CONC	<0.020 U	<0.020 U
		%REC		
		DUPL		
		OID	52702091	52702091

2,4-DNT 2,4-DNT

2,6-DNT 2,6-DNT

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19189 - 19198

1) Analysis: Volatiles Date Extracted/Digested: 3/30-31/92

2) Analysis: Water Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value belo instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concen trations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19189

DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	183	184	185	186	187	188	
		PPM.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE	
SAMP #	DESCRIPTION								
19189	ABG 1 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.009 B	<0.005	RO
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19190	ABG 2 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.005 B	<0.005	2
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19191	ABG 3 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.002 B	<0.005	3
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19192	ABG 4 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.003 B	<0.005	4
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19193	ABG 5 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.005 B	<0.005	5
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19194	ABG 6 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.010 B	<0.005	6
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride

BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 19189

DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	183	184	185	186	187	188	
		PPM.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE	
SAMP #	DESCRIPTION								RO
19195	ABG 7 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.010 B	<0.005	
		%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19196	FB5 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.005 B	<0.005	E
		%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19197	ABGR1 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.005 B	<0.005	9
		%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19198	TRIP BLANK	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.015 B	<0.005	1C
		%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
BL#01	VBLK01 (19189-19195)	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.007	<0.005	11
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
BL#02	VBLK01 (19196-19198)	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.009	<0.005	12
		%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride

BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 19189

DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

		COLUMN.....	7	8	9	10	11	12	
		ANALYTE.....	189	190	191	192	193	194	
		PPM.....	11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA	
SAMP #	DESCRIPTION								
19189	ABG 1 3/27/92	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	RO
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19190	ABG 2 3/27/92	CONC	<0.005	<0.005	<0.005	<0.005	0.002 J	<0.005	2
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19191	ABG 3 3/27/92	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19192	ABG 4 3/27/92	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	4
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19193	ABG 5 3/27/92	CONC	<0.005	<0.005	<0.005	0.001 J	<0.005	<0.005	5
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19194	ABG 6 3/27/92	CONC	<0.005	<0.005	<0.005	<0.005 U	<0.005	<0.005	6
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 19189 DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RDZG082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 9

COLUMN.....		7	8	9	10	11	12	
ANALYTE.....		189	190	191	192	193	194	
PPM.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA	
SAMP #	DESCRIPTION							RO
19195	ABG 7	CONC <0.005	<0.005	<0.005	<0.005 U	<0.005	<0.005	7
	3/27/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19196	FB5	CONC <0.005	<0.005	<0.005	0.001 J	<0.005	<0.005	8
	3/27/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19197	ABGR1	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	9
	3/27/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19198	TRIP BLANK	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	10
		%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
BL#01	VBLK01	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	11
	(19189-19195)	%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
BL#02	VBLK01	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	12
	(19196-19198)	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 19189

DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	195	196	197	198	199	200	
	PPM.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME	
SAMP #	DESCRIPTION							
19189	ABG 1 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	RO
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19190	ABG 2 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	2
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19191	ABG 3 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19192	ABG 4 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19193	ABG 5 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	5
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19194	ABG 6 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	6
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene

BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 19189 DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	195	196	197	198	199	200	
	PPM.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME	
SAMP #	DESCRIPTION							RO
19195	ABG 7	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
	3/27/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19196	FB5	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
	3/27/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19197	ABGR1	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
	3/27/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19198	TRIP BLANK	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	1
		%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
BL#01	VBLK01	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	11
	(19189-19195)	%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
BL#02	VBLK01	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	12
	(19196-19198)	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 19189

DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	201	202	203	205	206	207	
	PPM.....	c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TECLETE	
SAMP #	DESCRIPTION							
19189	ABG 1 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	RO
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19190	ABG 2 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	2
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19191	ABG 3 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	3
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19192	ABG 4 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	4
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19193	ABG 5 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	5
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19194	ABG 6 3/27/92	CONC <0.005	<0.005	<0.005	<0.005	<0.005	<0.005	6
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TECLETE Tetrachloroethene

JOB FILE: 19189 DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		201	202	203	205	206	207
	PPM.....		c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE
SAMP #	DESCRIPTION							RO
19195	ABG 7	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	7
	3/27/92	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19196	FB5	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	8
	3/27/92	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19197	ABGR1	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	9
	3/27/92	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19198	TRIP BLANK	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	10
		%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
BL#01	VBLK01	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	11
	(19189-19195)	%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
BL#02	VBLK01	CONC	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	12
	(19196-19198)	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 19189

DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

		COLUMN.....	25	26	27	28	29	30	
		ANALYTE.....	208	209	210	213	214	215	
		PPM.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION								
19189	ABG 1 3/27/92	CONC	<0.005	<0.005	<0.005	0.020 BJ	<0.10 U	<0.005	RO
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19190	ABG 2 3/27/92	CONC	<0.005	<0.005	<0.005	0.015 BJ	<0.10 U	<0.005	2
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19191	ABG 3 3/27/92	CONC	<0.005	<0.005	<0.005	0.010 BJ	<0.10 U	<0.005	3
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19192	ABG 4 3/27/92	CONC	<0.005	<0.005	<0.005	0.006 BJ	<0.10 U	<0.005	4
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19193	ABG 5 3/27/92	CONC	<0.005	<0.005	<0.005	0.010 BJ	<0.10 U	<0.005	5
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
19194	ABG 6 3/27/92	CONC	<0.005	<0.005	<0.005	0.009 BJ	<0.10 U	<0.005	6
		%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 19189 DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 9.

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		208	209	210	213	214	215
	PPM.....		TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2
SAMP #	DESCRIPTION							RO
19195	ABG 7	CONC	<0.005	<0.005	<0.005	0.004 BJ	<0.10 U	<0.005
	3/27/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19196	FB5	CONC	<0.005	<0.005	<0.005	0.009 BJ	<0.10 U	<0.005
	3/27/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19197	ABGR1	CONC	<0.005	<0.005	<0.005	0.019 BJ	<0.10 U	<0.005
	3/27/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19198	TRIP BLANK	CONC	<0.005	<0.005	<0.005	0.008 BJ	<0.10 U	<0.005
		%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
BL#01	VBLK01	CONC	<0.005	<0.005	<0.005	0.010 J	<0.10 U	<0.005
	(19189-19195)	%REC						
		DUPL						
		OID	98932090	98932090	98932090	98932090	98932090	98932090
BL#02	VBLK01	CONC	<0.005	<0.005	<0.005	0.014 J	<0.10 U	<0.005
	(19196-19198)	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 19189

DATE: 15 APR 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9:
EST. COMP. DATE: 17 APR 9:

	COLUMN.....	31	32	33	34	35	36	
	ANALYTE.....	216	217	218	219	220	221	
	PPM.....	2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S	
SAMP #	DESCRIPTION							ROI
19189	ABG 1 3/27/92	CONC <0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	103%	1
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19190	ABG 2 3/27/92	CONC <0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	107%	2
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19191	ABG 3 3/27/92	CONC <0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	111%	3
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19192	ABG 4 3/27/92	CONC <0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	110%	4
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19193	ABG 5 3/27/92	CONC <0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	110%	5
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	
19194	ABG 6 3/27/92	CONC <0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	114%	6
		%REC						
		DUPL						
		OID 98932090	98932090	98932090	98932090	98932090	98932090	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene

4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (76-114))

JOB FILE: 19189

DATE: 15 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 17 APR 92

	COLUMN.....		31	32	33	34	35	36	
	ANALYTE.....		216	217	218	219	220	221	
	PPM.....		2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S	
SAMP #	DESCRIPTION								ROW
19195	ABG 7	CONC	<0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	112%	7
	3/27/92	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19196	FB5	CONC	<0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	98.2%	8
	3/27/92	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19197	ABGR1	CONC	<0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	99.0%	9
	3/27/92	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
19198	TRIP BLANK	CONC	<0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	99.2%	10
		%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	
BL#01	VBLK01	CONC	<0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	103%	11
	(19189-19195)	%REC							
		DUPL							
		OID	98932090	98932090	98932090	98932090	98932090	98932090	
BL#02	VBLK01	CONC	<0.050 U	<0.050 U	<0.005	<0.050 U	<0.005	94.2%	12
	(19196-19198)	%REC							
		DUPL							
		OID	98932091	98932091	98932091	98932091	98932091	98932091	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene

4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (76-114))

JOB FILE: 19189

DATE: 15 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

	COLUMN.....	37	38	
	ANALYTE.....	222	223	
	PPM.....	TOL-d8-S	4BrFB-S	
SAMP #	DESCRIPTION			
19189	ABG 1 3/27/92	CONC 96.8%	96.6%	RO
		%REC		
		DUPL		
		OID 98932090	98932090	
19190	ABG 2 3/27/92	CONC 101%	99.1%	
		%REC		
		DUPL		
		OID 98932090	98932090	
19191	ABG 3 3/27/92	CONC 102%	98.1%	
		%REC		
		DUPL		
		OID 98932090	98932090	
19192	ABG 4 3/27/92	CONC 102%	101%	
		%REC		
		DUPL		
		OID 98932090	98932090	
19193	ABG 5 3/27/92	CONC 98.8%	98.6%	
		%REC		
		DUPL		
		OID 98932090	98932090	
19194	ABG 6 3/27/92	CONC 103%	102%	
		%REC		
		DUPL		
		OID 98932090	98932090	

TOL-d8-S Toluene-D8(Surrogate (88-110))

4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

JOB FILE: 19189 DATE: 15 APR 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 17 APR 9.

COLUMN.....	37	38
ANALYTE.....	222	223
PPM.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION				RO
19195	ABG 7	CONC	102%	102%	
	3/27/92	%REC			
		DUPL			
		OID	98932091	98932091	
19196	FB5	CONC	110%	104%	8
	3/27/92	%REC			
		DUPL			
		OID	98932091	98932091	
19197	ABGR1	CONC	107%	103%	9
	3/27/92	%REC			
		DUPL			
		OID	98932091	98932091	
19198	TRIP BLANK	CONC	103%	93.7%	10
		%REC			
		DUPL			
		OID	98932091	98932091	
BL#01	VBLK01	CONC	97.0%	95.1%	11
	(19189-19195)	%REC			
		DUPL			
		OID	98932090	98932090	
BL#02	VBLK01	CONC	105%	101%	12
	(19196-19198)	%REC			
		DUPL			
		OID	98932091	98932091	

TOL-d8-S Toluene-D8(Surrogate (88-110)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 28, 1992 (ROUND 1) Lab Sample ID: 19305 -19310

1) Analysis: Volatiles Date Extracted/Digested: 3/31/92

2) Analysis: Water Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value belo instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concen trations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

RC

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		183	184	185	186	187	188
	PPM.....		ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE
SAMP #	DESCRIPTION							RC
19305	ABG 2 (MAR 27)	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.011 B	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19306	ABG 8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.018 B	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19307	ABG 9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.016 B	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19308	ABG 10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.008 B	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19309	ABG 11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.006 B	<0.005 U
	3/28/92	%REC						119.2
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092
19310	TRIP BLANK	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.006 B	<0.005 U
	3/25/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride

BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 19305

DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 10 APR 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		183	184	185	186	187	188
	PPM.....		ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE
SAMP #	DESCRIPTION							RO
BL#01	VBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.009	<0.005 U
	(19305-19308)	%REC						
	(19310)	DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
BL#02	VBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.004	<0.005 U
	(19309)	%REC						
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride

BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		189	190	191	192	193	194
	PPM.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							RO
19305	ABG 2	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19306	ABG 8	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19307	ABG 9	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19308	ABG 10	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19309	ABG 11	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092
19310	TRIP BLANK	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/25/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 19305

DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 10 APR 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		189	190	191	192	193	194
	PPM.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19305-19308)	%REC						
	(19310)	DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
BL#02	VBLK02	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19309)	%REC						
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		195	196	197	198	199	200
	PPM.....		CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME
SAMP #	DESCRIPTION							RO
19305	ABG 2	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19306	ABG 8	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19307	ABG 9	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19308	ABG 10	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19309	ABG 11	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC					99.2	
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092
19310	TRIP BLANK	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/25/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 19305

DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 10 APR 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	195	196	197	198	199	200	
	PPM.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME	
SAMP #	DESCRIPTION							RO
BL#01	VBLK01	CONC <0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	(19305-19308)	%REC						
	(19310)	DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
BL#02	VBLK02	CONC <0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	(19309)	%REC						
		DUPL						
		OID 98932092	98932092	98932092	98932092	98932092	98932092	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene

BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		201	202	203	205	206	207
	PPM.....		c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE
SAMP #	DESCRIPTION							RO
19305	ABG 2	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19306	ABG 8	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19307	ABG 9	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19308	ABG 10	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19309	ABG 11	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/28/92	%REC			98.0			
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092
19310	TRIP BLANK	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/25/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		201	202	203	205	206	207
	PPM.....		c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE
SAMP #	DESCRIPTION							RO
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19305-19308)	%REC						
	(19310)	DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
BL#02	VBLK02	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19309)	%REC						
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9.
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9.

		COLUMN.....	25	26	27	28	29	30
		ANALYTE.....	208	209	210	213	214	215
		PPM.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2
SAMP #	DESCRIPTION							
19305	ABG 2	CONC	<0.005 U	<0.005 U	<0.005 U	0.019 BJ	<0.10 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19306	ABG 8	CONC	<0.005 U	<0.005 U	<0.005 U	0.008 BJ	<0.10 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19307	ABG 9	CONC	<0.005 U	<0.005 U	<0.005 U	0.005 BJ	<0.10 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19308	ABG 10	CONC	<0.005 U	<0.005 U	<0.005 U	0.005 BJ	<0.10 U	<0.005 U
	3/28/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
19309	ABG 11	CONC	<0.005 U	<0.005 U	<0.005 U	0.011 BJ	<0.10 U	<0.005 U
	3/28/92	%REC	99.6	104.2				
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092
19310	TRIP BLANK	CONC	<0.005 U	<0.005 U	<0.005 U	0.005 BJ	<0.10 U	<0.005 U
	3/25/92	%REC						
		DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		208	209	210	213	214	215
	PPM.....		TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2
SAMP #	DESCRIPTION							RO
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	0.014 J	<0.10 U	<0.005 U
	(19305-19308)	%REC						
	(19310)	DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
BL#02	VBLK02	CONC	<0.005 U	<0.005 U	<0.005 U	0.009 J	<0.10 U	<0.005 U
	(19309)	%REC						
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....	31	32	33	34	35	36	
	ANALYTE.....	216	217	218	219	220	221	
	PPM.....	2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S	
SAMP #	DESCRIPTION							RO
19305	ABG 2	CONC <0.050 U	<0.050 U	0.002 J	<0.050 U	<0.005 U	105%	
	3/28/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19306	ABG 8	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	99.6%	
	3/28/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19307	ABG 9	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	101%	
	3/28/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19308	ABG 10	CONC <0.050 U	0.001 J	<0.005 U	<0.050 U	<0.005 U	103%	
	3/28/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	
19309	ABG 11	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	94.4%	
	3/28/92	%REC					96.4	
		DUPL						
		OID 98932092	98932092	98932092	98932092	98932092	98932091	
19310	TRIP BLANK	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	102%	
	3/25/92	%REC						
		DUPL						
		OID 98932091	98932091	98932091	98932091	98932091	98932091	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate_(76-114))

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		216	217	218	219	220	221
	PPM.....		2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S
SAMP #	DESCRIPTION							RO
BL#01	VBLK01	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	94.2%
	(19305-19308)	%REC						
	(19310)	DUPL						
		OID	98932091	98932091	98932091	98932091	98932091	98932091
BL#02	VBLK02	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	92.5%
	(19309)	%REC						
		DUPL						
		OID	98932092	98932092	98932092	98932092	98932092	98932092

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (76-114))

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

COLUMN.....	37	38
ANALYTE.....	222	223
PPM.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION				RO
19305	ABG 2	CONC	109%	106%	
	3/28/92	%REC			
		DUPL			
		OID	98932091	98932091	
19306	ABG 8	CONC	102%	103%	
	3/28/92	%REC			
		DUPL			
		OID	98932091	98932091	
19307	ABG 9	CONC	107%	104%	
	3/28/92	%REC			
		DUPL			
		OID	98932091	98932091	
19308	ABG 10	CONC	108%	105%	
	3/28/92	%REC			
		DUPL			
		OID	98932091	98932091	
19309	ABG 11	CONC	93.7%	96.4%	
	3/28/92	%REC	96.5	96.4	
		DUPL			
		OID	98932091	98932091	
19310	TRIP BLANK	CONC	108%	102%	
	3/25/92	%REC			
		DUPL			
		OID	98932091	98932091	

TOL-d8-S Toluene-D8(Surrogate (88-110)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

JOB FILE: 19305 DATE: 22 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 14) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 10 APR 9

COLUMN.....	37	38
ANALYTE.....	222	223
PPM.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION					RO
BL#01	VBLK01	CONC	105%	101%		
	(19305-19308)	%REC				
	(19310)	DUPL				
		OID	98932091	98932091		
BL#02	VBLK02	CONC	97.1%	99.7%		
	(19309)	%REC				
		DUPL				
		OID	98932092	98932092		

TOL-d8-S Toluene-D8(Surrogate (88-110)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 Lab Sample ID: 19135 - 19143

1) Analysis: BNA Date Extracted/Digested: 4/1/92

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD26082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

	COLUMN.....	1	2	3	4	5	6	
	ANALYTE.....	234	235	236	237	238	239	
	PPM.....	PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH	
SAMP #	DESCRIPTION							ROW
19135	ABG 1 3/27/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	1
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	2
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	3
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	4
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	5
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	6
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	234	235	236	237	238	239
PPM.....	PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH

SAMP #	DESCRIPTION								ROW
19141	ABG 7	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	7
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	8
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	9
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	10
	(19135-19142)	%REC	32.3	73.0				72.0	
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	11
	(19143)	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 19135

DATE: 18 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

COLUMN.....		7	8	9	10	11	12	
ANALYTE.....		240	241	242	243	244	245	
PPM.....		246TCIPH	24DNPH	4NPHE	2M46DNPH	PCIPHE	BENZOAC	
SAMP #	DESCRIPTION							ROW
19135	ABG 1 3/27/92	CONC <0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	1
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC <0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	2
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC <0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	3
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC <0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	4
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC <0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	5
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC <0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	6
		%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	

246TCIPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PCIPHE Pentachlorophenol

24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 19135 DATE: 18 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....		7	8	9	10	11	12	
	ANALYTE.....		240	241	242	243	244	245	
	PPM.....		246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC	
SAMP #	DESCRIPTION								ROW
19141	ABG 7	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	7
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19142	F85	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	8
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	9
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	10
	(19135-19142)	%REC			39.2		103.0		
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	11
	(19143)	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	246	247	248	249	250	251	
	PPM.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION							ROW
19135	ABG 1 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	46.4%	27.8%	1
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	42.4%	25.4%	2
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	37.2%	21.4%	3
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	60.8%	44.7%	4
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	43.1%	26.2%	5
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	40.0%	23.4%	6
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (21-100))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (10-94))

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	246	247	248	249	250	251	
	PPM.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION							ROW
19141	ABG 7	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	40.0%	23.0%	7
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	46.2%	26.9%	8
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC <0.010 U	<0.010 U	<0.010 U	0.0008 J	24.0%	13.1%	9
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	43.5%	27.4%	10
	(19135-19142)	%REC				48.6	30.5	
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	30.8%	16.8%	11
	(19143)	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (21-100))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (10-94))

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

SAMP #	DESCRIPTION		COLUMN..... 19	20	21	22	23	24	ROW
			ANALYTE..... 252	263	264	265	266	267	
			PPM..... 246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR	
19135	ABG 1 3/27/92	CONC	74.9%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC	75.7%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC	63.4%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC	78.0%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC	73.3%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC	69.5%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

246TBP-S 2,4,6-Tribromophenol(Surrogate (10-123))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene

NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		252	263	264	265	266	267
	PPM.....		246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR
SAMP #	DESCRIPTION							ROW
19141	ABG 7	CONC	76.2%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	7
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19142	FB5	CONC	76.2%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19143	ABGR1	CONC	56.3%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
BL#01	SVBLK01	CONC	60.8%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	(19135-19142)	%REC	85.8%			65.8		
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
BL#02	SVBLK02	CONC	52.2%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	(19143)	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094

246TBP-S 2,4,6-Tribromophenol(Surrogate (10-123))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

		COLUMN.....	25	26	27	28	29	30	
		ANALYTE.....	268	269	270	271	272	273	
		PPM.....	BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ	
SAMP #	DESCRIPTION								ROW
19135	ABG 1 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	1
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	2
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	3
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	4
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	5
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	6
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....		25	26	27	28	29	30	
	ANALYTE.....		268	269	270	271	272	273	
	PPM.....		BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ	
SAMP #	DESCRIPTION								ROW
19141	ABG 7	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	7
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	8
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	9
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	10
	(19135-19142)	%REC			104.0				
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	11
	(19143)	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: _ TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		284	285	286	287	288	289
	PPM.....		BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB
SAMP #	DESCRIPTION							ROW
19135	ABG 1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U 1
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19136	ABG 2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U 2
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19137	ABG 3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U 3
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19138	ABG 4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U 4
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19139	ABG 5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U 5
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19140	ABG 6	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U 6
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		284	285	286	287	288	289
	PPM.....		BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB
SAMP #	DESCRIPTION							ROW
19141	ABG 7	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	7
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19142	FB5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
19143	ABGR1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	3/27/92	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	(19135-19142)	%REC			60.2			62.5
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094
BL#02	SVBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	(19143)	%REC						
		DUPL						
		OID	08952094	08952094	08952094	08952094	08952094	08952094

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

		COLUMN.....	37	38	39	40	41	42	
		ANALYTE.....	290	291	292	293	294	295	
		PPM.....	NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION								ROW
19135	ABG 1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY

JOB NUMBER: RD2G082E1170001

RECEIPT DATE: 28 MAR 92

CHEM. PRESERVATIVE: -

TYPE OF SAMPLE: WATER

EST. COMP. DATE: 01 MAY 92

	COLUMN.....	37	38	39	40	41	42	
	ANALYTE.....	290	291	292	293	294	295	
	PPM.....	NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION							ROW
19141	ABG 7 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	7
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1 3/27/92 CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01 (19135-19142) CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02 (19143) CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	%REC							
	DUPL							
	OID	08952094	08952094	08952094	08952094	08952094	08952094	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene

HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 15 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....	43	44	45	46	47	48	
	ANALYTE.....	296	297	298	299	300	301	
	PPM.....	ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION							ROW
19135	ABG 1	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 16 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....	43	44	45	46	47	48	
	ANALYTE.....	296	297	298	299	300	301	
	PPM.....	ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION							ROW
19141	ABG 7	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	7
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	(19135-19142)	%REC	78.4						
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	(19143)	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 17 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

SAMP #	DESCRIPTION		COLUMN..... 49	50	51	52	53	54	ROW
			ANALYTE..... 302	303	304	305	306	307	
			PPM..... HClBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE	
19135	ABG 1 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

HClBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

JOB FILE: 19135 DATE: 17 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 18 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....		49	50	51	52	53	54
	ANALYTE.....		302	303	304	305	306	307
	PPM.....		HClBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE
SAMP #	DESCRIPTION							ROW
19141	ABG 7	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	7
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC	<0.010 U	<0.010 U	<0.010 U	0.0006 BJ	<0.010 U	<0.010 U	9
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	(19135-19142)	%REC						117.0	
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	0.0011 J	<0.010 U	<0.010 U	11
	(19143)	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

HClBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 19 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

	COLUMN.....		55	56	57	58	59	60
	ANALYTE.....		308	309	310	311	312	313
	PPM.....		BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT
SAMP #	DESCRIPTION							ROW
19135	ABG 1 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	0.0020 J	<0.010 U	<0.010 U	6
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 20 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RDZG082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....	55	56	57	58	59	60	
	ANALYTE.....	308	309	310	311	312	313	
	PPM.....	BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT	
SAMP #	DESCRIPTION							ROW
19141	ABG 7	CONC <0.010 U	<0.010 U	<0.010 U	0.0019 J	0.0009 J	<0.010 U	7
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0010 J	<0.010 U	8
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	(19135-19142)	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	(19143)	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 21 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

SAMP #	DESCRIPTION		61 BKFLANT	62 BAPYRE	63 I123PYR	64 DBAHANT	65 B-GHI-PY	66 ANILINE	ROW
19135	ABG 1 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	1
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	2
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	3
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	4
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	5
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	6
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 22 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....	61	62	63	64	65	66	
	ANALYTE.....	314	315	316	317	318	319	
	PPM.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION							ROW
19141	ABG 7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	7
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	8
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	9
	3/27/92	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	10
	(19135-19142)	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	11
	(19143)	%REC						
		DUPL						
		OID 08952094	08952094	08952094	08952094	08952094	08952094	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 19135

DATE: 17 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 23 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

SAMP #	DESCRIPTION		4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL	ROW
		COLUMN.....	67	68	69	70	71	72	
		ANALYTE.....	320	321	322	323	324	325	
		PPM.....							
19135	ABG 1 3/27/92	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	1
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	2
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	3
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	4
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	5
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	6
		%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 19135 DATE: 17 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 24 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

	COLUMN.....		67	68	69	70	71	72	
	ANALYTE.....		320	321	322	323	324	325	
	PPM.....		4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL	
SAMP #	DESCRIPTION								ROW
19141	ABG 7	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	7
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19142	FB5	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	8
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
19143	ABGR1	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	9
	3/27/92	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#01	SVBLK01	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	10
	(19135-19142)	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	
BL#02	SVBLK02	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050	<0.050 U	11
	(19143)	%REC							
		DUPL							
		OID	08952094	08952094	08952094	08952094	08952094	08952094	

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 19135

DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 25 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 28 MAR 92
EST. COMP. DATE: 01 MAY 92

	COLUMN.....	73	74	75	
	ANALYTE.....	326	327	328	
	PPM.....	NB-D5-S	2FlBP-S	PTERP-S	
SAMP #	DESCRIPTION				
19135	ABG 1 3/27/92	CONC 72.7%	72.4%	106%	ROW
		%REC			1
		DUPL			
		OID 08952094	08952094	08952094	
19136	ABG 2 3/27/92	CONC 61.8%	60.8%	117%	
		%REC			2
		DUPL			
		OID 08952094	08952094	08952094	
19137	ABG 3 3/27/92	CONC 63.7%	62.9%	112%	
		%REC			3
		DUPL			
		OID 08952094	08952094	08952094	
19138	ABG 4 3/27/92	CONC 69.6%	73.1%	115%	
		%REC			4
		DUPL			
		OID 08952094	08952094	08952094	
19139	ABG 5 3/27/92	CONC 67.4%	67.1%	104%	
		%REC			5
		DUPL			
		OID 08952094	08952094	08952094	
19140	ABG 6 3/27/92	CONC 63.1%	60.8%	109%	
		%REC			6
		DUPL			
		OID 08952094	08952094	08952094	

NB-D5-S Nitrobenzene-D5(Surrogate (35-114))
PTERP-S p-Terphenyl-D14(Surrogate (33-141))
2FlBP-S 2-Fluorobiphenyl(Surrogate (43-116))

JOB FILE: 19135 DATE: 10 APR 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 26 OF 26) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: WATER EST. COMP. DATE: 01 MAY 92

COLUMN.....	73	74	75
ANALYTE.....	326	327	328
PPM.....	NB-D5-S	2FlBP-S	PTERP-S

SAMP #	DESCRIPTION					ROW
19141	ABG 7	CONC	63.9%	61.7%	105%	7
	3/27/92	%REC				
		DUPL				
		OID	08952094	08952094	08952094	
19142	FB5	CONC	71.1%	71.2%	114%	8
	3/27/92	%REC				
		DUPL				
		OID	08952094	08952094	08952094	
19143	ABGR1	CONC	48.5%	46.2%	77.7%	9
	3/27/92	%REC				
		DUPL				
		OID	08952094	08952094	08952094	
BL#01	SVBLK01	CONC	59.9%	49.7%	107%	10
	(19135-19142)	%REC	68.3	67.9	107	
		DUPL				
		OID	08952094	08952094	08952094	
BL#02	SVBLK02	CONC	48.6%	47.2%	104%	11
	(19143)	%REC				
		DUPL				
		OID	08952094	08952094	08952094	

NB-D5-S Nitrobenzene-D5(Surrogate (35-114)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (43-116))
PTERP-S p-Terphenyl-D14(Surrogate (33-141))

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 4/9/92

ANALYST: R. Kern INSTRUMENT: 95-HP5985B

PROBLEM: Low chrysene-d12 & perylene-d12 internal standard area

SAMPLE NUMBER(S) AFFECTED: 19138

RECOMMENDED CORRECTIVE ACTION: Clean-up & reanalyze sample extract.

CORRECTIVE ACTION TAKEN BY ANALYST: Clean-up not possible at this time. All other QC OK with these samples, therefore, didn't proceed with any other reanalysis.

COMMENTS:

DATE CORRECTIVE ACTION TAKEN: 4/4/92

REVIEWED BY: Richard Kern

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19412 - 19422

1) Analysis: Nutrients (NO_2, NO_3) Date Extracted/Digested: 4/28/92

2) Analysis: Sediment Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19412 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

D.L varies considerably on sediment because of difference in sample size, water content, etc (D. Brown, ALG)

	COLUMN.....	1	2
	ANALYTE.....	69	70
	MG/KG.....	NO2-N	NO3-N
SAMP #	DESCRIPTION		
19412	ABG 1 3/27/92	CONC 0.345	<1.38 U
		%REC	
		DUPL	
		OID 20452121	20452120
19413	ABG 2 3/27/92	CONC 1.45	6.27
		%REC	
		DUPL	
		OID 20452121	20452120
19414	ABG 3 3/27/92	CONC 1.40	8.90
		%REC	
		DUPL	
		OID 20452121	20452120
19415	ABG 4 3/27/92	CONC 1.63	6.44
		%REC	
		DUPL	
		OID 20452121	20452120
19416	ABG 5 3/27/92	CONC 1.17	7.23
		%REC	
		DUPL	
		OID 20452121	20452120
19417	ABG 6 3/27/92	CONC 1.84	10.7
		%REC	
		DUPL	
		OID 20452121	20452120

NO2-N Nitrite Nitrogen NO3-N Nitrate Nitrogen

JOB FILE: 19412 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

COLUMN.....	1	2
ANALYTE.....	69	70
MG/KG.....	NO2-N	NO3-N

SAMP #	DESCRIPTION					RO
19418	ABG 7	CONC	1.03	10.3		
	3/27/92	%REC				
		DUPL				
		OID	20452121	20452120		
19419	ABG 8	CONC	0.97	9.48		8
	3/28/92	%REC				
		DUPL				
		OID	20452121	20452120		
19420	ABG 9	CONC	2.08	9.92		9
	3/28/92	%REC				
		DUPL				
		OID	20452121	20452120		
19421	ABG 10	CONC	3.07	7.72		10
	3/28/92	%REC				
		DUPL				
		OID	20452121	20452120		
19422	ABG 11	CONC	2.27	7.20		11
	3/28/92	%REC				
		DUPL	2.27	7.59		
		OID	20452121	20452120		

NO2-N Nitrite Nitrogen NO3-N Nitrate Nitrogen

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19401 - 19411

1) Analysis: Cyanide Date Extracted/Digested: 4/10/92

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19401 DATE: 08 MAY 9

********** ANALYTICAL LABORATORY GROUP -- DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

COLUMN..... 1
ANALYTE..... 85
MG/KG..... CN

SAMP #	DESCRIPTION			RO
19401	ABG 1	CONC	<0.3 U	
	3/27/92	%REC		
		DUPL		
		OID	57402104	
19402	ABG 2	CONC	<0.35 U	2
	3/27/92	%REC		
		DUPL		
		OID	57402104	
19403	ABG 3	CONC	<0.4 U	3
	3/27/92	%REC	118.4	
		DUPL	<0.4 U	
		OID	57402104	
19404	ABG 4	CONC	0.3 B	4
	3/27/92	%REC		
		DUPL		
		OID	57402104	
19405	ABG 5	CONC	<0.35 U	5
	3/27/92	%REC		
		DUPL		
		OID	57402104	
19406	ABG 6	CONC	0.3 B	6
	3/27/92	%REC		
		DUPL		
		OID	57402104	

CN Cyanide

JOB FILE: 19401 DATE: 08 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

COLUMN..... 1
ANALYTE..... 85
MG/KG..... CN

SAMP #	DESCRIPTION			RO
19407	ABG 7	CONC	<0.3 U	
	3/27/92	%REC		
		DUPL		
		OID	57402104	
19408	ABG 8	CONC	<0.3 U	8
	3/28/92	%REC		
		DUPL		
		OID	57402104	
19409	ABG 9	CONC	0.5 B	9
	3/28/92	%REC		
		DUPL		
		OID	57402104	
19410	ABG 10	CONC	<0.35 U	10
	3/28/92	%REC		
		DUPL		
		OID	57402104	
19411	ABG 11	CONC	<0.3 U	11
	3/28/92	%REC	111.6	
		DUPL	<0.3 U	
		OID	57402104	

CN Cyanide

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19346 - 19356

1) Analysis: Explosives Date Extracted/Digested: 3/31/92

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value belc instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concer trations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

RK

JOB FILE: 19346

DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

	COLUMN.....	1	2	3	4	5	6
	ANALYTE.....	900	901	902	903	904	905
	MG/KG.....	HMX	RDX	TNB	DNB	TETRYL	TNT
SAMP #	DESCRIPTION						
19346	ABG 1 3/27/92	CONC <2.20 U	<1.00 U	<0.25 U	<0.25 U	<0.65 U	<0.25 U
		%REC 93.0	90.0	109.9			124.8
		DUPL <2.20 U	<1.00 U	<0.25 U	<0.25 U	<0.65 U	<0.25 U
		OID 52702099	52702099	52702099	52702099	52702099	52702099
19347	ABG 2 3/27/92	CONC <2.20 U	<1.00 U	<0.25 U	<0.25 U	<0.65 U	<0.25 U
		%REC					
		DUPL					
		OID 52702099	52702099	52702099	52702099	52702099	52702099
19348	ABG 3 3/27/92	CONC <2.20 U	<1.00 U	<0.25 U	<0.25 U	<0.65 U	<0.25 U
		%REC					
		DUPL					
		OID 52702099	52702099	52702099	52702099	52702099	52702099
19349	ABG 4 3/27/92	CONC 10.2	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.18 J
		%REC					
		DUPL					
		OID 52702099	52702099	52702099	52702099	52702099	52702099
19350	ABG 5 3/27/92	CONC <2.20 U	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.26
		%REC					
		DUPL					
		OID 52702099	52702099	52702099	52702099	52702099	52702099
19351	ABG 6 3/27/92	CONC 1.37 J	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.14 J
		%REC 99.0	95.0	98.0			100.0
		DUPL 2.13	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.15 J
		OID 52702099	52702099	52702099	52702099	52702099	52702099

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 19346 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	900	901	902	903	904	905
MG/KG.....	HMX	RDX	TNB	DNB	TETRYL	TNT

SAMP #	DESCRIPTION								RO
19352	ABG 7	CONC	1.46 J	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.12 J	
	3/27/92	%REC							
		DUPL							
		OID	52702099	52702099	52702099	52702099	52702099	52702099	
19353	ABG 8	CONC	2.90	<1.00 U	<0.25 U	<0.25 U	<0.65 U	1.13	
	3/28/92	%REC							
		DUPL							
		OID	52702099	52702099	52702099	52702099	52702099	52702099	
19354	ABG 9	CONC	0.32 J	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.17 J	
	3/28/92	%REC							
		DUPL							
		OID	52702099	52702099	52702099	52702099	52702099	52702099	
19355	ABG 10	CONC	0.78 J	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.11 J	1
	3/28/92	%REC							
		DUPL							
		OID	52702099	52702099	52702099	52702099	52702099	52702099	
19356	ABG 11	CONC	<2.20 U	<1.00 U	<0.25 U	<0.25 U	<0.65 U	0.27	1
	3/28/92	%REC	88.0	82.0	103.0			96.0	
		DUPL	<2.20 U	1.00 U	<0.25 U	<0.25 U	<0.65 U	0.34	
		OID	52702099	52702099	52702099	52702099	52702099	52702099	
BL#01	METHOD BLK	CONC	<2.20 U	<1.00 U	<0.25 U	<0.25 U	<0.65 U	<0.25 U	1
	19346	%REC	96.0	87.0	102.0			123.8	
		DUPL							
		OID	52702099	52702099	52702099	52702099	52702099	52702099	

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 19346

DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

COLUMN.....		7	8
ANALYTE.....		906	907
MG/KG.....		2,4-DNT	2,6-DNT
SAMP #	DESCRIPTION		
19346	ABG 1 3/27/92	CONC	<0.25 U / <0.26 U
		%REC	97.0 /
		DUPL	<0.25 U / <0.26 U
		OID	52702099 / 52702099
19347	ABG 2 3/27/92	CONC	<0.25 U / <0.26 U
		%REC	/
		DUPL	/
		OID	52702099 / 52702099
19348	ABG 3 3/27/92	CONC	<0.25 U / <0.26 U
		%REC	/
		DUPL	/
		OID	52702099 / 52702099
19349	ABG 4 3/27/92	CONC	<0.25 U / <0.26 U
		%REC	/
		DUPL	/
		OID	52702099 / 52702099
19350	ABG 5 3/27/92	CONC	<0.25 U / <0.26 U
		%REC	/
		DUPL	/
		OID	52702099 / 52702099
19351	ABG 6 3/27/92	CONC	<0.25 U / <0.26 U
		%REC	96.0 /
		DUPL	<0.25 U / <0.26 U
		OID	52702099 / 52702099

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

JOB FILE: 19346 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 4) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9.

COLUMN.....	7	8	
ANALYTE.....	906	907	
MG/KG.....	2,4-DNT	2,6-DNT	

SAMP #	DESCRIPTION					RO
19352	ABG 7	CONC	<0.25 U	<0.26 U		
	3/27/92	%REC				
		DUPL				
		OID	52702099	52702099		
19353	ABG 8	CONC	<0.25 U	<0.26 U		8
	3/28/92	%REC				
		DUPL				
		OID	52702099	52702099		
19354	ABG 9	CONC	<0.25 U	<0.26 U		9
	3/28/92	%REC				
		DUPL				
		OID	52702099	52702099		
19355	ABG 10	CONC	<0.25 U	<0.26 U		10
	3/28/92	%REC				
		DUPL				
		OID	52702099	52702099		
19356	ABG 11	CONC	<0.25 U	<0.26 U		11
	3/28/92	%REC	94.0			
		DUPL	<0.25 U	<0.26 U		
		OID	52702099	52702099		
BL#01	METHOD BLK	CONC	<0.25 U	<0.26		12
	19346	%REC	94.0			
		DUPL				
		OID	52702099	52702099		

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19199 - 19205

1) Analysis: Volatiles Date Extracted/Digested: 4/3-9/92

2) Analysis: Sediment Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

RK

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	183	184	185	186	187	188	
		MG/KG.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE	
SAMP #	DESCRIPTION								RO
19199	ABG 1	CONC	<0.021 U	<0.021 U	<0.021 U	<0.021 U	0.131 B	<0.010 U	1
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19200	ABG 2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.152 B	<0.005 U	2
	3/27/92	%REC							
		DUPL							
		OID	98932097	98932097	98932097	98932097	98932097	98932097	
19201	ABG 3	CONC	<0.021 U	<0.021 U	<0.021 U	<0.021 U	0.095 B	<0.011 U	3
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19202	ABG 4	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	0.091 B	<0.010 U	4
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19203	ABG 5	CONC	<0.014 U	<0.014 U	<0.014 U	<0.014 U	0.058 B	<0.007 U	5
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19204	ABG 6	CONC	<0.020 U	<0.020 U	<0.020 U	<0.020 U	0.382 B	<0.010 U	6
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride
BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		183	184	185	186	187	188
	MG/KG.....		ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE
SAMP #	DESCRIPTION							RO
19205	ABG 7	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	0.034 B	<0.006 U
	3/27/92	%REC						
		DUPL						
		OID	98932100	98932100	98932098	98932098	98932098	98932098
BL#01	VBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.005	<0.005 U
	(19199)	%REC						
	(19201-19204)	DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#02	VBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.006	<0.005 U
	(19227-19229)	%REC						
	(19200)	DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#03	VBLK03	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.004 J	<0.005 U
	(19205)	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932100

ClMETH	Chloromethane	BrMETH	Bromomethane
VNLCL	Vinyl Chloride	ClETHA	Chloroethane
MECL	Methylene Chloride	11DClETE	1,1-Dichloroethene

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		189	190	191	192	193	194
	MG/KG.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							RO
19199	ABG 1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19200	ABG 2	CONC	<0.005 U	<0.005 U	<0.005 U	0.010	<0.005 U	<0.005 U
	3/27/92	%REC						
		DUPL						
		OID	98932097	98932097	98932097	98932097	98932097	98932097
19201	ABG 3	CONC	<0.011 U	<0.011 U	<0.011 U	0.006 J	<0.011 U	<0.011 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19202	ABG 4	CONC	<0.010 U	<0.010 U	<0.010 U	0.004 J	<0.010 U	<0.010 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19203	ABG 5	CONC	<0.007 U	<0.007 U	<0.007 U	0.002 J	<0.007 U	<0.007 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19204	ABG 6	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

		COLUMN.....	7	8	9	10	11	12	
		ANALYTE.....	189	190	191	192	193	194	
		MG/KG.....	11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA	
SAMP #	DESCRIPTION								RO
19205	ABG 7	CONC	<0.006 U	<0.006 U	<0.006 U	<0.006 U	<0.006 U	0.014	7
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	8
	(19199)	%REC							
	(19201-19204)	DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#02	VBLK02	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	9
	(19227-19229)	%REC							
	(19200)	DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#03	VBLK03	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	10
	(19205)	%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

		COLUMN.....	13	14	15	16	17	18	
		ANALYTE.....	195	196	197	198	199	200	
		MG/KG.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME	
SAMP #	DESCRIPTION								RO
19199	ABG 1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19200	ABG 2	CONC	<0.005 U	0.003 J	<0.005 U	<0.005 U	<0.005 U	<0.005 U	2
	3/27/92	%REC							
		DUPL							
		OID	98932097	98932097	98932097	98932097	98932097	98932097	
19201	ABG 3	CONC	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	3
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19202	ABG 4	CONC	<0.010 U	0.002 J	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19203	ABG 5	CONC	<0.007 U	<0.007 U	<0.007 U	<0.007 U	<0.007 U	<0.007 U	5
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19204	ABG 6	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		195	196	197	198	199	200
	MG/KG.....		CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME
SAMP #	DESCRIPTION							RO
19205	ABG 7	CONC	<0.006 U	<0.006 U	<0.006 U	<0.006 U	<0.006 U	<0.006 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19199)	%REC						
	(19201-19204)	DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#02	VBLK02	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19227-19229)	%REC						
	(19200)	DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#03	VBLK03	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19205)	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		201	202	203	205	206	207
	MG/KG.....		c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE
SAMP #	DESCRIPTION							RO
19199	ABG 1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19200	ABG 2	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	3/27/92	%REC						
		DUPL						
		OID	98932097	98932097	98932097	98932097	98932097	98932097
19201	ABG 3	CONC	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19202	ABG 4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19203	ABG 5	CONC	<0.007 U	<0.007 U	<0.007 U	<0.007 U	<0.007 U	<0.007 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19204	ABG 6	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

		COLUMN.....	19	20	21	22	23	24	
		ANALYTE.....	201	202	203	205	206	207	
		MG/KG.....	c13ClPRE	112TCA	BENZENE	CHBr3	112TClA	TECLETE	
SAMP #	DESCRIPTION								RO
19205	ABG 7	CONC	<0.006 U	<0.006 U	<0.006 U	0.003 J	<0.006 U	<0.006 U	
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	8
	(19199)	%REC							
	(19201-19204)	DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#02	VBLK02	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	9
	(19227-19229)	%REC							
	(19200)	DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#03	VBLK03	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	10
	(19205)	%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
112TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TECLETE Tetrachloroethene

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

		COLUMN.....	25	26	27	28	29	30	
		ANALYTE.....	208	209	210	213	214	215	
		MG/KG.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION								RO
19199	ABG 1	CONC	<0.010 U	<0.010 U	<0.010 U	0.131 BJ	<0.209 U	<0.010 U	
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19200	ABG 2	CONC	<0.005 U	<0.005 U	<0.005 U	0.071 BJ	<0.102 U	0.005 J	2
	3/27/92	%REC							
		DUPL							
		OID	98932097	98932097	98932097	98932097	98932097	98932097	
19201	ABG 3	CONC	<0.011 U	<0.011 U	<0.011 U	0.073 BJ	<0.211 U	<0.011 U	3
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19202	ABG 4	CONC	<0.010 U	<0.010 U	<0.010 U	0.088 BJ	<0.202 U	<0.010 U	4
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19203	ABG 5	CONC	<0.007 U	<0.007 U	<0.007 U	0.175 B	0.006 J	<0.007 U	5
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
19204	ABG 6	CONC	<0.010 U	<0.010 U	<0.010 U	0.117 BJ	<0.195 U	<0.010 U	6
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	

TOLUENE	Toluene	ClBEN	Chlorobenzene
ETBEN	Ethylbenzene	ACETONE	Acetone
BUTANO	2-Butanone	CS2	Carbondisulfide

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

		COLUMN.....	25	26	27	28	29	30	
		ANALYTE.....	208	209	210	213	214	215	
		MG/KG.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION								RO
19205	ABG 7	CONC	0.003 J	<0.006 U	0.001 J	0.206 B	0.013 J	<0.006 U	
	3/27/92	%REC							
		DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	0.023 J	<0.10 U	<0.005 U	8
	(19199)	%REC							
	(19201-19204)	DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#02	VBLK02	CONC	<0.005 U	<0.005 U	<0.005 U	0.007 J	<0.10 U	<0.005 U	9
	(19227-19229)	%REC							
	(19200)	DUPL							
		OID	98932098	98932098	98932098	98932098	98932098	98932098	
BL#03	VBLK03	CONC	<0.005 U	<0.005 U	<0.005 U	0.031 J	<0.10 U	<0.005 U	10
	(19205)	%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	

TOLUENE	Toluene	ClBEN	Chlorobenzene
ETBEN	Ethylbenzene	ACETONE	Acetone
BUTANO	2-Butanone	CS2	Carbondisulfide

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		216	217	218	219	220	221
	MG/KG.....		2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DCLE-S
SAMP #	DESCRIPTION							RO
19199	ABG 1	CONC	<0.104 U	<0.104 U	<0.010 U	<0.104 U	<0.010 U	100%
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19200	ABG 2	CONC	<0.051 U	<0.051 U	<0.005 U	<0.051 U	<0.005 U	102%
	3/27/92	%REC						
		DUPL						
		OID	98932097	98932097	98932097	98932097	98932097	98932097
19201	ABG 3	CONC	<0.106 U	<0.106 U	<0.011 U	<0.106 U	<0.011 U	104%
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19202	ABG 4	CONC	<0.101 U	<0.101 U	<0.010 U	<0.101 U	<0.010 U	103%
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19203	ABG 5	CONC	<0.068 U	<0.068 U	<0.007 U	<0.068 U	<0.007 U	104%
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
19204	ABG 6	CONC	<0.098 U	<0.098 U	<0.010 U	<0.098 U	<0.010 U	103%
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DCLE-S 1,2-Dichloroethane-d4(Surrogate (70-121))

JOB FILE: 19199 DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 9

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		216	217	218	219	220	221
	MG/KG.....		2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DCLE-S
SAMP #	DESCRIPTION							RO
19205	ABG 7	CONC	<0.062 U	<0.062 U	<0.006 U	<0.062 U	<0.006 U	110%
	3/27/92	%REC						
		DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#01	VBLK01	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	99.9%
	(19199)	%REC						
	(19201-19204)	DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#02	VBLK02	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	89.9%
	(19227-19229)	%REC						
	(19200)	DUPL						
		OID	98932098	98932098	98932098	98932098	98932098	98932098
BL#03	VBLK03	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	93.0%
	(19205)	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DCLE-S 1,2-Dichloroethane-d4(Surrogate (70-121))

JOB FILE: 19199 DATE: 27 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 28 MAR 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 17 APR 92

COLUMN.....	37	38
ANALYTE.....	222	223
MG/KG.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION				ROW
19199	ABG 1	CONC	96.2%	98.8%	1
	3/27/92	%REC			
		DUPL			
		OID	98932098	98932098	
19200	ABG 2	CONC	100%	89.2%	2
	3/27/92	%REC			
		DUPL			
		OID	98932097	98932097	
19201	ABG 3	CONC	100%	103%	3
	3/27/92	%REC			
		DUPL			
		OID	98932098	98932098	
19202	ABG 4	CONC	96.7%	100%	4
	3/27/92	%REC			
		DUPL			
		OID	98932098	98932098	
19203	ABG 5	CONC	98.3%	101%	5
	3/27/92	%REC			
		DUPL			
		OID	98932098	98932098	
19204	ABG 6	CONC	99.0%	102%	6
	3/27/92	%REC			
		DUPL			
		OID	98932098	98932098	

TOL-d8-S Toluene-D8(Surrogate (81-117)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (74-121))

JOB FILE: 19199

DATE: 27 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 14) **********

JOB DESCRIPTION: CRANE MONITORING WELLS - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 28 MAR 9
EST. COMP. DATE: 17 APR 9

	COLUMN.....	37	38	
	ANALYTE.....	222	223	
	MG/KG.....	TOL-d8-S	4BrFB-S	
SAMP #	DESCRIPTION			
19205	ABG 7 3/27/92	CONC	103%	102%
		%REC		
		DUPL		
		OID	98932098	98932098
BL#01	VBLK01 (19199) (19201-19204)	CONC	99.6%	101%
		%REC		
		DUPL		
		OID	98932098	98932098
BL#02	VBLK02 (19227-19229) (19200)	CONC	99.8%	101%
		%REC		
		DUPL		
		OID	98932098	98932098
BL#03	VBLK03 (19205)	CONC	95.4%	97.9%
		%REC		
		DUPL		
		OID	98932100	98932100

TOL-d8-S Toluene-D8(Surrogate (81-117))

4BrFB-S 4-Bromofluorobenzene(Surrogate (74-121))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 28, 1992 (ROUND 1) Lab Sample ID: 19423 - 19426

1) Analysis: Volatiles Date Extracted/Digested: 4/9/92

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19423 DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 7) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 10 APR 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		183	184	185	186	187	188
	MG/KG.....		ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE
SAMP #	DESCRIPTION							RO
19423	ABG 8	CONC	<0.013 U	<0.013 U	<0.013 U	<0.013 U	0.025 B	<0.006
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19424	ABG 9	CONC	<0.014 U	<0.014 U	<0.014 U	<0.014 U	0.125 B	<0.007
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19425	ABG 10	CONC	<0.014 U	<0.014 U	<0.014 U	<0.014 U	0.071 B	<0.007
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19426	ABG 11	CONC	<0.013 U	<0.013 U	<0.013 U	<0.013 U	0.038 B	<0.006 U
	3/28/92	%REC						100.8
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
BL#01	VBLK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.004 J	<0.005 U
	(19423-19426)	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride
BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 19423 DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 7) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 10 APR 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		189	190	191	192	193	194
	MG/KG.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							RO
19423	ABG 8	CONC	<0.006	<0.006	<0.006	<0.006	<0.006	0.004 J
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19424	ABG 9	CONC	<0.007	<0.007	<0.007	0.021	<0.007	0.008
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19425	ABG 10	CONC	<0.007	<0.007	<0.007	0.037	<0.007	0.012
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19426	ABG 11	CONC	<0.006	<0.006	<0.006	0.015	<0.006	0.010
	3/28/92	%REC						108.4
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	(19423-19426)	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 19423

DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 7) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 10 APR 9

		COLUMN.....	13	14	15	16	17	18	
		ANALYTE.....	195	196	197	198	199	200	
		MG/KG.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME	
SAMP #	DESCRIPTION								RO
19423	ABG 8 3/28/92	CONC	<0.006	<0.006 U	<0.006	<0.006	<0.006	<0.006 U	1
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19424	ABG 9 3/28/92	CONC	<0.007	0.006 J	<0.007	<0.007	<0.007	0.002 J	2
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19425	ABG 10 3/28/92	CONC	<0.007	0.014	<0.007	<0.007	<0.007	0.006 J	3
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19426	ABG 11 3/28/92	CONC	<0.006	0.004 J	<0.006	<0.006	<0.006	0.001 J	4
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
BL#01	VBLK01 (19423-19426)	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	5
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene

BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 19423 DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 7) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 10 APR 9

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	201	202	203	205	206	207
MG/KG.....	c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE

SAMP #	DESCRIPTION								RO
19423	ABG 8	CONC	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	
	3/28/92	%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19424	ABG 9	CONC	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	
	3/28/92	%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19425	ABG 10	CONC	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	
	3/28/92	%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19426	ABG 11	CONC	<0.006	<0.006	<0.006 U	<0.006	<0.006	<0.006	
	3/28/92	%REC			112.8				
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
BL#01	VBLK01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	(19423-19426)	%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 19423

DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 7) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 10 APR 9

		COLUMN.....	25	26	27	28	29	30	
		ANALYTE.....	208	209	210	213	214	215	
		MG/KG.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION								RO
19423	ABG 8 3/28/92	CONC	0.002 J	<0.006	<0.006	0.118 B	<0.129 U	<0.006	
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19424	ABG 9 3/28/92	CONC	0.002 J	<0.007	<0.007	0.069 BJ	<0.137 U	<0.007	2
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19425	ABG 10 3/28/92	CONC	0.001 J	<0.007	<0.007	0.058 BJ	<0.144 U	<0.007	3
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
19426	ABG 11 3/28/92	CONC	<0.006 U	<0.006 U	<0.006	0.049 BJ	<0.126 U	<0.006	4
		%REC	108.2	102.6					
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	
BL#01	VBLK01 (19423-19426)	CONC	<0.005 U	<0.005 U	<0.005 U	0.031 J	<0.10 U	<0.005 U	5
		%REC							
		DUPL							
		OID	98932100	98932100	98932100	98932100	98932100	98932100	

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone

ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 19423 DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 7) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 10 APR 9

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		216	217	218	219	220	221
	MG/KG.....		2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S
SAMP #	DESCRIPTION							RO
19423	ABG 8	CONC	<0.064 U	<0.064 U	<0.006 U	<0.064 U	0.003 J	105%
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19424	ABG 9	CONC	<0.069 U	<0.069 U	<0.007 U	<0.069 U	<0.007 U	103%
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19425	ABG 10	CONC	<0.072 U	<0.072 U	<0.007 U	<0.072 U	<0.007 U	106%
	3/28/92	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100
19426	ABG 11	CONC	<0.063 U	<0.063 U	<0.006 U	<0.063 U	<0.006 U	103%
	3/28/92	%REC						103
		DUPL						95.8%
		OID	98932100	98932100	98932100	98932100	98932100	98932100
BL#01	VBLK01	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	93.0%
	(19423-19426)	%REC						
		DUPL						
		OID	98932100	98932100	98932100	98932100	98932100	98932100

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (76-114))

JOB FILE: 19423

DATE: 17 APR 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 7) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 10 APR 9

COLUMN.....	37	38
ANALYTE.....	222	223
MG/KG.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION				
19423	ABG 8 3/28/92	CONC	98.5%	102%	
		%REC			
		DUPL			
		OID	98932100	98932100	
19424	ABG 9 3/28/92	CONC	100%	99.9%	
		%REC			
		DUPL			
		OID	98932100	98932100	
19425	ABG 10 3/28/92	CONC	99.3%	100%	
		%REC			
		DUPL			
		OID	98932100	98932100	
19426	ABG 11 3/28/92	CONC	98.9%	99.1%	
		%REC	96.9	98.8	
		DUPL	94.9%	94.2%	
		OID	98932100	98932100	
BL#01	VBLK01 (19423-19426)	CONC	95.4%	97.9%	
		%REC			
		DUPL			
		OID	98932100	98932100	

TOL-d8-S Toluene-D8(Surrogate (88-110))

4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19357 - 19367

1) Analysis: BNA Date Extracted/Digested: 4/2/92

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

RK

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		234	235	236	237	238	239
	MG/KG.....		PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH
SAMP #	DESCRIPTION							RO
19357	ABG 1	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U
	3/27/92	%REC	75.0	74.0				81.0
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19358	ABG 2	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<1.8 U
	3/27/92	%REC						
		DUPL						
		OID	08952112	08952112	08952112	08952112	08952112	08952112
19359	ABG 3	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19360	ABG 4	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19361	ABG 5	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19362	ABG 6	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<1.6 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		234	235	236	237	238	239
	MG/KG.....		PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH
SAMP #	DESCRIPTION							RO
19363	ABG 7	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<1.6 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19364	ABG 8	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<1.5 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19365	ABG 9	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<1.7 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19366	ABG 10	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<1.7 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19367	ABG 11	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<1.7 U
	3/28/92	%REC	65.5	59.5				71.5
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#01	SVBLK01	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<1.3 U
	19357,19359-61	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9.

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	234	235	236	237	238	239
MG/KG.....	PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH

SAMP #	DESCRIPTION								RO
BL#02	SVBLK02	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<1.3 U	1
	19362-67	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<1.3 U	1
	19358	%REC	81.5	79.5				100.0	
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

COLUMN.....	7	8	9	10	11	12
ANALYTE.....	240	241	242	243	244	245
MG/KG.....	246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC

SAMP #	DESCRIPTION		7	8	9	10	11	12	RO
19357	ABG 1	CONC	<0.85 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	
	3/27/92	%REC			100.5		97.0		
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2	CONC	<0.90 U	<4.5 U	<4.5 U	<4.5 U	<4.5 U	<4.5 U	
	3/27/92	%REC							
		DUPL							
		OID	08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3	CONC	<0.85 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4	CONC	<0.85 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5	CONC	<0.85 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6	CONC	<0.82 U	<4.1 U	<4.1 U	<4.1 U	<4.1 U	<4.1 U	
	3/27/92	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

		COLUMN.....	7	8	9	10	11	12	
		ANALYTE.....	240	241	242	243	244	245	
		MG/KG.....	246TCIPH	24DNPH	4NPHE	2M46DNPH	PCIPHE	BENZOAC	
SAMP #	DESCRIPTION								RO
19363	ABG 7 3/27/92	CONC	<0.82 U	<4.1 U	<4.1 U	<4.1 U	<4.1 U	<4.1 U	7
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19364	ABG 8 3/28/92	CONC	<0.75 U	<3.8 U	<3.8 U	<3.8 U	<3.8 U	<3.8 U	8
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19365	ABG 9 3/28/92	CONC	<0.87 U	<4.4 U	<4.4 U	<4.4 U	<4.4 U	<4.4 U	9
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19366	ABG 10 3/28/92	CONC	<0.87 U	<4.4 U	<4.4 U	<4.4 U	<4.4 U	<4.4 U	10
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19367	ABG 11 3/28/92	CONC	<0.87 U	<4.4 U	<4.4 U	<4.4 U	<4.4 U	<4.4 U	11
		%REC			108.5		105.0		
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#01	SVBLK01 19357,19359-61	CONC	<0.67 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	12
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

246TCIPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PCIPHE Pentachlorophenol

24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD26082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		240	241	242	243	244	245
	MG/KG.....		246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC
SAMP #	DESCRIPTION							RO
BL#02	SVBLK02	CONC	<0.67 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	1
	19362-67	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#03	SVBLK03	CONC	<0.67 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	1
	19358	%REC			93.0		113.0	
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

		COLUMN.....	13	14	15	16	17	18	
		ANALYTE.....	246	247	248	249	250	251	
		MG/KG.....	2MEPHE	4MEPHE	245TCIPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION								RO
19357	ABG 1 3/27/92	CONC	<0.85 U	<0.85 U	<0.85 U	<1.7 U	48.5%	61.2%	
		%REC					68.3	73.1	
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2 3/27/92	CONC	<0.90 U	<0.90 U	<0.90 U	<1.8 U	27.8%	31.7%	2
		%REC							
		DUPL							
		OID	08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3 3/27/92	CONC	<0.85 U	<0.85 U	<0.85 U	<1.7 U	60.9%	62.1%	3
		%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4 3/27/92	CONC	<0.85 U	<0.85 U	<0.85 U	<1.7 U	50.2%	50.1%	4
		%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5 3/27/92	CONC	<0.85 U	<0.85 U	<0.85 U	<1.7 U	42.1%	45.8%	5
		%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6 3/27/92	CONC	<0.82 U	<0.82 U	<0.82 U	<1.6 U	40.3%	42.9%	6
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

2MEPHE 2-Methylphenol
245TCIPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (25-121))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (24-113))

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

			COLUMN.....	13	14	15	16	17	18	
			ANALYTE.....	246	247	248	249	250	251	
			MG/KG.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION									RO
19363	ABG 7	CONC	<0.82 U	<0.82 U	<0.82 U	<1.6 U	47.5%	52.1%		
	3/27/92	%REC								
		DUPL								
		OID	08952099	08952099	08952099	08952099	08952099	08952099		
19364	ABG 8	CONC	<0.75 U	<0.75 U	<0.75 U	<1.5 U	67.0%	62.6%		8
	3/28/92	%REC								
		DUPL								
		OID	08952099	08952099	08952099	08952099	08952099	08952099		
19365	ABG 9	CONC	<0.87 U	<0.87 U	<0.87 U	<1.7 U	66.7%	65.7%		9
	3/28/92	%REC								
		DUPL								
		OID	08952099	08952099	08952099	08952099	08952099	08952099		
19366	ABG 10	CONC	<0.87 U	<0.87 U	<0.87 U	<1.7 U	46.6%	62.0%		10
	3/28/92	%REC								
		DUPL								
		OID	08952099	08952099	08952099	08952099	08952099	08952099		
19367	ABG 11	CONC	<0.87 U	<0.87 U	<0.87 U	<1.7 U	80.6%	77.7%		11
	3/28/92	%REC					61.3	64.4		
		DUPL								
		OID	08952099	08952099	08952099	08952099	08952099	08952099		
BL#01	SVBLK01	CONC	<0.67 U	<0.67 U	<0.67 U	<1.3 U	48.3%	48.8%		12
	19357,19359-61	%REC								
		DUPL								
		OID	08952099	08952099	08952099	08952099	08952099	08952099		

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (25-121))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (24-113))

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	246	247	248	249	250	251	
	MG/KG.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION							RO
BL#02	SVBLK02	CONC	<0.67 U	<0.67 U	<0.67 U	<1.3 U	87.8%	84.9%	1
	19362-67	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC	<0.67 U	<0.67 U	<0.67 U	<1.3 U	73.5%	83.3%	1
	19358	%REC					75.8	76.6	
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (25-121))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (24-113))

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		252	263	264	265	266	267
	MG/KG.....		246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR
SAMP #	DESCRIPTION							RO
19357	ABG 1	CONC	78.4%	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U
	3/27/92	%REC	90.5			64.3		
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19358	ABG 2	CONC	62.0%	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U
	3/27/92	%REC						
		DUPL						
		OID	08952112	08952112	08952112	08952112	08952112	08952112
19359	ABG 3	CONC	84.3%	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19360	ABG 4	CONC	84.0%	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19361	ABG 5	CONC	88.4%	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19362	ABG 6	CONC	78.1%	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

246TBP-S 2,4,6-Tribromophenol(Surrogate (19-122))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

SAMP #	DESCRIPTION		19 / 252 / 246TBP-S	20 / 263 / NNDMeAM	21 / 264 / BCIIPrE	22 / 265 / NNDNPAM	23 / 266 / NITROBEN	24 / 267 / ISOPHOR	
19363	ABG 7 3/27/92	CONC	77.3%	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	RO 7
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19364	ABG 8 3/28/92	CONC	71.6%	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	8
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19365	ABG 9 3/28/92	CONC	82.2%	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	9
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19366	ABG 10 3/28/92	CONC	86.0%	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	10
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19367	ABG 11 3/28/92	CONC	78.2%	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	11
		%REC	76.6			51.8			
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#01	SVBLK01 19357,19359-61	CONC	59.2%	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	12
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

246TBP-S 2,4,6-Tribromophenol(Surrogate (19-122))
BCIIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		252	263	264	265	266	267
	MG/KG.....		246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR
SAMP #	DESCRIPTION							RO
BL#02	SVBLK02	CONC	82.8%	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	1
	19362-67	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#03	SVBLK03	CONC	83.3%	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	1
	19358	%REC	88.4			63.9		
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

246TBP-S 2,4,6-Tribromophenol(Surrogate (19-122))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 19357 DATE: 28 MAY 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9:

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		268	269	270	271	272	273
	MG/KG.....		BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ
SAMP #	DESCRIPTION							RO
19357	ABG 1	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<4.2 U	<1.7 U
	3/27/92	%REC			93.5			
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19358	ABG 2	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<4.5 U	<1.8 U
	3/27/92	%REC						
		DUPL						
		OID	08952112	08952112	08952112	08952112	08952112	08952112
19359	ABG 3	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<4.2 U	<1.7 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19360	ABG 4	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<4.2 U	<1.7 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19361	ABG 5	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<4.2 U	<1.7 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19362	ABG 6	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<4.1 U	<1.6 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		268	269	270	271	272	273
	MG/KG.....		BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ
SAMP #	DESCRIPTION							RO
19363	ABG 7	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<4.1 U	<1.6 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19364	ABG 8	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<3.8 U	<1.5 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19365	ABG 9	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<4.4 U	<1.7 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19366	ABG 10	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<4.4 U	<1.7 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19367	ABG 11	CONC	<0.87 U	<0.87 U	1.1	<0.87 U	<4.4 U	<1.7 U
	3/28/92	%REC			84.7			
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#01	SVBLK01	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<3.3 U	<1.3 U
	19357,19359-61	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

Checked w/ R. Karn - This is a real result. Did not show up in 2,4-DNT (explosive) apparently because sample was not homogeneous.

JOB FILE: 19357

DATE: 28 MAY 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 15 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9:
EST. COMP. DATE: 08 MAY 9:

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	268	269	270	271	272	273	
	MG/KG.....	BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ	
SAMP #	DESCRIPTION							RO
BL#02	SVBLK02	CONC <0.67 U	<0.67 U	<0.67 U	<0.67 U	<3.3 U	<1.3 U	1:
	19362-67	%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC <0.67 U	<0.67 U	<0.67 U	<0.67 U	<3.3 U	<1.3 U	1:
	19358	%REC		72.6				
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 19357 DATE: 28 MAY 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 16 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 92

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		284	285	286	287	288	289
	MG/KG.....		BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB
SAMP #	DESCRIPTION							ROW
19357	ABG 1	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	1
	3/27/92	%REC			60.2			65.5	
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	2
	3/27/92	%REC							
		DUPL							
		OID	08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	3
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	5
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	6
	3/27/92	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 19357 DATE: 28 MAY 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 17 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9:

		COLUMN.....	31	32	33	34	35	36
		ANALYTE.....	284	285	286	287	288	289
		MG/KG.....	BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB
SAMP #	DESCRIPTION							RO
19363	ABG 7	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19364	ABG 8	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19365	ABG 9	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19366	ABG 10	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19367	ABG 11	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U
	3/28/92	%REC			46.0			54.4
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#01	SVBLK01	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U
	19357,19359-61	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 19357 DATE: 28 MAY 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 18 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9:

		COLUMN.....	31	32	33	34	35	36	
		ANALYTE.....	284	285	286	287	288	289	
		MG/KG.....	BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB	
SAMP #	DESCRIPTION								RO
BL#02	SVBLK02	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	1:
	19362-67	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	14
	19358	%REC			73.5			78.3	
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 19357

DATE: 28 MAY 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 19 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9:
EST. COMP. DATE: 08 MAY 9:

COLUMN.....		37	38	39	40	41	42	
ANALYTE.....		290	291	292	293	294	295	
MG/KG.....		NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION							RO
19357	ABG 1 3/27/92	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2 3/27/92	CONC <0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	2
		%REC						
		DUPL						
		OID 08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3 3/27/92	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	3
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4 3/27/92	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5 3/27/92	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	5
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6 3/27/92	CONC <0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	6
		%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 20 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		37	38	39	40	41	42
	ANALYTE.....		290	291	292	293	294	295
	MG/KG.....		NAPHTH	HCLBU	HCLCYPD	2CLNAPH	ACENAY	DMePHTH
SAMP #	DESCRIPTION							RO
19363	ABG 7	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19364	ABG 8	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19365	ABG 9	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19366	ABG 10	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19367	ABG 11	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#01	SVBLK01	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U
	19357,19359-61	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

NAPHTH Naphthalene
HCLCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HCLBU Hexachlorobutadiene
2CLNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 21 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

		COLUMN.....	37	38	39	40	41	42	
		ANALYTE.....	290	291	292	293	294	295	
		MG/KG.....	NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION								RO
BL#02	SVBLK02	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	1
	19362-67	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	1
	19358	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 22 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

COLUMN.....		43	44	45	46	47	48	
ANALYTE.....		296	297	298	299	300	301	
MG/KG.....		ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION							RO
19357	ABG 1	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	
	3/27/92	%REC 78.2						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2	CONC <0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	
	3/27/92	%REC						
		DUPL						
		OID 08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	
	3/27/92	%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	
	3/27/92	%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	
	3/27/92	%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6	CONC <0.82 U	<0. 82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	
	3/27/92	%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 23 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

	COLUMN.....	43	44	45	46	47	48	
	ANALYTE.....	296	297	298	299	300	301	
	MG/KG.....	ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION							
19363	ABG 7 3/27/92	CONC <0.82 U	<0. 82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	RO
		%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
19364	ABG 8 3/28/92	CONC <0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	8
		%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
19365	ABG 9 3/28/92	CONC <0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	9
		%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
19366	ABG 10 3/28/92	CONC <0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	10
		%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
19367	ABG 11 3/28/92	CONC <0.87 U	<0.87 U	<0.87 U	<0.87 U	0.11 J	<0.87 U	11
		%REC 64.0						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
BL#01	SVBLK01 19357,19359-61	CONC <0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	12
		%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine

FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 19357 DATE: 28 MAY '

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 24 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR '
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY '

	COLUMN.....		43	44	45	46	47	48
	ANALYTE.....		296	297	298	299	300	301
	MG/KG.....		ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET
SAMP #	DESCRIPTION							RC
BL#02	SVBLK02	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U
	19362-67	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#03	SVBLK03	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U
	19358	%REC	90.9					
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 26 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

		COLUMN.....	49	50	51	52	53	54	
		ANALYTE.....	302	303	304	305	306	307	
		MG/KG.....	HCLBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE	
SAMP #	DESCRIPTION								RO
19363	ABG 7 3/27/92	CONC	<0.82 U	<0.82 U	<0.82 U	0.048 BJ	<0.82 U	<0.82 U	
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19364	ABG 8 3/28/92	CONC	<0.75 U	<0.75 U	<0.75 U	0.035 BJ	<0.75 U	<0.75 U	8
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19365	ABG 9 3/28/92	CONC	0.11 J	<0.87 U	<0.87 U	0.20 BJ	<0.87 U	<0.87 U	9
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19366	ABG 10 3/28/92	CONC	<0.87 U	<0.87 U	<0.87 U	0.065 BJ	<0.87 U	<0.87 U	10
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19367	ABG 11 3/28/92	CONC	<0.87 U	<0.87 U	<0.87 U	0.043 BJ	<0.87 U	<0.87 U	11
		%REC						94.5	
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#01	SVBLK01 19357,19359-61	CONC	<0.67 U	<0.67 U	<0.67 U	0.42 J	<0.67 U	<0.67 U	12
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

HCLBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 25 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

		COLUMN.....	49	50	51	52	53	54	
		ANALYTE.....	302	303	304	305	306	307	
		MG/KG.....	HClBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE	
SAMP #	DESCRIPTION								RO
19357	ABG 1	CONC	<0.85 U	<0.85 U	<0.85 U	0.37 BJ	<0.85 U	<0.85 U	
	3/27/92	%REC						79.3	
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2	CONC	<0.90 U	<0.90 U	<0.90 U	0.078 BJ	<0.90 U	<0.90 U	
	3/27/92	%REC							
		DUPL							
		OID	08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3	CONC	<0.85 U	<0.85 U	<0.85 U	0.22 BJ	<0.85 U	<0.85 U	
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4	CONC	<0.85 U	<0.85 U	<0.85 U	0.74 BJ	<0.85 U	<0.85 U	
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5	CONC	<0.85 U	0.048 J	<0.85 U	0.058 BJ	0.056 J	0.041 J	
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6	CONC	<0.82 U	0.021 J	<0.82 U	0.16 BJ	<0.82 U	<0.82 U	
	3/27/92	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

HClBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 27 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

		COLUMN.....	49	50	51	52	53	54	
		ANALYTE.....	302	303	304	305	306	307	
		MG/KG.....	HCLBEN	PHENAN	ANTRAC	DBUPHTH	FLANTHE	PYRENE	
SAMP #	DESCRIPTION								RO
BL#02	SVBLK02	CONC	<0.67 U	<0.67 U	<0.67 U	0.38 J	<0.67 U	<0.67 U	1
	19362-67	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC	<0.67 U	<0.67 U	<0.67 U	0.054 J	<0.67 U	<0.67 U	1
	19358	%REC						83.0	
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

HCLBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBUPHTH Dibutylphthalate
PYRENE Pyrene

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 28 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

		COLUMN.....	55	56	57	58	59	60	
		ANALYTE.....	308	309	310	311	312	313	
		MG/KG.....	BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT	
SAMP #	DESCRIPTION								RO
19357	ABG 1	CONC	<0.85 U	<0.85 U	<0.85 U	0.22 BJ	<0.85 U	<0.85 U	
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2	CONC	<0.90 U	<0.90 U	<0.90 U	0.027 BJ	<0.90 U	<0.90 U	2
	3/27/92	%REC							
		DUPL							
		OID	08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3	CONC	<0.85 U	<0.85 U	<0.85 U	0.24 BJ	<0.85 U	<0.85 U	2
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4	CONC	<0.85 U	<0.85 U	<0.85 U	0.83 BJ	<0.85 U	<0.85 U	4
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5	CONC	<0.85 U	0.028 J	0.019 J	0.052 BJ	<0.85 U	0.033 J	5
	3/27/92	%REC							
		DUPL							
		OID	08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6	CONC	<0.82 U	<0.82 U	<0.82 U	0.039 BJ	<0.82 U	<0.82 U	6
	3/27/92	%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 29 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		55	56	57	58	59	60
	ANALYTE.....		308	309	310	311	312	313
	MG/KG.....		BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT
SAMP #	DESCRIPTION							RO
19363	ABG 7	CONC	<0.82 U	<0.82 U	<0.82 U	0.047 BJ	<0.82 U	<0.82 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19364	ABG 8	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19365	ABG 9	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19366	ABG 10	CONC	<0.87 U	<0.87 U	<0.87 U	0.047 BJ	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19367	ABG 11	CONC	<0.87 U	<0.87 U	<0.87 U	0.29 BJ	<0.87 U	<0.87 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#01	SVBLK01	CONC	<0.67 U	<0.67 U	<0.67 U	0.25 J	<0.67 U	<0.67 U
	19357,19359-61	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 30 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		55	56	57	58	59	60
	ANALYTE.....		308	309	310	311	312	313
	MG/KG.....		BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT
SAMP #	DESCRIPTION							RO
BL#02	SVBLK02	CONC	<0.67 U	<0.67 U	<0.67 U	0.41 J	<0.67 U	<0.67 U
	19362-67	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#03	SVBLK03	CONC	<0.67 U	<0.67 U	<0.67 U	0.029 J	<0.67 U	<0.67 U
	19358	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 31 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

	COLUMN.....	61	62	63	64	65	66	
	ANALYTE.....	314	315	316	317	318	319	
	MG/KG.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION							RO
19357	ABG 1 3/27/92	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19358	ABG 2 3/27/92	CONC <0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<1.8 U	2
		%REC						
		DUPL						
		OID 08952112	08952112	08952112	08952112	08952112	08952112	
19359	ABG 3 3/27/92	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	3
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19360	ABG 4 3/27/92	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	4
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19361	ABG 5 3/27/92	CONC 0.021 J	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	5
		%REC						
		DUPL						
		OID 08952098	08952098	08952098	08952098	08952098	08952098	
19362	ABG 6 3/27/92	CONC <0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<1.6 U	6
		%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 32 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		61	62	63	64	65	66
	ANALYTE.....		314	315	316	317	318	319
	MG/KG.....		BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE
SAMP #	DESCRIPTION							RO
19363	ABG 7	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<1.6 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19364	ABG 8	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<1.5 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19365	ABG 9	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<1.7 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19366	ABG 10	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<1.7 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
19367	ABG 11	CONC	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<0.87 U	<1.7 U
	3/28/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099
BL#01	SVBLK01	CONC	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<1.3 U
	19357,19359-61	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 33 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

	COLUMN.....	61	62	63	64	65	66	
	ANALYTE.....	314	315	316	317	318	319	
	NG/KG.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION							RO
BL#02	SVBLK02	CONC <0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<1.3 U	1
	19362-67	%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC <0.67 U	<0.67 U	<0.67 U	<0.67 U	<0.67 U	<1.3 U	1
	19358	%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 34 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....		67	68	69	70	71	72
	ANALYTE.....		320	321	322	323	324	325
	MG/KG.....		4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL
SAMP #	DESCRIPTION							RO
19357	ABG 1	CONC	<1.7 U	<0.85 U	<0.85 U	<4.2 U	<4.2 U	<4.2 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19358	ABG 2	CONC	<1.8 U	<0.90 U	<0.90 U	<4.5 U	<4.5 U	<4.5 U
	3/27/92	%REC						
		DUPL						
		OID	08952112	08952112	08952112	08952112	08952112	08952112
19359	ABG 3	CONC	<1.7 U	<0.85 U	<0.85 U	<4.2 U	<4.2 U	<4.2 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19360	ABG 4	CONC	<1.7 U	<0.85 U	<0.85 U	<4.2 U	<4.2 U	<4.2 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19361	ABG 5	CONC	<1.7 U	<0.85 U	<0.85 U	<4.2 U	<4.2 U	<4.2 U
	3/27/92	%REC						
		DUPL						
		OID	08952098	08952098	08952098	08952098	08952098	08952098
19362	ABG 6	CONC	<1.6 U	<0.82 U	<0.82 U	<4.1 U	<4.1 U	<4.1 U
	3/27/92	%REC						
		DUPL						
		OID	08952099	08952099	08952099	08952099	08952099	08952099

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 19357

DATE: 28 MAY 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 35 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9:
EST. COMP. DATE: 08 MAY 9:

		COLUMN.....	67	68	69	70	71	72	
		ANALYTE.....	320	321	322	323	324	325	
		MG/KG.....	4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL	
SAMP #	DESCRIPTION								ROW
19363	ABG 7 3/27/92	CONC	<1.6 U	<0.82 U	<0.82 U	<4.1 U	<4.1 U	<4.1 U	7
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19364	ABG 8 3/28/92	CONC	<1.5 U	<0.75 U	<0.75 U	<3.8 U	<3.8 U	<4.1 U	8
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19365	ABG 9 3/28/92	CONC	<1.7 U	<0.87 U	<0.87 U	<4.4 U	<4.4 U	<4.4 U	9
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19366	ABG 10 3/28/92	CONC	<1.7 U	<0.87 U	<0.87 U	<4.4 U	<4.4 U	<4.4 U	10
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
19367	ABG 11 3/28/92	CONC	<1.7 U	<0.87 U	<0.87 U	<4.4 U	<4.4 U	<4.4 U	11
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	
BL#01	SVBLK01 19357,19359-61	CONC	<1.3 U	<0.67 U	<0.67 U	<3.3 U	<3.3 U	<3.3 U	12
		%REC							
		DUPL							
		OID	08952099	08952099	08952099	08952099	08952099	08952099	

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

*JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 36 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

	COLUMN.....	67	68	69	70	71	72	
	ANALYTE.....	320	321	322	323	324	325	
	MG/KG.....	4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL	
SAMP #	DESCRIPTION							RO
BL#02	SVBLK02	CONC <1.3 U	<0.67 U	<0.67 U	<3.3 U	<3.3 U	<3.3 U	1
	19362-67	%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	
BL#03	SVBLK03	CONC <1.3 U	<0.67 U	<0.67 U	<3.3 U	<3.3 U	<3.3 U	1
	19358	%REC						
		DUPL						
		OID 08952099	08952099	08952099	08952099	08952099	08952099	

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 19357

DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 37 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 08 MAY 9

	COLUMN.....	73	74	75	
	ANALYTE.....	326	327	328	
	MG/KG.....	NB-D5-S	2FlBP-S	PTERP-S	
SAMP #	DESCRIPTION				
19357	ABG 1 3/27/92	CONC 53.7%	60.7%	80.1%	
		%REC 62.5	75.1	84.0	
		DUPL			
		OID 08952098	08952098	08952098	
19358	ABG 2 3/27/92	CONC 26.8%	30.2%	73.3%	
		%REC			
		DUPL			
		OID 08952112	08952112	08952112	
19359	ABG 3 3/27/92	CONC 56.4%	62.1%	83.6%	
		%REC			
		DUPL			
		OID 08952098	08952098	08952098	
19360	ABG 4 3/27/92	CONC 45.3%	51.2%	86.5%	
		%REC			
		DUPL			
		OID 08952098	08952098	08952098	
19361	ABG 5 3/27/92	CONC 39.8%	48.2%	89.6%	
		%REC			
		DUPL			
		OID 08952098	08952098	08952098	
19362	ABG 6 3/27/92	CONC 30.1%	38.2%	98.5%	
		%REC			
		DUPL			
		OID 08952099	08952099	08952099	

NB-D5-S Nitrobenzene-D5(Surrogate (23-120))
PTERP-S p-Terphenyl-D14(Surrogate (18-137))
2FlBP-S 2-Fluorobiphenyl(Surrogate (30-115))

JOB FILE: 19357 DATE: 28 MAY 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 38 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 08 MAY 9

	COLUMN.....	73	74	75	
	ANALYTE.....	326	327	328	
	MG/KG.....	NB-D5-S	2FlBP-S	PTERP-S	
SAMP #	DESCRIPTION				RO
19363	ABG 7	CONC 37.5%	47.7%	91.8%	7
	3/27/92	%REC			
		DUPL			
		OID 08952099	08952099	08952099	
19364	ABG 8	CONC 52.3%	58.6%	96.2%	8
	3/28/92	%REC			
		DUPL			
		OID 08952099	08952099	08952099	
19365	ABG 9	CONC 48.9%	59.2%	91.4%	9
	3/28/92	%REC			
		DUPL			
		OID 08952099	08952099	08952099	
19366	ABG 10	CONC 35.1%	58.7%	92.3%	10
	3/28/92	%REC			
		DUPL			
		OID 08952099	08952099	08952099	
19367	ABG 11	CONC 62.8%	70.0%	99.4%	11
	3/28/92	%REC 56.2	69.4	97.0	
		DUPL			
		OID 08952099	08952099	08952099	
BL#01	SVBLK01	CONC 47.3%	51.2%	72.9%	12
	19357,19359-61	%REC			
		DUPL			
		OID 08952099	08952099	08952099	

NB-D5-S Nitrobenzene-D5(Surrogate (23-120)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (30-115))
PTERP-S p-Terphenyl-D14(Surrogate (18-137))

JOB FILE: 19357

DATE: 28 MAY 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 39 OF 39) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9:
EST. COMP. DATE: 08 MAY 9:

	COLUMN.....	73	74	75	
	ANALYTE.....	326	327	328	
	MG/KG.....	NB-D5-S	2FlBP-S	PTERP-S	
SAMP #	DESCRIPTION				
BL#02	SVBLK02	CONC 65.1%	77.5%	94.0%	
	19362-67	%REC			
		DUPL			
		OID 08952099	08952099	08952099	
BL#03	SVBLK03	CONC 42.6%	69.4%	95.1%	
	19358	%REC 70.1	80.8	86.9	
		DUPL			
		OID 08952099	08952099	08952099	

NB-D5-S Nitrobenzene-D5(Surrogate (23-120))
PTERP-S p-Terphenyl-D14(Surrogate (18-137))
2FlBP-S 2-Fluorobiphenyl(Surrogate (30-115))

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 4/16/92

ANALYST: R. Kain INSTRUMENT: HP 5985B

PROBLEM: Low perylene-d12 internal standard area

SAMPLE NUMBER(S) AFFECTED: 19364, 19366-7

RECOMMENDED CORRECTIVE ACTION: Clean-up sample extracts as samples were very dirty & re-analyze.

CORRECTIVE ACTION TAKEN BY ANALYST: Clean-up not possible at this time; however, all other QC on these samples was OK with the exception of 4-nitrophenol & pentachlorophenol ~~COMMENTS~~: % recovery on the MSD was high.

DATE CORRECTIVE ACTION TAKEN: 4/9/92

REVIEWED BY: Karen J Myers

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 4/15/92

ANALYST: R. Karn INSTRUMENT: HP-5985B

PROBLEM: Low perylene-d12 internal standard area

SAMPLE NUMBER(S) AFFECTED: 19361

RECOMMENDED CORRECTIVE ACTION: Clean-up extract and re-analyze.

CORRECTIVE ACTION TAKEN BY ANALYST: Cleanup of extracts not possible at present time. All other QC with these samples is OK

COMMENTS:

DATE CORRECTIVE ACTION TAKEN: 4/8/92

REVIEWED BY: Karen F Myers

Lab Name: CE-WES ANALYTICAL LAB GRP. Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 (ROUND 1) Lab Sample ID: 19379 - 19389

1) Analysis: Herbicides Date Extracted/Digested: 4/13/92

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

RF

JOB FILE: 19379

DATE: 04 JUN 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 09 MAY 9

	COLUMN.....	1	2	3	4	5	
	ANALYTE.....	169	170	171	172	174	
	MG/KG.....	2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB	
SAMP #	DESCRIPTION						RO
19379	ABG 1 3/27/92	CONC <0.52 U	148%	<0.086 U	<0.074 U	<0.030 U	
		%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19380	ABG 2 3/27/92	CONC <0.54 U	135%	<0.090 U	<0.076 U	<0.032 U	2
		%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19381	ABG 3 3/27/92	CONC <0.50 U	142%	<0.084 U	<0.072 U	<0.029 U	3
		%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19382	ABG 4 3/27/92	CONC <0.50 U	130%	<0.084 U	<0.072 U	<0.029 U	4
		%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19383	ABG 5 3/27/92	CONC <0.52 U	154%	<0.087 U	<0.074 U	<0.030 U	5
		%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19384	ABG 6 3/27/92	CONC <0.50 U	132%	<0.084 U	<0.071 U	<0.029 U	6
		%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	

2,4-D	2,4-D	2,4-DP	2,4-DP(Surrogate)
2,4,5-T	2,4,5-T	2,4,5-TP	2,4,5-TP
DINOSEB	Dinoseb		

JOB FILE: 19379 DATE: 04 JUN 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY 9

	COLUMN.....	1	2	3	4	5	
	ANALYTE.....	169	170	171	172	174	
	MG/KG.....	2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB	
SAMP #	DESCRIPTION						RO
19385	ABG 7	CONC <0.50 U	125%	<0.084 U	<0.071 U	<0.029 U	
	3/27/92	%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19386	ABG 8	CONC <0.44 U	169%	<0.073 U	<0.062 U	<0.025 U	
	3/28/92	%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19387	ABG 9	CONC <0.50 U	121%	<0.084 U	<0.071 U	<0.029 U	
	3/28/92	%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19388	ABG 10	CONC <0.53 U	149%	<0.088 U	<0.075 U	<0.031 U	1
	3/28/92	%REC					
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
19389	ABG 11	CONC <0.53 U	116%	<0.088 U	<0.075 U	<0.031 U	1
	3/28/92	%REC 109.0	135	71.0	86.0		
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	
BL#01	HERB-BLK01	CONC <0.24 U	143%	<0.040 U	<0.034 U	<0.014 U	1
		%REC 98.0	131	90.0	88.0		
		DUPL					
		OID 07922122	07922122	07922122	07922122	07972122	

2,4-D 2,4-D
2,4,5-T 2,4,5-T
DINOSEB Dinoseb

2,4-DP 2,4-DP(Surrogate)
2,4,5-TP 2,4,5-TP

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: MARCH 27, 1992 Lab Sample ID: 19368

1) Analysis: Pesticides Date Extracted/Digested:

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value belo instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concen trations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121'
MG/KG.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								RC
19368	ABG 1 3/27/92	CONC	<0.0034 U	<0.0025 U	<0.0051 U	<0.0034 U	<0.0076 U	<0.0093 U	
		%REC							
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	
19369	ABG 2 3/27/92	CONC	<0.0036 U	<0.0027 U	<0.0055 U	<0.0036 U	<0.0082 U	<0.010 U	
		%REC							
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	
19370	ABG 3 3/27/92	CONC	<0.0035 U	<0.0027 U	<0.0053 U	<0.0035 U	<0.0080 U	<0.0098 U	
		%REC							
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	
19371	ABG 4 3/27/92	CONC	<0.0035 U	<0.0026 U	<0.0052 U	<0.0035 U	<0.0079 U	<0.0096 U	
		%REC							
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	
19372	ABG 5 3/27/92	CONC	<0.0034 U	<0.0026 U	<0.0051 U	<0.0034 U	<0.0077 U	<0.0094 U	
		%REC							
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	
19373	ABG 6 3/27/92	CONC	<0.0033 U	<0.0025 U	<0.0050 U	<0.0033 U	<0.0074 U	<0.0091 U	
		%REC							
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121
MG/KG.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								R
19374	ABG 7	CONC	<0.0034 U	<0.0025 U	<0.0051 U	<0.0034 U	<0.0076 U	0.0010 J	
	3/27/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19375	ABG 8	CONC	<0.0030 U	<0.0022 U	<0.0045 U	<0.0030 U	<0.0067 U	<0.0082 U	
	3/28/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19376	ABG 9	CONC	<0.0035 U	<0.0026 U	<0.0052 U	<0.0035 U	<0.0078 U	<0.0096 U	
	3/28/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19377	ABG 10	CONC	<0.0036 U	<0.0027 U	<0.0053 U	<0.0036 U	<0.0080 U	<0.0098 U	1
	3/28/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19378	ABG 11	CONC	<0.0037 U	<0.0028 U	<0.0056 U	<0.0037 U	<0.0084 U	<0.010 U	1
	3/28/92	%REC	76.0			82.0			
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
BL#01	PBLK01	CONC	<0.0027 U	<0.0020 U	<0.0040 U	<0.0027 U	0.00066 J	<0.0074 U	1
	(19368-76)	%REC	93.0			66.0			
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 19368 DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121
MG/KG.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								RC
BL#02	PBLK02	CONC	<0.0027 U	<0.0020 U	<0.0040 U	<0.0027 U	<0.0060 U	<0.0074 U	1
	(19377-78)	%REC	84.0			83.0			
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

COLUMN.....	7	8	9	10	11	12
ANALYTE.....	122	123	124	125	126	127
MG/KG.....	PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII

SAMP #	DESCRIPTION							
19368	ABG 1 3/27/92	CONC	<0.0034 U	<0.010 U	<0.0025 U	<0.0017 U	<0.012 U	<0.0034 U
		%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19369	ABG 2 3/27/92	CONC	<0.0036 U	<0.011 U	<0.0027 U	<0.0018 U	<0.013 U	<0.0036 U
		%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19370	ABG 3 3/27/92	CONC	<0.0035 U	<0.011 U	<0.0027 U	<0.0017 U	<0.012 U	<0.0035 U
		%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19371	ABG 4 3/27/92	CONC	<0.0035 U	<0.010 U	<0.0026 U	<0.0017 U	<0.012 U	<0.0035 U
		%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19372	ABG 5 3/27/92	CONC	<0.0034 U	<0.010 U	<0.0026 U	<0.0017 U	<0.012 U	<0.0034 U
		%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19373	ABG 6 3/27/92	CONC	0.0065	<0.0099 U	<0.0025 U	<0.0017 U	<0.012 U	<0.0033 U
		%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195

PPDDE PPDDE
HPTCL Heptachlor
ENDOI A-Endosulfan

PPDDT PPDDT
DIELDRIN Dieldrin
ENDOII B-Endosulfan

JOB FILE: 19368 DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY 9

	COLUMN.....		7	8	9	10	11	12	
	ANALYTE.....		122	123	124	125	126	127	
	MG/KG.....		PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII	
SAMP #	DESCRIPTION								RC
19374	ABG 7	CONC	0.0032 J	<0.010 U	0.0024 J	0.0032	<0.012 U	<0.0034 U	
	3/27/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19375	ABG 8	CONC	0.00049 J	<0.0090 U	0.0017 J	0.00088 J	<0.010 U	<0.0030 U	
	3/28/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19376	ABG 9	CONC	0.0010 J	<0.010 U	<0.0026 U	<0.0017 U	<0.012 U	<0.0035 U	
	3/28/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19377	ABG 10	CONC	0.00082 J	0.0013 J	0.00044 BJ	0.0013 BJ	<0.012 U	<0.0036 U	1
	3/28/92	%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19378	ABG 11	CONC	<0.0037 U	<0.011 U	0.0012 BJ	0.0065 BJ	<0.013 U	<0.0037 U	1
	3/28/92	%REC		80.0		76.0			
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
BL#01	PBLK01	CONC	<0.0027 U	<0.0080 U	<0.0020 U	<0.0013 U	<0.0094 U	<0.0027 U	1
	(19368-76)	%REC		92.0	76.0	220.0			
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	

PPDDE	PPDDE	PPDDT	PPDDT
HPTCL	Heptachlor	DIELDRIN	Dieldrin
ENDOI	A-Endosulfan	ENDOII	B-Endosulfan

JOB FILE: 19368

DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 09 MAY 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		122	123	124	125	126	127
	MG/KG.....		PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII
SAMP #	DESCRIPTION							RC
BL#02	PBLK02	CONC	<0.0027 U	<0.0080 U	0.0010 J	0.00076 J	<0.0094 U	<0.0027 U	1
	(19377-78)	%REC		88.0	80.0	88.0			
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	

PPDDE	PPDDE	PPDDT	PPDDT
HPTCL	Heptachlor	DIELDRIN	Dieldrin
ENDOI	A-Endosulfan	ENDOII	B-Endosulfan

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		128	129	130	131	133	134
	MG/KG.....		ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S
SAMP #	DESCRIPTION							R
19368	ABG 1	CONC	<0.056 U	<0.0051 U	<0.020 U	<0.071 U	<0.15 U	120%
	3/27/92	%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19369	ABG 2	CONC	<0.060 U	<0.0055 U	<0.021 U	<0.076 U	<0.16 U	140%
	3/27/92	%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19370	ABG 3	CONC	<0.059 U	<0.0053 U	<0.020 U	<0.074 U	<0.16 U	130%
	3/27/92	%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19371	ABG 4	CONC	<0.058 U	<0.0052 U	<0.020 U	<0.072 U	<0.15 U	120%
	3/27/92	%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19372	ABG 5	CONC	<0.056 U	<0.0051 U	<0.020 U	<0.071 U	<0.15 U	120%
	3/27/92	%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195
19373	ABG 6	CONC	<0.055 U	<0.0050 U	<0.019 U	<0.069 U	<0.15 U	120%
	3/27/92	%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 19368

DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 09 MAY 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	128	129	130	131	133	134	
	MG/KG.....	ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S	
SAMP #	DESCRIPTION							RC
19374	ABG 7 3/27/92	CONC 0.0074 J	<0.0051 U	<0.019 U	<0.070 U	<0.15 U	110%	
		%REC						
		DUPL						
		OID 07972195	07972195	07972195	07972195	07972195	07972195	
19375	ABG 8 3/28/92	CONC <0.049 U	<0.0045 U	<0.017 U	<0.062 U	<0.13 U	120%	
		%REC						
		DUPL						
		OID 07972195	07972195	07972195	07972195	07972195	07972195	
19376	ABG 9 3/28/92	CONC <0.057 U	<0.0052 U	<0.020 U	<0.072 U	<0.15 U	120%	
		%REC						
		DUPL						
		OID 07972195	07972195	07972195	07972195	07972195	07972195	
19377	ABG 10 3/28/92	CONC <0.059 U	<0.0053 U	<0.020 U	<0.074 U	<0.16 U	110%	1
		%REC						
		DUPL						
		OID 07972195	07972195	07972195	07972195	07972195	07972195	
19378	ABG 11 3/28/92	CONC <0.061 U	<0.0056 U	<0.021 U	<0.077 U	<0.16 U	110%	1
		%REC	36.0					
		DUPL						
		OID 07972195	07972195	07972195	07972195	07972195	07972195	
BL#01	PBLK01 (19368-76)	CONC <0.044 U	<0.0040 U	<0.015 U	<0.056 U	<0.12 U	130%	1
		%REC	6.4				120	
		DUPL						
		OID 07972128	07972128	07972128	07972128	07972128	07972128	

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor

ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

COLUMN.....	13	14	15	16	17	18
ANALYTE.....	128	129	130	131	133	134
MG/KG.....	ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S

SAMP #	DESCRIPTION							
BL#02	PBLK02	CONC	<0.044 U	<0.0040 U	<0.015 U	<0.056 U	<0.12 U	98%
	(19377-78)	%REC		40.0				110
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 19368

DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR
EST. COMP. DATE: 09 MAY

	COLUMN.....	19	20	21	22	23	24
	ANALYTE.....	136	137	138	139	140	141
	MG/KG.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248
SAMP #	DESCRIPTION						
19368	ABG 1 3/27/92						
	CONC	<0.120 U	<0.010 U	<0.010 U	0.0023 J	<0.010 U	<0.010 U
	%REC						
	DUPL						
	OID	07972195	07972195	07972195	07972195	07972195	07972195
19369	ABG 2 3/27/92						
	CONC	<0.022 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U
	%REC						
	DUPL						
	OID	07972195	07972195	07972195	07972195	07972195	07972195
19370	ABG 3 3/27/92						
	CONC	<0.021 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U
	%REC						
	DUPL						
	OID	07972195	07972195	07972195	07972195	07972195	07972195
19371	ABG 4 3/27/92						
	CONC	<0.021 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U
	%REC						
	DUPL						
	OID	07972195	07972195	07972195	07972195	07972195	07972195
19372	ABG 5 3/27/92						
	CONC	<0.021 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U
	%REC						
	DUPL						
	OID	07972195	07972195	07972195	07972195	07972195	07972195
19373	ABG 6 3/27/92						
	CONC	<0.021 U	<0.0099 U	<0.0099 U	<0.0099 U	<0.0099 U	<0.0099 U
	%REC						
	DUPL						
	OID	07972195	07972195	07972195	07972195	07972195	07972195

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242

PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 19368 DATE: 06 AUG 5

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 5
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY 5

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	136	137	138	139	140	141
MG/KG.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248

SAMP #	DESCRIPTION								RC
19374	ABG 7 3/27/92	CONC	<0.020 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
		%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19375	ABG 8 3/28/92	CONC	<0.018 U	<0.0089 U	<0.0089 U	<0.0089 U	<0.0089 U	0.0013 J	
		%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19376	ABG 9 3/28/92	CONC	<0.021 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
		%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19377	ABG 10 3/28/92	CONC	<0.021 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	1
		%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
19378	ABG 11 3/28/92	CONC	<0.022 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	<0.011 U	1
		%REC							
		DUPL							
		OID	07972195	07972195	07972195	07972195	07972195	07972195	
BL#01	PBLK01 (19368-76)	CONC	<0.016 U	<0.0080 U	<0.0080 U	<0.0080 U	<0.0080 U	<0.0080 U	1
		%REC							
		DUPL							
		OID	07972128	07972128	07972128	07972128	07972128	07972128	

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242
PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 19368

DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 09 MAY 9

		COLUMN.....	19	20	21	22	23	24
		ANALYTE.....	136	137	138	139	140	141
		NG/KG.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248
SAMP #	DESCRIPTION							RC
BL#02	PBLK02	CONC	<0.016 U	<0.0080 U	<0.0080 U	<0.0080 U	<0.0080 U	<0.0080 U	1
	(19377-78)	%REC						
		DUPL						
		OID	07972195	07972195	07972195	07972195	07972195	07972195

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242

PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

		COLUMN.....	25	26	27	28	29	30
		ANALYTE.....	142	143	154	158	159	160
		MG/KG.....	PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO
SAMP #	DESCRIPTION							
19368	ABG 1 3/27/92	CONC	<0.020 U	<0.020 U	<0.025 U	<0.076 U	110%	<0.044 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
19369	ABG 2 3/27/92	CONC	<0.022 U	<0.022 U	<0.027 U	<0.082 U	103%	<0.048 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
19370	ABG 3 3/27/92	CONC	<0.021 U	<0.021 U	<0.026 U	<0.079 U	99%	<0.046 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
19371	ABG 4 3/27/92	CONC	0.021 BJ	<0.021 U	<0.026 U	<0.078 U	101%	<0.046 U
		%REC						
		DUPL						
		OID	07972128	07972195	54942133	54942133	54942133	54942133
19372	ABG 5 3/27/92	CONC	<0.020 U	<0.020 U	<0.026 U	<0.076 U	114%	<0.045 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
19373	ABG 6 3/27/92	CONC	<0.020 U	<0.020 U	<0.025	<0.074 U	113%	<0.043 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)
PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 19368

DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR 9
EST. COMP. DATE: 09 MAY 9

		COLUMN.....	25	26	27	28	29	30
		ANALYTE.....	142	143	154	158	159	160
		MG/KG.....	PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO
SAMP #	DESCRIPTION							RC
19374	ABG 7 3/27/92	CONC	<0.020 U	<0.020 U	<0.038 U	<0.075 U	121%	<0.044 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
19375	ABG 8 3/28/92	CONC	<0.018 U	<0.018 U	<0.033 U	<0.067 U	111%	<0.039 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
19376	ABG 9 3/28/92	CONC	0.028 BJ	<0.021 U	<0.039 U	<0.078 U	128%	<0.045 U
		%REC						
		DUPL						
		OID	07972128	07972195	54942133	54942133	54942133	54942133
19377	ABG 10 3/28/92	CONC	<0.021 U	<0.021 U	<0.040 U	<0.080 U	128%	<0.046 U
		%REC						
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
19378	ABG 11 3/28/92	CONC	<0.022 U	<0.022 U	<0.042 U	<0.083 U	132%	<0.049 U
		%REC			112.5	101.0	110	85.6
		DUPL						
		OID	07972195	07972195	54942133	54942133	54942133	54942133
BL#01	PBLK01 (19368-76)	CONC	0.021 J	<0.020 U	<0.030 U	<0.060 U	85%	<0.035 U
		%REC			53.3	63.0	93	92.4
		DUPL						
		OID	07972128	07972128	07972128	07972128	07972128	07972128

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)

PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 15 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

	COLUMN.....	25	26	27	28	29	30
	ANALYTE.....	142	143	154	158	159	160
	MG/KG.....	PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO
SAMP #	DESCRIPTION						R
BL#02	PBLK02	CONC <0.016 U	<0.016 U	<0.030 U	<0.060 U	120%	<0.035 U
	(19377-78)	%REC		56.6	63.0	55	50.0
		DUPL					
		OID 07972195	07972195	07972195	07972195	07972195	07972195

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)
PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 19368

DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 16 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY)
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G082E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 31 MAR
EST. COMP. DATE: 09 MAY

		COLUMN.....	31	32	33	34	35
		ANALYTE.....	161	162	900	901	902
		MG/KG.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE
SAMP #	DESCRIPTION						
19368	ABG 1 3/27/92	CONC	<0.076 U	<0.025 U	<0.0042 U	<0.0042 U	<0.51 U
		%REC					
		DUPL					
		OID	54942133	54942133	07972128	07972128	07972128
19369	ABG 2 3/27/92	CONC	<0.082 U	<0.027 U	<0.0046 U	<0.0046 U	<0.55 U
		%REC					
		DUPL					
		OID	54942133	54942133	07972128	07972128	07972128
19370	ABG 3 3/27/92	CONC	<0.079 U	<0.026 U	<0.0044 U	<0.0044 U	<0.53 U
		%REC					
		DUPL					
		OID	54942133	54942133	07972128	07972128	07972128
19371	ABG 4 3/27/92	CONC	<0.078 U	<0.026 U	<0.0044 U	<0.0044 U	<0.53 U
		%REC					
		DUPL					
		OID	54942133	54942133	07972128	07972128	07972128
19372	ABG 5 3/27/92	CONC	<0.076 U	<0.026 U	<0.0043 U	0.0040 J	<0.51 U
		%REC					
		DUPL					
		OID	54942133	54942133	07972128	07972128	07972128
19373	ABG 6 3/27/92	CONC	<0.074 U	<0.025 U	<0.0041 U	<0.0041 U	<0.50 U
		%REC					
		DUPL					
		OID	54942133	54942133	07972128	07972128	07972128

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE

PHORATE Phorate
g-CHLRDN g-CHLORDANE

JOB FILE: 19368 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 17 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY

	COLUMN.....		31	32	33	34	35
	ANALYTE.....		161	162	900	901	902
	MG/KG.....		FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE
SAMP #	DESCRIPTION						
19374	ABG 7	CONC	<0.075 U	<0.025 U	0.00090 J	0.0011 BJ	<0.51 U
	3/27/92	%REC					
		DUPL					
		OID	07972128	07972128	07972195	07972195	07972195
19375	ABG 8	CONC	<0.067 U	<0.022 U	<0.0037 U	<0.0037 U	<0.45 U
	3/28/92	%REC					
		DUPL					
		OID	07972128	07972128	07972195	07972195	07972195
19376	ABG 9	CONC	<0.078 U	<0.026 U	<0.0043 U	<0.0043 U	<0.52 U
	3/28/92	%REC					
		DUPL					
		OID	07972128	07972128	07972195	07972195	07972195
19377	ABG 10	CONC	<0.080 U	<0.026 U	<0.0045 U	<0.0045 U	<0.53 U
	3/28/92	%REC					
		DUPL					
		OID	07972128	07972128	07972195	07972195	07972195
19378	ABG 11	CONC	<0.083 U	<0.028 U	<0.0047 U	<0.0047 U	<0.56 U
	3/28/92	%REC	118.0	100.6			
		DUPL					
		OID	07972128	07972128	07972195	07972195	07972195
BL#01	PBLK01	CONC	<0.060 U	<0.020 U	<0.0034 U	<0.0034 U	<0.40 U
	(19368-76)	%REC	81.0	98.3			
		DUPL					
		OID	07972128	07972128	07972128	07972128	07972128

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE

PHORATE Phorate
g-CHLRDN g-CHLORDANE

JOB FILE: 19368 DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 18 OF 18) **********

JOB DESCRIPTION: CRANE - ABG (MURPHY) JOB NUMBER: RD2G082E1170001 RECEIPT DATE: 31 MAR 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 09 MAY 9

	COLUMN.....	31	32	33	34	35	
	ANALYTE.....	161	162	900	901	902	
	MG/KG.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE	
SAMP #	DESCRIPTION						RO
BL#02	PBLK02	CONC <0.060 U	<0.020 U	0.0016 J	0.00047 J	<0.40 U	1
	(19377-78)	%REC 61.0	54.2				
		DUPL					
		OID 07972195	07972195	07972195	07972195	07972195	

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE
PHORATE Phorate
g-CHLRDN g-CHLORDANE

IN5 170 023 498

Appendix C
Results of Analysis of Surface Water and Sediment Samples, Round 2 (July 1992)

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (ROUND 2) Lab Sample ID: 23595 - 23606

1) Analysis: Metals Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

FILE: 23595

DATE: 10 DEC 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: HNO3

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

SAMP #	DESCRIPTION		COLUMN..... 1	2	3	4	5	6	ROI
			ANALYTE..... 1	2	3	4	5	6	
			PPM..... SB	AS	BE	CD	CR	CU	
23595	R4 07/17/92	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	
		%REC							
		DUPL							
		OID	04352336	04352328	01202289	04352339	01202289	01202289	
23596	1 07/17/92	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	2
		%REC	93.8	107.0	96.0	101.6	98.5	96.8	
		DUPL	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	
		OID	04352336	04352328	01202289	04352339	01202289	01202289	
23597	2 07/17/92	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	3
		%REC							
		DUPL							
		OID	04352336	04352328	01202289	04352339	01202289	01202289	
23598	3 07/17/92	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	4
		%REC							
		DUPL							
		OID	04352336	04352328	01202289	04352339	01202289	01202289	
23599	4 07/17/92	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	5
		%REC							
		DUPL							
		OID	04352336	04352328	01202289	04352339	01202289	01202289	
23600	5 07/17/92	CONC	<0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	6
		%REC							
		DUPL							
		OID	04352336	04352328	01202289	04352339	01202289	01202289	

SB Antimony
BE Beryllium
CR Chromium
AS Arsenic
CD Cadmium
CU Copper

JOB FILE: 23595 DATE: 10 DEC 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	1	2	3	4	5	6	
	ANALYTE.....	1	2	3	4	5	6	
	PPM.....	SB	AS	BE	CD	CR	CU	
SAMP #	DESCRIPTION							RO
23601	6	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	
	07/17/92	%REC						
		DUPL						
		OID 04352336	04352328	01202289	04352339	01202289	01202289	
23602	7	CONC <0.0030 U	<0.0020 U	<0.001 U	0.00033 B	<0.005 U	0.012 B	8
	07/17/92	%REC						
		DUPL						
		OID 04352336	04352328	01202289	04352339	01202289	01202289	
23603	8	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	9
	07/17/92	%REC						
		DUPL						
		OID 04352336	04352328	01202289	04352339	01202289	01202289	
23604	9	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	10
	07/17/92	%REC						
		DUPL						
		OID 04352336	04352328	01202289	04352339	01202289	01202289	
23605	10	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 U	<0.005 U	11
	07/17/92	%REC						
		DUPL						
		OID 04352336	04352328	01202289	04352339	01202289	01202289	
23606	11	CONC <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 UN	<0.005 U	12
	07/17/92	%REC 95.4	103.0	120.0	87.2	127.0	121.2	
		DUPL <0.0030 U	<0.0020 U	<0.001 U	<0.00020 U	<0.005 UN	<0.005 U	
		OID 04352336	04352328	01202289	04352339	01202289	01202289	

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 23595 DATE: 10 DEC 9:

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 3 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9:
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9:

	COLUMN.....	7	8	9	10	11	12	
	ANALYTE.....	7	8	9	10	11	12	
	PPM.....	PB	HG	NI	SE	AG	TL	
SAMP #	DESCRIPTION							ROI
23595	R4	CONC 0.0013 B	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U	
	07/17/92	%REC						
		DUPL						
		OID 04352338	09652210	01202289	04352341	01252303	04352337	
23596	1	CONC <0.0010 U	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U	2
	07/17/92	%REC 105.0		93.6	96.0	88.0	85.0	
		DUPL <0.0010 U		<0.005 U	<0.0020 U	<0.010 U	<0.0020 U	
		OID 04352338	09652210	01202289	04352341	01252303	04352337	
23597	2	CONC <0.0010 U	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U	3
	07/17/92	%REC						
		DUPL						
		OID 04352338	09652210	01202289	04352341	01252303	04352337	
23598	3	CONC <0.0010 U	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U	4
	07/17/92	%REC						
		DUPL						
		OID 04352338	09652210	01202289	04352341	01252303	04352337	
23599	4	CONC <0.0010 U	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 UW	5
	07/17/92	%REC						
		DUPL						
		OID 04352338	09652210	01202289	04352341	01252303	04352337	
23600	5	CONC <0.0010 U	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U	6
	07/17/92	%REC						
		DUPL						
		OID 04352338	09652210	01202289	04352341	01252303	04352337	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 23595 DATE: 10 DEC 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 4 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....			7	8	9	10	11	12
ANALYTE.....			7	8	9	10	11	12
PPM.....			PB	HG	NI	SE	AG	TL
SAMP #	DESCRIPTION							RO
23601	6	CONC	<0.0010 U	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U
	07/17/92	%REC						
		DUPL						
		OID	04352338	09652210	01202289	04352341	01252303	04352337
23602	7	CONC	0.0340	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 UW
	07/17/92	%REC						
		DUPL						
		OID	04352338	09652210	01202289	04352341	01252303	04352337
23603	8	CONC	0.0158	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U
	07/17/92	%REC						
		DUPL						
		OID	04352338	09652210	01202289	04352341	01252303	04352337
23604	9	CONC	0.0019 B	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U
	07/17/92	%REC						
		DUPL						
		OID	04352338	09652210	01202289	04352341	01252303	04352338
23605	10	CONC	0.0012 B	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U
	07/17/92	%REC						
		DUPL						
		OID	04352338	09652210	01202289	04352341	01252303	04352338
23606	11	CONC	0.0011 B	<0.0002 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U
	07/17/92	%REC	96.5	94.0	118.4	104.0	90.0	90.5
		DUPL	0.0012 B	<0.0004 U	<0.005 U	<0.0020 U	<0.010 U	<0.0020 U
		OID	04352338	09652210	01202289	04352341	01252303	04352337

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 23595

DATE: 10 DEC 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 5 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: HNO3

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

COLUMN.....		13	14	15	16	17	18	
ANALYTE.....		13	24	25	27	29	30	
PPM.....		ZN	AL	BA	CA	CO	FE	
SAMP #	DESCRIPTION							ROI
23595	R4 07/17/92	CONC <0.010 U	<0.030 U	<0.020 U	<0.200 U	0.022 B	<0.040	1
		%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23596	1 07/17/92	CONC <0.010 U	0.032 B	0.045 B	6.30	<0.020 U	<0.040	2
		%REC 98.8	82.5	94.5		97.2	98.0	
		DUPL <0.010 U	0.037 B	0.043 B	6.31	<0.020 U	<0.040	
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23597	2 07/17/92	CONC <0.010 U	0.075 B	0.046 B	9.62	0.023 B	0.157	3
		%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23598	3 07/17/92	CONC <0.010 U	0.102 B	0.053 B	12.2	0.027 B	0.108	4
		%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23599	4 07/17/92	CONC <0.010 U	0.072 B	0.048 B	11.3	<0.020 U	0.084 B	5
		%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23600	5 07/17/92	CONC <0.010 U	0.071 B	0.045 B	11.4	<0.020 U	0.082 B	6
		%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	

ZN Zinc
BA Barium
CO Cobalt
AL Aluminum
CA Calcium
FE Iron

JOB FILE: 23595 DATE: 10 DEC 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 6 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	13	24	25	27	29	30	
	PPM.....	ZN	AL	BA	CA	CO	FE	
SAMP #	DESCRIPTION							RO
23601	6	CONC <0.010 U	0.073 B	0.055 B	11.9	<0.020 U	0.096 B	
	07/17/92	%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23602	7	CONC 0.124	0.777	0.124 B	27.6	<0.020 U	0.774	
	07/17/92	%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23603	8	CONC 0.065	0.447	0.091 B	22.7	<0.020 U	0.441	
	07/17/92	%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23604	9	CONC <0.010 U	0.168 B	0.070 B	17.7	<0.020 U	0.174	1
	07/17/92	%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23605	10	CONC <0.010 U	0.148 B	0.059 B	20.7	<0.020 U	0.157	1
	07/17/92	%REC						
		DUPL						
		OID 01202289	01202290	01202294	01252295	01202289	01202294	
23606	11	CONC <0.010 UN	0.133 B	0.068 B	22.7	<0.020 U	0.138	1
	07/17/92	%REC 126.6	86.0	100.5		118.4	93.8	
		DUPL 0.011 BN	0.132 B	0.069 B	22.5	0.023 B	0.138	
		OID 01202289	01202290	01202294	01252295	01202289	01202294	

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 23595

DATE: 10 DEC 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 7 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: HNO3

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

		COLUMN.....	19	20	21	22	23	24
		ANALYTE.....	31	32	34	35	37	39
		PPM.....	MG	MN	K	NA	V	SN
SAMP #	DESCRIPTION							
23595	R4 07/17/92	CONC	<0.200 U	<0.005 U	<0.200 U	<0.200	<0.010 U	<0.050 U
		%REC						
		DUPL						
		OID	01252295	01202289	01202294	01252296	01202289	01202289
23596	1 07/17/92	CONC	3.50 B	0.005 B	1.46 B	2.25 B	<0.010 U	<0.050 U
		%REC		98.2			99.0	
		DUPL	3.43 B	<0.005 U	1.39 B	2.39 B	<0.010 U	<0.050 U
		OID	01252295	01202289	01202294	01252296	01202289	01202289
23597	2 07/17/92	CONC	4.40 B	0.023	1.60 B	2.24 B	<0.010 U	<0.050 U
		%REC						
		DUPL						
		OID	01252295	01202289	01202294	01252296	01202289	01202289
23598	3 07/17/92	CONC	4.31 B	0.016	1.33 B	3.61 B	<0.010 U	<0.050 U
		%REC						
		DUPL						
		OID	01252295	01202289	01202294	01252296	01202289	01202289
23599	4 07/17/92	CONC	4.17 B	0.014 B	1.20 B	3.66 B	<0.010 U	<0.050 U
		%REC						
		DUPL						
		OID	01252295	01202289	01202294	01252296	01202289	01202289
23600	5 07/17/92	CONC	4.04 B	0.018	1.21 B	3.60 B	<0.010 U	<0.050 U
		%REC						
		DUPL						
		OID	01252295	01202289	01202294	01252296	01202289	01202289

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

JOB FILE: 23595 DATE: 10 DEC 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 8 OF 8) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: HNO3 TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....		19	20	21	22	23	24		
ANALYTE.....		31	32	34	35	37	39		
PPM.....		MG	MN	K	NA	V	SN		
SAMP #	DESCRIPTION								RO
23601	6	CONC	4.45 B	0.019	1.43 B	3.25 B	<0.010 U	<0.050 U	7
	07/17/92	%REC							
		DUPL							
		OID	01252295	01202289	01202294	01252296	01202289	01202289	
23602	7	CONC	6.73	0.133	4.07 B	4.87 B	<0.010 U	<0.050 U	8
	07/17/92	%REC							
		DUPL							
		OID	01252295	01202289	01202294	01252296	01202289	01202289	
23603	8	CONC	5.89	0.076	2.62 B	4.32 B	<0.010 U	<0.050 U	9
	07/17/92	%REC							
		DUPL							
		OID	01252295	01202289	01202294	01252296	01202289	01202289	
23604	9	CONC	4.64 B	0.016	1.55 B	3.31 B	<0.010 U	<0.050 U	10
	07/17/92	%REC							
		DUPL							
		OID	01252295	01202289	01202294	01252296	01202289	01202289	
23605	10	CONC	4.17 B	0.017	1.58 B	2.37 B	<0.010 U	<0.050 U	11
	07/17/92	%REC							
		DUPL							
		OID	01252295	01202289	01202294	01252296	01202289	01202289	
23606	11	CONC	4.52 B	0.019	1.63 B	2.45 B	<0.010 U	<0.050 U	12
	07/17/92	%REC		125.0			121.6		
		DUPL	4.55 B	0.020	1.62 B	2.43 B	<0.010 U	<0.050 U	
		OID	01252295	01202289	01202294	01252296	01202289	01202289	

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 Lab Sample ID: 23619 - 23630

1) Analysis: Nutrients (NO_2, NO_3) Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23619 DATE: 18 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
JOB NUMBER: RD2G222E1170001
RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: H2SO4
TYPE OF SAMPLE: WATER
EST. COMP. DATE: 21 AUG 9

	COLUMN.....	1	2
	ANALYTE.....	69	70
	PPM.....	NO2-N	NO3-N
SAMP #	DESCRIPTION		
23619	R4	CONC <0.005 U	<0.020 U
	07/17/92	%REC	
		DUPL	
		OID 20452206	20452205
23620	1	CONC <0.005 U	0.139
	07/17/92	%REC	
		DUPL	
		OID 20452206	20452205
23621	2	CONC <0.005 U	0.172
	07/17/92	%REC	
		DUPL	
		OID 20452206	20452205
23622	3	CONC <0.005 U	0.104
	07/17/92	%REC	
		DUPL	
		OID 20452206	20452205
23623	4	CONC <0.005 U	0.064
	07/17/92	%REC	
		DUPL	
		OID 20452206	20452205
23624	5	CONC <0.005 U	0.062
	07/17/92	%REC	
		DUPL	
		OID 20452206	20452205

NO2-N Nitrite Nitrogen NO3-N Nitrate Nitrogen

JOB FILE: 23619

DATE: 18 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: H2SO4

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

		COLUMN.....	1	2	
		ANALYTE.....	69	70	
		PPM.....	NO2-N	NO3-N	
SAMP #	DESCRIPTION				
23625	6	CONC	<0.005 U	0.109	RO
	07/17/92	%REC			7
		DUPL			
		OID	20452206	20452205	
23626	7	CONC	<0.005 U	1.09	
	07/17/92	%REC			8
		DUPL			
		OID	20452206	20452205	
23627	8	CONC	<0.005 U	0.492	
	07/17/92	%REC			9
		DUPL			
		OID	20452206	20452205	
23628	9	CONC	<0.005 U	0.082	
	07/17/92	%REC			10
		DUPL			
		OID	20452206	20452205	
23629	10	CONC	<0.005 U	0.116	
	07/17/92	%REC			11
		DUPL			
		OID	20452206	20452205	
23630	11	CONC	<0.005 U	0.122	
	07/17/92	%REC	135.2	94.7	12
		DUPL	<0.005 U	0.121	
		OID	20452206	20452205	

NO2-N Nitrite Nitrogen

NO3-N Nitrate Nitrogen

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 Lab Sample ID: 23607-23618

1) Analysis: Cyanide / Sulfide Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value belc instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concei trations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23607

DATE: 31 JUL 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: NAOH

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

COLUMN.....		1	2	
ANALYTE.....		85	106	
PPM.....		CN	SULFIDE	
SAMP #	DESCRIPTION			
23607	R4 07/17/92	CONC	<0.005 U	0.021
		%REC	99.0	
		DUPL	<0.005 U	
		OID	49402205	20452202
23608	1 07/17/92	CONC	<0.005 U	0.021
		%REC		
		DUPL		
		OID	49402205	20452202
23609	2 07/17/92	CONC	<0.005 U	<0.020 U
		%REC		
		DUPL		
		OID	49402205	20452202
23610	3 07/17/92	CONC	<0.005 U	0.037
		%REC		
		DUPL		
		OID	49402205	20452202
23611	4 07/17/92	CONC	<0.005 U	0.027
		%REC		
		DUPL		
		OID	49402205	20452202
23612	5 07/17/92	CONC	<0.005 U	0.036
		%REC		
		DUPL		
		OID	49402205	20452202

CN Cyanide

SULFIDE Sulfide

JOB FILE: 23607 DATE: 31 JUL 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
JOB NUMBER: RD2G222E1170001
RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: NAOH
TYPE OF SAMPLE: WATER
EST. COMP. DATE: 05 AUG 9

	COLUMN.....	1	2	
	ANALYTE.....	85	106	
	PPM.....	CN	SULFIDE	
SAMP #	DESCRIPTION			RO
23613	6	CONC <0.005 U	0.036	
	07/17/92	%REC		
		DUPL		
		OID 49402205	20452202	
23614	7	CONC <0.005 U	0.053	E
	07/17/92	%REC		
		DUPL		
		OID 49402205	20452202	
23615	8	CONC <0.005 U	0.038	9
	07/17/92	%REC		
		DUPL		
		OID 49402205	20452202	
23616	9	CONC <0.005 U	0.032	1C
	07/17/92	%REC		
		DUPL		
		OID 49402205	20452202	
23617	10	CONC <0.005 U	0.057	11
	07/17/92	%REC		
		DUPL		
		OID 49402205	20452202	
23618	11	CONC <0.005	0.071	12
	07/17/92	%REC 103.0	102.2	
		DUPL <0.005	0.072	
		OID 49402205	20452202	

CN Cyanide SULFIDE Sulfide

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 Lab Sample ID: 23547 -23558

1) Analysis: Explosives Date Extracted/Digested: N/A (H_2O)

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23547 DATE: 24 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 6) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	900	901	902	903	904	905
PPM.....	HMX	RDX	TNB	DNB	TETRYL	TNT

SAMP #	DESCRIPTION								RO
23547	R4	CONC	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23548	1	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	2
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23549	2	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	3
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23550	3	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	4
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23551	4	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	5
	07/17/92	%REC	99.0	101.0	111.0			112.5	
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23552	5	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	6
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 23547 DATE: 24 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 6) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	900	901	902	903	904	905
PPM.....	HMX	RDX	TNB	DNB	TETRYL	TNT

SAMP #	DESCRIPTION								RO
23553	6	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23554	7	CONC	0.035	0.037	<0.020	<0.020	<0.050	<0.020	8
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23555	8	CONC	0.025	0.024	<0.020	<0.020	<0.050	<0.020	9
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23556	9	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	10
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23557	10	CONC	<0.020	<0.020	<0.020	<0.020	<0.050	<0.020	11
	07/17/92	%REC							
		DUPL							
		OID	52962200	52962200	52962200	52962200	52962200	52962200	
23558	11	CONC	0.014 J	<0.020	<0.020	<0.020	<0.050	<0.020	12
	07/17/92	%REC	103.5	100.5	107.5			109.0	
		DUPL	0.014 J	<0.020	<0.020	<0.020	<0.050	<0.020	
		OID	52962200	52962200	52962200	52962200	52962200	52962200	

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 23547 DATE: 24 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 6) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	1	2	3	4	5	6	
	ANALYTE.....	900	901	902	903	904	905	
	PPM.....	HMX	RDX	TNB	DNB	TETRYL	TNT	
SAMP #	DESCRIPTION							RO
BL#01	METHOD BLANK	CONC <0.020	<0.020	<0.020	<0.020	<0.050	<0.020	1
		%REC 101.5	101.0	111.0			110.5	
		DUPL						
		OID 52962200	52962200	52962200	52962200	52962200	52962200	

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 23547 DATE: 24 AUG 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 6) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 92

COLUMN.....	7	8
ANALYTE.....	906	907
PPM.....	2,4-DNT	2,6-DNT

SAMP #	DESCRIPTION				ROW
23547	R4	CONC	<0.020	<0.020	1
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23548	1	CONC	<0.020	<0.020	2
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23549	2	CONC	<0.020	<0.020	3
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23550	3	CONC	<0.020	<0.020	4
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23551	4	CONC	<0.020	<0.020	5
	07/17/92	%REC	100.5		
		DUPL			
		OID	52962200	52962200	
23552	5	CONC	<0.020	<0.020	6
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

JOB FILE: 23547 DATE: 24 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 6) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

COLUMN.....	7	8
ANALYTE.....	906	907
PPM.....	2,4-DNT	2,6-DNT

SAMP #	DESCRIPTION				RO
23553	6	CONC	<0.020	<0.020	
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23554	7	CONC	0.009 J	<0.020	
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23555	8	CONC	0.004 J	<0.020	
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23556	9	CONC	<0.020	<0.020	
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23557	10	CONC	<0.020	<0.020	
	07/17/92	%REC			
		DUPL			
		OID	52962200	52962200	
23558	11	CONC	<0.020	<0.020	
	07/17/92	%REC	97.5		
		DUPL	<0.020	<0.020	
		OID	52962200	52962200	

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

JOB FILE: 23547 DATE: 24 AUG 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 6) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 92
EST. COMP. DATE: 21 AUG 92

COLUMN.....	7	8
ANALYTE.....	906	907
PPM.....	2,4-DNT	2,6-DNT

SAMP #	DESCRIPTION				ROW
BL#01	METHOD BLANK	CONC	<0.020	<0.020	13
		%REC	98.5		
		DUPL			
		OID	52962200	52962200	

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: July 17, 1992 Lab Sample ID: 23641 - 23652

1) Analysis: Volatiles Date Extracted/Digested: 7/23/92

2) Analysis: Water Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23641

DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

	COLUMN.....	1	2	3	4	5	6
	ANALYTE.....	183	184	185	186	187	188
	PPM.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE
SAMP #	DESCRIPTION						
23641	R4 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0010 BJ	<0.005 U
		%REC					
		DUPL					
		OID 08932205	08932205	08932205	08932205	08932205	08932205
23642	1 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0008 BJ	<0.005 U
		%REC					
		DUPL					
		OID 08932205	08932205	08932205	08932205	08932205	08932205
23643	2 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0003 BJ	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206
23644	3 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0012 BJ	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206
23645	4 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0012 BJ	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206
23646	5 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0010 BJ	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206

RC

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride

BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 23641 DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG 9

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	183	184	185	186	187	188.	
		PPM.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE	
SAMP #	DESCRIPTION								RC
23647	6	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0010 BJ	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
23648	7	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0012 BJ	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	
23649	8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0030 BJ	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	
23650	9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0019 BJ	<0.005 U	1
	07/17/92	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	
23651	10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0017 BJ	<0.005 U	1
	07/17/92	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	
23652	11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0006 BJ	<0.005 U	1
	07/17/92	%REC						91.2	
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride
BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 23641

DATE: 29 SEP 9:

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 3 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9:
EST. COMP. DATE: 05 AUG 9:

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	183	184	185	186	187	188
PPM.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE

SAMP #	DESCRIPTION									RO
23653	TRIP BLANK 07/18/92	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.016 B	<0.005 U		1:
		%REC								
		DUPL								
		OID	08932207	08932207	08932207	08932207	08932207	08932207		
BL#01	VBLK 01 (23641-2)	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0013 J	<0.005 U		1
		%REC								
		DUPL								
		OID	08932205	08932205	08932205	08932205	08932205	08932205		
BL#02	VBLK 02 (23643-7)	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0012 J	<0.005 U		15
		%REC								
		DUPL								
		OID	08932206	08932206	08932206	08932206	08932206	08932206		
BL#03	VBLK 03 (23648-53)	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0006 J	<0.005 U		1(
		%REC								
		DUPL								
		OID	08932207	08932207	08932207	08932207	08932207	08932207		

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride

BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 23641 DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG

COLUMN.....			7	8	9	10	11	12
ANALYTE.....			189	190	191	192	193	194
PPM.....			11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							
23641	R4	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932205	08932205	08932205	08932205	08932205	08932205
23642	1	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932205	08932205	08932205	08932205	08932205	08932205
23643	2	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23644	3	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23645	4	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23646	5	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 23541

DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL
EST. COMP. DATE: 05 AUG

		COLUMN.....	7	8	9	10	11	12
		ANALYTE.....	189	190	191	192	193	194
		PPM.....	11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							
23647	6 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23648	7 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23649	8 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23650	9 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23651	10 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23652	11 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 23541 DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG 9

		COLUMN.....	7	8	9	10	11	12	
		ANALYTE.....	189	190	191	192	193	194	
		PPM.....	11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA	
SAMP #	DESCRIPTION								RC
23653	TRIP BLANK	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	07/18/92	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	
BL#01	VBLK 01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	(23641-2)	%REC							
		DUPL							
		OID	08932205	08932205	08932205	08932205	08932205	08932205	
BL#02	VBLK 02	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	(23643-7)	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
BL#03	VBLK 03	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	(23648-53)	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 23641 DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG

COLUMN.....	13	14	15	16	17	18
ANALYTE.....	195	196	197	198	199	200
PPM.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME

SAMP #	DESCRIPTION							
23641	R4 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932205	08932205	08932205	08932205	08932205	08932205
23642	1 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932205	08932205	08932205	08932205	08932205	08932205
23643	2 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23644	3 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23645	4 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23646	5 07/17/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
		%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 23641 DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		195	196	197	198	199	200
	PPM.....		CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME
SAMP #	DESCRIPTION							RC
23647	6	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932206	08932206	08932206	08932206	08932206	08932206
23648	7	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23649	8	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23650	9	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23651	10	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC						
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207
23652	11	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U
	07/17/92	%REC					104.6	
		DUPL						
		OID	08932207	08932207	08932207	08932207	08932207	08932207

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 23641

DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL
EST. COMP. DATE: 05 AUG

		COLUMN.....	13	14	15	16	17	18	
		ANALYTE.....	195	196	197	198	199	200	
		PPM.....	CCL4	BrDCLME	12DClPR	t13ClPRE	TCE	DBrClME	
SAMP #	DESCRIPTION								R(
23653	TRIP BLANK 07/18/92	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
		%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	
BL#01	VBLK 01 (23641-2)	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
		%REC							
		DUPL							
		OID	08932205	08932205	08932205	08932205	08932205	08932205	
BL#02	VBLK 02 (23643-7)	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
		%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
BL#03	VBLK 03 (23648-53)	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
		%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene

BrDCLME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 23641 DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG 9

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	201	202	203	205	206	207
PPM.....	c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE

SAMP #	DESCRIPTION								RO
23641	R4	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932205	08932205	08932205	08932205	08932205	08932205	
23642	1	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932205	08932205	08932205	08932205	08932205	08932205	
23643	2	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
23644	3	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
23645	4	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
23646	5	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	07/17/92	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 23641

DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	201	202	203	205	206	207	
	PPM.....	c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TECLETE	
SAMP #	DESCRIPTION							RO
23647	6 07/17/92 CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	%REC							
	DUPL							
	OID	08932206	08932206	08932206	08932206	08932206	08932206	
23648	7 07/17/92 CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	%REC							
	DUPL							
	OID	08932207	08932207	08932207	08932207	08932207	08932207	
23649	8 07/17/92 CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	
	%REC							
	DUPL							
	OID	08932207	08932207	08932207	08932207	08932207	08932207	
23650	9 07/17/92 CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	%REC							
	DUPL							
	OID	08932207	08932207	08932207	08932207	08932207	08932207	
23651	10 07/17/92 CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	%REC							
	DUPL							
	OID	08932207	08932207	08932207	08932207	08932207	08932207	
23652	11 07/17/92 CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	%REC			99.4				
	DUPL							
	OID	08932207	08932207	08932207	08932207	08932207	08932207	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TECLETE Tetrachloroethene

JOB FILE: 23641 DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG 9

	COLUMN.....		19	20	21	22	23	24	
	ANALYTE.....		201	202	203	205	206	207	
	PPM.....		c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE	
SAMP #	DESCRIPTION								RC
23653	TRIP BLANK	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	07/18/92	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	
BL#01	VBLK 01	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	(23641-2)	%REC							
		DUPL							
		OID	08932205	08932205	08932205	08932205	08932205	08932205	
BL#02	VBLK 02	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	(23643-7)	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
BL#03	VBLK 03	CONC	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	<0.005 U	1
	(23648-53)	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 23641

DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL
EST. COMP. DATE: 05 AUG

	COLUMN.....	25	26	27	28	29	30
	ANALYTE.....	208	209	210	213	214	215
	PPM.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2
SAMP #	DESCRIPTION						
23641	R4 07/17/92	CONC <0.005 U	<0.005 U	<0.005 U	0.013 BJ	<0.10 U	<0.005 U
		%REC					
		DUPL					
		OID 08932205	08932205	08932205	08932205	08932205	08932205
23642	1 07/17/92	CONC <0.005 U	<0.005 U	<0.005 U	0.0014 BJ	<0.10 U	<0.005 U
		%REC					
		DUPL					
		OID 08932205	08932205	08932205	08932205	08932205	08932205
23643	2 07/17/92	CONC <0.005 U	<0.005 U	<0.005 U	<0.10 U	<0.10 U	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206
23644	3 07/17/92	CONC <0.005 U	<0.005 U	<0.005 U	0.0027 BJ	<0.10 U	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206
23645	4 07/17/92	CONC <0.005 U	<0.005 U	<0.005 U	0.003 BJ	<0.10 U	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206
23646	5 07/17/92	CONC <0.005 U	<0.005 U	<0.005 U	0.0024 BJ	<0.10 U	<0.005 U
		%REC					
		DUPL					
		OID 08932206	08932206	08932206	08932206	08932206	08932206

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 23641 DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	208	209	210	213	214	215	
	PPM.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION							R
23647	6	CONC <0.005 U	<0.005 U	<0.005 U	<0.10 U	<0.10 U	<0.005 U	
	07/17/92	%REC						
		DUPL						
		OID 08932206	08932206	08932206	08932206	08932206	08932206	
23648	7	CONC <0.005 U	<0.005 U	<0.005 U	<0.10 U	<0.10 U	<0.005 U	
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932207	08932207	
23649	8	CONC <0.005 U	<0.005 U	<0.005 U	0.0027 BJ	<0.10 U	<0.005 U	
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932207	08932207	
23650	9	CONC <0.005 U	<0.005 U	<0.005 U	0.0015 BJ	<0.10 U	<0.005 U	1
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932207	08932207	
23651	10	CONC <0.005 U	<0.005 U	<0.005 U	<0.10 U	<0.10 U	<0.005 U	1
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932207	08932207	
23652	11	CONC <0.005 U	<0.005 U	<0.005 U	<0.010 U	<0.10 U	<0.005 U	1
	07/17/92	%REC 103.8	98.8					
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932207	08932207	

TOLUENE	Toluene	ClBEN	Chlorobenzene
ETBEN	Ethylbenzene	ACETONE	Acetone
BUTANO	2-Butanone	CS2	Carbondisulfide

JOB FILE: 23641

DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 15 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	208	209	210	213	214	215	
	PPM.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION							RC
23653	TRIP BLANK 07/18/92	CONC <0.005 U	<0.005 U	<0.005 U	0.0039 BJ	<0.10 U	<0.005 U	1
		%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932207	08932207	
BL#01	VBLK 01 (23641-2)	CONC <0.005 U	<0.005 U	<0.005 U	0.0059 J	<0.10 U	<0.005 U	1
		%REC						
		DUPL						
		OID 08932205	08932205	08932205	08932205	08932205	08932205	
BL#02	VBLK 02 (23643-7)	CONC <0.005 U	<0.005 U	<0.005 U	0.0028 J	<0.10 U	<0.005 U	1
		%REC						
		DUPL						
		OID 08932206	08932206	08932206	08932206	08932206	08932206	
BL#03	VBLK 03 (23648-53)	CONC <0.005 U	<0.005 U	<0.005 U	0.0039 J	<0.10 U	<0.005 U	1
		%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932207	08932207	

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 23641 DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 16 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG

	COLUMN.....	31	32	33	34	35	36	
	ANALYTE.....	216	217	218	219	220	221	
	PPM.....	2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S	
SAMP #	DESCRIPTION							RC
23641	R4	CONC <0.050 U	<0.050 U	0.0020 J	<0.050 U	<0.005 U	102%	
	07/17/92	%REC						
		DUPL						
		OID 08932205	08932205	08932205	08932205	08932205	08932205	
23642	1	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	103%	
	07/17/92	%REC						
		DUPL						
		OID 08932205	08932205	08932205	08932205	08932205	08932205	
23643	2	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	97.5%	3
	07/17/92	%REC						
		DUPL						
		OID 08932206	08932206	08932206	08932206	08932205	08932206	
23644	3	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	98.8%	4
	07/17/92	%REC						
		DUPL						
		OID 08932206	08932206	08932206	08932206	08932205	08932206	
23645	4	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	100%	5
	07/17/92	%REC						
		DUPL						
		OID 08932206	08932206	08932206	08932206	08932205	08932206	
23646	5	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	103%	6
	07/17/92	%REC						
		DUPL						
		OID 08932206	08932206	08932206	08932206	08932205	08932206	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (76-114))

JOB FILE: 23641

DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 17 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

	COLUMN.....	31	32	33	34	35	36	
	ANALYTE.....	216	217	218	219	220	221	
	PPM.....	2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DCLE-S	
SAMP #	DESCRIPTION							RO
23647	6	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	104%	
	07/17/92	%REC						
		DUPL						
		OID 08932206	08932206	08932206	08932206	08932205	08932206	
23648	7	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	96.9%	
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932205	08932207	
23649	8	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	98.1%	
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932205	08932207	
23650	9	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	105%	1
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932205	08932207	
23651	10	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	104%	1
	07/17/92	%REC						
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932205	08932207	
23652	11	CONC <0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	102%	1
	07/17/92	%REC					101	
		DUPL						
		OID 08932207	08932207	08932207	08932207	08932205	08932207	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene

4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DCLE-S 1,2-Dichloroethane-d4(Surrogate (76-114))

JOB FILE: 23641 DATE: 04 SEP

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 18 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL

CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG

		COLUMN.....	31	32	33	34	35	36	
		ANALYTE.....	216	217	218	219	220	221	
		PPM.....	2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S	
SAMP #	DESCRIPTION								R
23653	TRIP BLANK	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	109%	1
	07/18/92	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932205	08932207	
BL#01	VBLK 01	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	94.8%	1
	(23641-2)	%REC							
		DUPL							
		OID	08932205	08932205	08932205	08932205	08932205	08932205	
BL#02	VBLK 02	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	96.3%	1
	(23643-7)	%REC							
		DUPL							
		OID	08932206	08932206	08932206	08932206	08932206	08932206	
BL#03	VBLK 03	CONC	<0.050 U	<0.050 U	<0.005 U	<0.050 U	<0.005 U	104%	1
	(23648-53)	%REC							
		DUPL							
		OID	08932207	08932207	08932207	08932207	08932207	08932207	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (76-114))

JOB FILE: 23641 DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 19 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

COLUMN.....	37	38
ANALYTE.....	222	223
PPM.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION					RD
23641	R4	CONC	102%	99.7%		
	07/17/92	%REC				
		DUPL				
		OID	08932205	08932205		
23642	1	CONC	102%	104%		
	07/17/92	%REC				
		DUPL				
		OID	08932205	08932205		
23643	2	CONC	98.6%	98.1%		
	07/17/92	%REC				
		DUPL				
		OID	08932206	08932206		
23644	3	CONC	101%	87.8%		
	07/17/92	%REC				
		DUPL				
		OID	08932206	08932206		
23645	4	CONC	101%	100%		5
	07/17/92	%REC				
		DUPL				
		OID	08932206	08932206		
23646	5	CONC	102%	98.8%		6
	07/17/92	%REC				
		DUPL				
		OID	08932206	08932206		

TOL-d8-S Toluene-D8(Surrogate (88-110))

4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

JOB FILE: 23641 DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 20 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 05 AUG 9

COLUMN.....		37	38
ANALYTE.....		222	223
PPM.....		TOL-d8-S	4BrFB-S
SAMP #	DESCRIPTION		
23647	6	CONC 101%	94.5%
	07/17/92	%REC	
		DUPL	
		OID 08932206	08932206
23648	7	CONC 101%	99.9%
	07/17/92	%REC	
		DUPL	
		OID 08932207	08932207
23649	8	CONC 100%	99.6%
	07/17/92	%REC	
		DUPL	
		OID 08932207	08932207
23650	9	CONC 106%	102%
	07/17/92	%REC	
		DUPL	
		OID 08932207	08932207
23651	10	CONC 102%	100%
	07/17/92	%REC	
		DUPL	
		OID 08932207	08932207
23652	11	CONC 103%	99.7%
	07/17/92	%REC 104	105
		DUPL	
		OID 08932207	08932207

TOL-d8-S Toluene-D8(Surrogate (88-110)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

JCS FILE: 23641

DATE: 04 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 21 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

COLUMN.....	37	38	
ANALYTE.....	222	223	
PPM.....	TOL-d8-S	4BrFB-S	

SAMP #	DESCRIPTION				RC
23653	TRIP BLANK 07/18/92	CONC	108%	108%	1
		%REC			
		DUPL			
		OID	08932207	08932207	
BL#01	VBLK 01 (23641-2)	CONC	101%	95.9%	1
		%REC			
		DUPL			
		OID	08932205	08932205	
BL#02	VBLK 02 (23643-7)	CONC	98.2%	95.7%	1
		%REC			
		DUPL			
		OID	08932206	08932206	
BL#03	VBLK 03 (23648-53)	CONC	108%	104%	1
		%REC			
		DUPL			
		OID	08932207	08932207	

TOL-d8-S Toluene-D8(Surrogate (88-110))

4BrFB-S 4-Bromofluorobenzene(Surrogate (86-115))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 Lab Sample ID: 23559-23570

1) Analysis: BNA Date Extracted/Digested: 7/21/92

2) Analysis: Water Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 9/7/92

ANALYST: R. Kam INSTRUMENT: 95-HP5985B

PROBLEM: 1) Low 2-fluorophenol surrogate recovery
2) RPD out MS
3) high 2,4-dinitrotoluene MS, MSD

SAMPLE NUMBER(S) AFFECTED: 1) 23568-9
2) 23570 MS
3) 23570 MS & MSD

RECOMMENDED CORRECTIVE ACTION: 1,2) monitor recoveries to see if a problem exists. 3) check standards

CORRECTIVE ACTION TAKEN BY ANALYST: 1) monitoring of recoveries will be done to see if a continuing problem exists. The low surrogates weren't repeated since 9/2 rec was >10%. The spike recoveries were usually high

COMMENTS: High on 2,4-dinitrotoluene indicating high spike concentration as being most likely since the standard is ~~and~~ matching up closely with the original Spt curve.

DATE CORRECTIVE ACTION TAKEN: 7/30/92

REVIEWED BY: R. Kam

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	234	235	236	237	238	239
PPM.....	PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH

SAMP #	DESCRIPTION								RO
23559	R4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23560	1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23561	2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23562	3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23563	4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23564	5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 23559

DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	234	235	236	237	238	239	
		PPM.....	PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH	
SAMP #	DESCRIPTION								RO
23565	6	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	11
	07/17/92	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	12
	07/17/92	%REC	19.8	56.5				56.5	
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		234	235	236	237	238	239
	PPM.....		PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U
	(23559-64)	%REC	28.5	63.5				73.0
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
BL#02	SV-BLK 02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U
	(23565-23570)	%REC					-	
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 23559

DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		240	241	242	243	244	245
	PPM.....		246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC
SAMP #	DESCRIPTION							RO
23559	R4 07/17/92	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
		%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1 07/17/92	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
		%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2 07/17/92	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
		%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3 07/17/92	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
		%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4 07/17/92	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
		%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5 07/17/92	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
		%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		240	241	242	243	244	245
	PPM.....		246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC
SAMP #	DESCRIPTION							RO
23565	6	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23566	7	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23567	8	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23568	9	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23569	10	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23570	11	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC			38.2		98.5	
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		240	241	242	243	244	245
	PPM.....		246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	1
	(23559-64)	%REC			51.0		105.0		
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC	<0.010 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	<0.050 U	1
	(23565-23570)	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		246	247	248	249	250	251
	PPM.....		2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S
SAMP #	DESCRIPTION							RO
23559	R4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	44.2%	28.1%
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	45.6%	27.8%
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	37.7%	22.6%
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	29.8%	24.0%
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	21.2%	18.9%
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.020 U	34.3%	26.8%
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (21-100))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (10-94))

JOB FILE: 23559

DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	246	247	248	249	250	251	
	PPM.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION							RO
23565	6 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	26.8%	18.9%	
		%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	29.4%	18.1%	
		%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	26.0%	19.8%	
		%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	17.3%	15.5%	1
		%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	18.3%	14.5%	1
		%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11 07/17/92	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	29.6%	17.4%	1
		%REC				28.7	19.6	
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (21-100))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (10-94))

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	246	247	248	249	250	251	
	PPM.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S	
SAMP #	DESCRIPTION							RC
BL#01	SV-BLK 01	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	45.6 %	27.9%	1
	(23559-64)	%REC				40.1	26.2	
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC <0.010 U	<0.010 U	<0.010 U	<0.020 U	31.8%	19.8	1
	(23565-23570)	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (21-100))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (10-94))

JOB FILE: 23559

DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

		COLUMN.....	19	20	21	22	23	24	
		ANALYTE.....	252	263	264	265	266	267	
		PPM.....	246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR	
SAMP #	DESCRIPTION								RO
23559	R4	CONC	84.1%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23560	1	CONC	81.8%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23561	2	CONC	83.0%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23562	3	CONC	87.9%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23563	4	CONC	87.1%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
23564	5	CONC	84.6%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
	07/17/92	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	

246TBP-S 2,4,6-Tribromophenol(Surrogate (10-123))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene

NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		252	263	264	265	266	267
	PPM.....		246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR
SAMP #	DESCRIPTION							RO
23565	6	CONC	55.5%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23566	7	CONC	55.9%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23567	8	CONC	54.0%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23568	9	CONC	41.1%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23569	10	CONC	46.4%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23570	11	CONC	73.6%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC	76.0					
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

246TBP-S 2,4,6-Tribromophenol(Surrogate (10-123))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....		19	20	21	22	23	24	
	ANALYTE.....		252	263	264	265	266	267	
	PPM.....		246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR	
SAMP #	DESCRIPTION								RO
BL#01	SV-BLK 01	CONC	86.7%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23559-64)	%REC	92.6			61.7			
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC	54.7%	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23565-23570)	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	

246TBP-S 2,4,6-Tribromophenol(Surrogate (10-123))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		268	269	270	271	272	273
	PPM.....		BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ
SAMP #	DESCRIPTION							RO
23559	R4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	268	269	270	271	272	273	
	PPM.....	BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ	
SAMP #	DESCRIPTION							RO
23565	6	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	8
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	9
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	10
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	11
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U	12
	07/17/92	%REC		57.0				
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 15 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		268	269	270	271	272	273
	PPM.....		BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	(23559-64)	%REC			109.0			
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
BL#02	SV-BLK 02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.050 U	<0.020 U
	(23565-23570)	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 16 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		284	285	286	287	288	289
	PPM.....		BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB
SAMP #	DESCRIPTION							RO
23559	R4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 17 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	31	32	33	34	35	36	
	ANALYTE.....	284	285	286	287	288	289	
	PPM.....	BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB	
SAMP #	DESCRIPTION							RO
23565	6	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	07/17/92	%REC		62.2			61.6	
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 23559

DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 18 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

		COLUMN.....	31	32	33	34	35	36	
		ANALYTE.....	284	285	286	287	288	289	
		PPM.....	BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB	
SAMP #	DESCRIPTION								
									RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23559-64)	%REC			57.7			56.2	
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	14
	(23565-23570)	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 19 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	37	38	39	40	41	42	
	ANALYTE.....	290	291	292	293	294	295	
	PPM.....	NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION							RO
23559	R4	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23560	1	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23561	2	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23562	3	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23563	4	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23564	5	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 23559

DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 20 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....	37	38	39	40	41	42	
	ANALYTE.....	290	291	292	293	294	295	
	PPM.....	NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION							RO
23565	6	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	12
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 21 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		37	38	39	40	41	42
	ANALYTE.....		290	291	292	293	294	295
	PPM.....		NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23559-64)	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
BL#02	SV-BLK 02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	14
	(23565-23570)	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 22 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		43	44	45	46	47	48
	ANALYTE.....		296	297	298	299	300	301
	PPM.....		ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET
SAMP #	DESCRIPTION							RO
23559	R4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 23 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	43	44	45	46	47	48	
	ANALYTE.....	296	297	298	299	300	301	
	PPM.....	ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION							RO
23565	6	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	7
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	12
	07/17/92	%REC 66.2						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 24 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		43	44	45	46	47	48
	ANALYTE.....		296	297	298	299	300	301
	PPM.....		ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23559-64)	%REC	77.6					
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
BL#02	SV-BLK 02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23565-23570)	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 25 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		49	50	51	52	53	54
	ANALYTE.....		302	303	304	305	306	307
	PPM.....		HClBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE
SAMP #	DESCRIPTION							RO
23559	R4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

HClBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

DATE: 09 SEP 9

JOB FILE: 23559

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 26 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....	49	50	51	52	53	54	
	ANALYTE.....	302	303	304	305	306	307	
	PPM.....	HCLBEN	PHENAN	ANTRAC	DBUPHTH	FLANTHE	PYRENE	
SAMP #	DESCRIPTION							RO
23565	6	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	12
	07/17/92	%REC					86.9	
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

HCLBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBUPHTH Dibutylphthalate
PYRENE Pyrene

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 27 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

		COLUMN.....	49	50	51	52	53	54	
		ANALYTE.....	302	303	304	305	306	307	
		PPM.....	HClBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE	
SAMP #	DESCRIPTION								RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23559-64)	%REC						79.5	
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23565-23570)	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	

HClBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 28 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

		COLUMN.....	55	56	57	58	59	60
		ANALYTE.....	308	309	310	311	312	313
		PPM.....	BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT
SAMP #	DESCRIPTION							
23559	R4	CONC	<0.010 U	<0.010 U	<0.010 U	0.0041 J	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 29 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	55	56	57	58	59	60	
	ANALYTE.....	308	309	310	311	312	313	
	PPM.....	BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT	
SAMP #	DESCRIPTION							RO
23565	6	CONC <0.010 U	<0.010 U	<0.010 U	0.013	<0.010 U	<0.010 U	7
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	8
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	9
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	10
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	11
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	12
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 30 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....	55	56	57	58	59	60	
	ANALYTE.....	308	309	310	311	312	313	
	PPM.....	BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT	
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23559-64)	%REC							
		DUPL							
		OID	08952210	08952210	08952210	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	1
	(23565-23570)	%REC							
		DUPL							
		OID	08952211	08952211	08952211	08952211	08952211	08952211	

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 23559 DATE: 09 SEP 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 31 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9:

	COLUMN.....	61	62	63	64	65	66	
	ANALYTE.....	314	315	316	317	318	319	
	PPM.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION							RO
23559	R4	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23560	1	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23561	2	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23562	3	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23563	4	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
23564	5	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 23559 DATE: 09 SEP 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 32 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9:

	COLUMN.....	61	62	63	64	65	66	
	ANALYTE.....	314	315	316	317	318	319	
	PPM.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION							RO
23565	6	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23566	7	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	8
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23567	8	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	9
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23568	9	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	10
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23569	10	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	11
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	
23570	11	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	12
	07/17/92	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 33 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	61	62	63	64	65	66	
	ANALYTE.....	314	315	316	317	318	319	
	PPM.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	1
	(23559-64)	%REC						
		DUPL						
		OID 08952210	08952210	08952210	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC <0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.010 U	<0.020 U	1
	(23565-23570)	%REC						
		DUPL						
		OID 08952211	08952211	08952211	08952211	08952211	08952211	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 34 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....		67	68	69	70	71	72
	ANALYTE.....		320	321	322	323	324	325
	PPM.....		4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL
SAMP #	DESCRIPTION							RC
23559	R4	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23560	1	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23561	2	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23562	3	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23563	4	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
23564	5	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline

DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 35 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RDZG222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		67	68	69	70	71	72
	ANALYTE.....		320	321	322	323	324	325
	PPM.....		4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL
SAMP #	DESCRIPTION							RO
23565	6	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23566	7	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23567	8	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23568	9	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U 1
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23569	10	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U 1
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211
23570	11	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U 1
	07/17/92	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 36 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....		67	68	69	70	71	72
	ANALYTE.....		320	321	322	323	324	325
	PPM.....		4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL
SAMP #	DESCRIPTION							RO
BL#01	SV-BLK 01	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U 1
	(23559-64)	%REC						
		DUPL						
		OID	08952210	08952210	08952210	08952210	08952210	08952210
BL#02	SV-BLK 02	CONC	<0.020 U	<0.010 U	<0.010 U	<0.050 U	<0.050 U	<0.050 U 1
	(23565-23570)	%REC						
		DUPL						
		OID	08952211	08952211	08952211	08952211	08952211	08952211

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 37 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	73	74	75
ANALYTE.....	326	327	328
PPM.....	NB-D5-S	2FlBP-S	PTERP-S

SAMP #	DESCRIPTION					RC
23559	R4	CONC	81.0%	81.6%	84.3%	
	07/17/92	%REC				
		DUPL				
		OID	08952210	08952210	08952210	
23560	1	CONC	80.4%	73.8%	86.7%	
	07/17/92	%REC				
		DUPL				
		OID	08952210	08952210	08952210	
23561	2	CONC	58.7%	56.3%	86.7%	
	07/17/92	%REC				
		DUPL				
		OID	08952210	08952210	08952210	
23562	3	CONC	52.3%	63.7%	87.1%	
	07/17/92	%REC				
		DUPL				
		OID	08952210	08952210	08952210	
23563	4	CONC	35.6%	65.5%	87.0	
	07/17/92	%REC				
		DUPL				
		OID	08952210	08952210	08952210	
23564	5	CONC	57.3%	66.6%	84.9%	
	07/17/92	%REC				
		DUPL				
		OID	08952210	08952210	08952210	

NB-D5-S Nitrobenzene-D5(Surrogate (35-114)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (43-116))
PTERP-S p-Terphenyl-D14(Surrogate (33-141))

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 38 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	73	74	75
ANALYTE.....	326	327	328
PPM.....	NB-D5-S	2FlBP-S	PTERP-S

SAMP #	DESCRIPTION					RC
23565	6	CONC	68.8%	62.4%	90.3%	
	07/17/92	%REC				
		DUPL				
		OID	08952211	08952211	08952211	
23566	7	CONC	55.0%	43.6%	70.3%	
	07/17/92	%REC				
		DUPL				
		OID	08952211	08952211	08952211	
23567	8	CONC	65.8%	61.2%	84.6%	
	07/17/92	%REC				
		DUPL				
		OID	08952211	08952211	08952211	
23568	9	CONC	69.8%	65.8%	89.1%	1
	07/17/92	%REC				
		DUPL				
		OID	08952211	08952211	08952211	
23569	10	CONC	66.6%	63.6%	87.2%	1
	07/17/92	%REC				
		DUPL				
		OID	08952211	08952211	08952211	
23570	11	CONC	61.1%	53.4%	91.1%	1.
	07/17/92	%REC	69.0	61.0	96.2	
		DUPL				
		OID	08952211	08952211	08952211	

NB-D5-S Nitrobenzene-D5(Surrogate (35-114)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (43-116))
PTERP-S p-Terphenyl-D14(Surrogate (33-141))

JOB FILE: 23559 DATE: 09 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 39 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	73	74	75
ANALYTE.....	326	327	328
PPM.....	NB-D5-S	2FlBP-S	PTERP-S

SAMP #	DESCRIPTION					RC
BL#01	SV-BLK 01	CONC	71.6%	76.1%	86.6%	1
	(23559-64)	%REC	60.8	65.0	79.0	
		DUPL				
		OID	08952210	08952210	08952210	
BL#02	SV-BLK 02	CONC	70.1%	63.2%	92.2%	1
	(23565-23570)	%REC				
		DUPL				
		OID	08952211	08952211	08952211	

NB-D5-S Nitrobenzene-D5(Surrogate (35-114)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (43-116))
PTERP-S p-Terphenyl-D14(Surrogate (33-141))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 Lab Sample ID: 23571-23582

1) Analysis: Pesticides/PCB/Phos Date Extracted/Digested: 7/21/92

2) Analysis: Water Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23571

DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121
PPM.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								RC
23571	R4 07/17/92	CONC	<0.000038 U	<0.000029 U	<0.000058 U	<0.000038 U	<0.000087 U	<0.00011 U	
		%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23572	1 07/17/92	CONC	<0.000038 U	<0.000029 U	<0.000058 U	<0.000038 U	<0.000087 U	<0.00011 U	
		%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23573	2 07/17/92	CONC	<0.000038 U	<0.000029 U	<0.000058 U	<0.000038 U	<0.000087 U	<0.00011 U	
		%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23574	3 07/17/92	CONC	<0.000040 U	<0.000030 U	<0.000060 U	<0.000040 U	<0.000090 U	<0.00011 U	
		%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23575	4 07/17/92	CONC	<0.000040 U	<0.000030 U	<0.000060 U	<0.000040 U	<0.000090 U	<0.00011 U	
		%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23576	5 07/17/92	CONC	<0.000040 U	<0.000030 U	0.000012 BJ	<0.000040 U	<0.000090 U	<0.00011 U	
		%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121
PPM.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								RO
23577	6	CONC	<0.000040 U	<0.000030 U	0.000016 BJ	<0.000039 U	<0.000087 U	<0.00011 U	
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23578	7	CONC	<0.000040 U	<0.000030 U	0.000032 BJ	<0.000039 U	<0.000090 U	<0.00011 U	
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23579	8	CONC	<0.000040 U	<0.000030 U	<0.000061 U	<0.000039 U	<0.000090 U	<0.00011 U	
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23580	9	CONC	<0.000040 U	<0.000030 U	<0.000061 U	<0.000041 U	<0.000092 U	<0.00011 U	1
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23581	10	CONC	<0.000040 U	<0.000030 U	<0.000061 U	<0.000041 U	<0.000092 U	<0.00011 U	11
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23582	11	CONC	<0.000040 U	<0.000030 U	<0.000059 U	<0.000039 U	<0.000088 U	<0.00011 U	1
	07/17/92	%REC	65.0			60.0			
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 3 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
JOB NUMBER: RD2G222E1170001
RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE:
TYPE OF SAMPLE: WATER
EST. COMP. DATE: 21 AUG 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121
PPM.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								RO
BL#01	PBLK 01	CONC	<0.000040 U	<0.000030 U	0.000030 J	<0.000040 U	<0.000090 U	<0.00011 U	1
	(23571-82)	%REC	65.0			60.0			
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 4 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	7	8	9	10	11	12
	ANALYTE.....	122	123	124	125	126	127
	PPM.....	PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII
SAMP #	DESCRIPTION						RC
23571	R4	CONC 0.000008 BJ	<0.00012 U	<0.000029 U	<0.000019 U	<0.00013 U	<0.000038 U
	07/17/92	%REC					
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	07972234
23572	1	CONC <0.000039 U	<0.00012 U	<0.000029 U	<0.000019 U	<0.00013 U	<0.000038 U
	07/17/92	%REC					
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	07972234
23573	2	CONC <0.000039 U	<0.00012 U	<0.000029 U	<0.000019 U	<0.00013 U	<0.000039 U
	07/17/92	%REC					
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	07972234
23574	3	CONC <0.000039 U	<0.00012 U	<0.000029 U	<0.000019 U	<0.00013 U	<0.000039 U
	07/17/92	%REC					
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	07972234
23575	4	CONC <0.000039 U	<0.00012 U	<0.000029 U	<0.000019 U	<0.00013 U	<0.000039 U
	07/17/92	%REC					
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	07972234
23576	5	CONC <0.000039 U	<0.00012 U	<0.000029 U	<0.000019 U	<0.00013 U	<0.000039 U
	07/17/92	%REC					
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	07972234

PPDDE	PPDDE	PPDDT	PPDDT
HPTCL	Heptachlor	DIELDRIN	Dieldrin
ENDOI	A-Endosulfan	ENDOII	B-Endosulfan

JOB FILE: 23571 DATE: 28 SEP

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 5 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		122	123	124	125	126	127
	PPM.....		PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII
SAMP #	DESCRIPTION							RC
23577	6	CONC	<0.000039 U	<0.00012 U	0.000008 BJ	<0.000019 U	<0.00014 U	<0.000039 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23578	7	CONC	<0.000039 U	<0.00012 U	<0.000030 U	<0.000019 U	<0.00014 U	<0.000039 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23579	8	CONC	<0.000039 U	<0.00012 U	<0.000030 U	<0.000019 U	<0.00014 U	<0.000039 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23580	9	CONC	<0.000041 U	<0.00012 U	0.000015 BJ	<0.000019 U	<0.00014 U	<0.000041 U 1
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23581	10	CONC	<0.000041 U	<0.00012 U	<0.000030 U	<0.000019 U	<0.00014 U	<0.000041 U 1
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23582	11	CONC	<0.000039 U	<0.00012 U	<0.000030 U	<0.000019 U	<0.00014 U	<0.000039 U 1
	07/17/92	%REC		80.0	70.0	74.0		
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234

PPDDE	PPDDE	PPDDT	PPDDT
HPTCL	Heptachlor	DIELDRIN	Dieldrin
ENDOI	A-Endosulfan	ENDOII	B-Endosulfan

JOB FILE: 23571 DATE: 28 SEP

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 6 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG

	COLUMN.....	7	8	9	10	11	12
	ANALYTE.....	122	123	124	125	126	127
	PPM.....	PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII
SAMP #	DESCRIPTION						
SL#01	PBLK 01	CONC 0.000007 J	<0.00012 U	0.000028 J	<0.000020 U	<0.00014 U	<0.000040 U
	(23571-82)	%REC	98.0	75.0	84.0		
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	07972234

PPDDE PPDDE
HPTCL Heptachlor
ENDOI A-Endosulfan
PPDDT PPDDT
DIELDRIN Dieldrin
ENDOII B-Endosulfan

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 7 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		128	129	130	131	133	134
	PPM.....		ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S
SAMP #	DESCRIPTION							RC
23571	R4	CONC	<0.00063 U	<0.000058 U	<0.00022 U	<0.00080 U	<0.0017 U	100%
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23572	1	CONC	<0.00065 U	<0.000058 U	<0.00022 U	<0.00080 U	<0.0017 U	100%
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23573	2	CONC	<0.00065 U	<0.000058 U	<0.00022 U	<0.00080 U	<0.0017 U	110%
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23574	3	CONC	<0.00066 U	<0.000060 U	<0.00023 U	<0.00083 U	<0.0018 U	100%
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23575	4	CONC	<0.00066 U	<0.000060 U	<0.00023 U	<0.00083 U	<0.0018 U	96%
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23576	5	CONC	<0.00066 U	<0.000060 U	<0.00023 U	<0.00083 U	<0.0018 U	90%
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 23571 DATE: 28 SEP

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 8 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	128	129	130	131	133	134	
	PPM.....	ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S	
SAMP #	DESCRIPTION							R
23577	6	CONC <0.00064 U	<0.000058 U	<0.00022 U	<0.00081 U	<0.0017 U	99%	
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23578	7	CONC <0.00066 U	<0.000060 U	<0.00023 U	<0.00083 U	<0.0018 U	81%	
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23579	8	CONC <0.00066 U	<0.000060 U	<0.00023 U	<0.00083 U	<0.0018 U	95%	
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23580	9	CONC <0.00066 U	<0.000060 U	<0.00023 U	<0.00085 U	<0.0018 U	100%	1
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23581	10	CONC <0.00066 U	<0.000060 U	<0.00023 U	<0.00085 U	<0.0018 U	100%	1
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23582	11	CONC <0.00066 U	<0.000060 U	<0.00023 U	<0.00081 U	<0.0018 U	87%	1
	07/17/92	%REC	44.0				100	
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 9 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	128	129	130	131	133	134	
	PPM.....	ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S	
SAMP #	DESCRIPTION							RC
BL#01	PBLK 01	CONC <0.00066 U	<0.000060 U	<0.00023 U	<0.0008 U	<0.0018 U	110%	1
	(23571-82)	%REC	58.0				110	
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 23571 DATE: 28 SEP

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 10 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	136	137	138	139	140	141
PPM.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248

SAMP #	DESCRIPTION							
23571	R4	CONC	<0.0024 U	<0.00062 U	<0.00062 U	<0.00062 U	<0.00062 U	<0.00062 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23572	1	CONC	<0.0024 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23573	2	CONC	<0.0024 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23574	3	CONC	<0.0024 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23575	4	CONC	<0.0024 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234
23576	5	CONC	<0.0024 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U	<0.00064 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242
PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 11 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	136	137	138	139	140	141
PPM.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248

SAMP #	DESCRIPTION								RC
23577	6	CONC	<0.0024 U	<0.00063 U	<0.00063 U	<0.00063 U	<0.00063 U	<0.000063 U	
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23578	7	CONC	<0.0024 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23579	8	CONC	<0.0024 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23580	9	CONC	<0.0024 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	1
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23581	10	CONC	<0.0024 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	1
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23582	11	CONC	<0.0024 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	1.
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242
PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 12 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		136	137	138	139	140	141
	PPM.....		TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248
SAMP #	DESCRIPTION							RC
BL#01	PBLK 01	CONC	<0.0024 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	<0.00065 U	1
	(23571-82)	%REC						
		DUPL						
		OID	07972234	07972234	07972234	07972234	07972234	07972234

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242
PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 23571

DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 13 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

COLUMN.....		25	26	27	28	29	30
ANALYTE.....		142	143	154	158	159	160
PPM.....		PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO
SAMP #	DESCRIPTION						RC
23571	R4 07/17/92	CONC <0.0013 U	<0.0013 U	<0.00058 U	<0.0011 U	112%	<0.00067 U
		%REC					
		DUPL					
		OID 07972234	07972234	54942227	54942227	54942227	54942227
23572	1 07/17/92	CONC <0.0013 U	<0.0013 U	<0.00059 U	<0.0012 U	113%	<0.00069 U
		%REC					
		DUPL					
		OID 07972234	07972234	54942227	54942227	54942227	54942227
23573	2 07/17/92	CONC <0.0013 U	<0.0013 U	<0.00059 U	<0.0012 U	74%	<0.00069 U
		%REC					
		DUPL					
		OID 07972234	07972234	54942227	54942227	54942227	54942227
23574	3 07/17/92	CONC <0.0013 U	<0.0013 U	<0.00059 U	<0.0012 U	74%	<0.00069 U
		%REC					
		DUPL					
		OID 07972234	07972234	54942227	54942227	54942227	54942227
23575	4 07/17/92	CONC <0.0013 U	<0.0013 U	<0.00059 U	<0.0012 U	137%	<0.00069 U
		%REC					
		DUPL					
		OID 07972234	07972234	54942227	54942227	54942227	54942227
23576	5 07/17/92	CONC <0.0013 U	<0.0013 U	<0.00059 U	<0.0012 U	92%	<0.00069 U
		%REC					
		DUPL					
		OID 07972234	07972234	54942227	54942227	54942227	54942227

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)

PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 14 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		142	143	154	158	159	160
	PPM.....		PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO
SAMP #	DESCRIPTION							RO
23577	6	CONC	<0.0013 U	<0.0013 U	<0.00058 U	<0.0012 U	80%	<0.00068 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	54942227	54942227	54942227	54942227
23578	7	CONC	<0.0013 U	<0.0013 U	<0.00060 U	<0.0012 U	98%	<0.00070 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	54942227	54942227	54942227	54942227
23579	8	CONC	<0.0013 U	<0.0013 U	<0.00060 U	<0.0012 U	103%	<0.00070 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	54942227	54942227	54942227	54942227
23580	9	CONC	<0.0013 U	<0.0013 U	<0.00060 U	<0.0012 U	95%	<0.00070 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	54942227	54942227	54942227	54942227
23581	10	CONC	<0.0013 U	<0.0013 U	<0.00060 U	<0.0012 U	107%	<0.00070 U
	07/17/92	%REC						
		DUPL						
		OID	07972234	07972234	54942227	54942227	54942227	54942227
23582	11	CONC	<0.0013 U	<0.0013 U	<0.00059 U	<0.0012 U	77%	<0.00070 U
	07/17/92	%REC			86.8	61.0	79	57.6
		DUPL						
		OID	07972234	07972234	54942227	54942227	54942227	54942227

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)
PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 23571

DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 15 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	142	143	154	158	159	160	
	PPM.....	PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO	
SAMP #	DESCRIPTION							RO
BL#01	PBLK 01	CONC <0.0013 U	<0.0013 U	<0.00060 U	<0.0012 U	101%	<0.00070 U	1
	(23571-82)	%REC		130.3	95.0	130	121.2	
		DUPL						
		OID 07972234	07972234	54942227	54942227	54942227	54942227	

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)

PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 23571 DATE: 30 SEP 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 16 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 92

	COLUMN.....	31	32	33	34	35	
	ANALYTE.....	161	162	900	901	902	
	PPM.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE	
SAMP #	DESCRIPTION						ROW
23571	R4	CONC <0.0011 U	<0.00038 U	0.000020 BJ	<0.000048 U	<0.0058 U	1
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972234	07972234	07972234	
23572	1	CONC <0.0012 U	<0.00038 U	0.000010 BJ	<0.000048 U	<0.0058 U	2
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972234	07972234	07972234	
23573	2	CONC <0.0012 U	<0.00038 U	<0.000049 U	<0.000048 U	<0.0058 U	3
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972234	07972234	07972234	
23574	3	CONC <0.0012 U	<0.00040 U	<0.000049 U	<0.000048 U	<0.0060 U	4
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972234	07972234	07972234	
23575	4	CONC <0.0012 U	<0.00040 U	0.000016 BJ	<0.000050 U	<0.0060 U	5
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972234	07972234	07972234	
23576	5	CONC <0.0012 U	<0.00040 U	0.000023 BJ	<0.000050 U	<0.0060 U	6
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972234	07972234	07972234	

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE

PHORATE Phorate
g-CHLRDN g-CHLORDANE

JOB FILE: 23571 DATE: 28 SEP '

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 17 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL '
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG '

		COLUMN.....	31	32	33	34	35	
		ANALYTE.....	161	162	900	901	902	
		PPM.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE	
SAMP #	DESCRIPTION							R(
23577	6	CONC	<0.0012 U	<0.00039 U	0.000018 BJ	<0.000049 U	<0.0058 U	
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23578	7	CONC	<0.0012 U	<0.00039 U	0.000013 BJ	<0.000049 U	<0.0058 U	
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23579	8	CONC	<0.0012 U	<0.00039 U	0.000037 BJ	<0.000051 U	<0.0061 U	
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23580	9	CONC	<0.0012 U	<0.00041 U	0.000020 BJ	<0.000051 U	<0.0061 U	1
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23581	10	CONC	<0.0012 U	<0.00041 U	0.000021 BJ	<0.000051 U	<0.0061 U	1
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23582	11	CONC	<0.0012 U	<0.00041 U	0.000010 BJ	<0.000049 U	<0.0059 U	1
	07/17/92	%REC	61.0	59.2				
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE

PHORATE Phorate
g-CHLRDN g-CHLORDANE

JOB FILE: 23571 DATE: 28 SEP 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 18 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

	COLUMN.....	31	32	33	34	35	
	ANALYTE.....	161	162	900	901	902	
	PPM.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE	
SAMP #	DESCRIPTION						RC
BL#01	PBLK 01	CONC <0.0012 U	<0.00040 U	0.000022 J	<0.000050 U	<0.0060 U	1
	(23571-82)	%REC 125.0	92.2				
		DUPL					
		OID 54942227	54942227	07972234	07972234	07972234	

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE
PHORATE Phorate
g-CHLRDN g-CHLORDANE

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 Lab Sample ID: 23583-23594

1) Analysis: Herbicides Date Extracted/Digested: 7/23/92

2) Analysis: Water Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23583 DATE: 18 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 3) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: WATER

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 21 AUG 9

	COLUMN.....	1	2	3	4	5	
	ANALYTE.....	169	170	171	172	174	
	PPM.....	2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB	
SAMP #	DESCRIPTION						RO
23583	R4	CONC <0.013 U	129%	<0.0021 U	<0.0017 U	<0.00074 U	
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23584	1	CONC <0.012 U	122 %	<0.0020 U	<0.0017 U	<0.00069 U	2
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23585	2	CONC <0.012 U	98%	<0.0020 U	<0.0017 U	<0.00071 U	3
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23586	3	CONC <0.012 U	109%	<0.0020 U	<0.0017 U	<0.00069 U	4
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23587	4	CONC <0.012 U	117%	<0.0019 U	<0.0017 U	<0.00068 U	5
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23588	5	CONC <0.012 U	101%	<0.0020 U	<0.0017 U	<0.00071 U	6
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	

2,4-D	2,4-D	2,4-DP	2,4-DP(Surrogate)
2,4,5-T	2,4,5-T	2,4,5-TP	2,4,5-TP
DINOSEB	Dinoseb		

JOB FILE: 23583 DATE: 18 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 3) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9.

	COLUMN.....	1	2	3	4	5	
	ANALYTE.....	169	170	171	172	174	
	PPM.....	2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB	
SAMP #	DESCRIPTION						RO
23589	6	CONC <0.012 U	110 %	<0.0019 U	<0.0017 U	<0.00067 U	
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23590	7	CONC <0.012 U	102%	<0.0019 U	<0.0017 U	<0.00069 U	8
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23591	8	CONC <0.012 U	114%	<0.0020 U	<0.0017 U	<0.00070 U	9
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23592	9	CONC <0.012 U	115%	<0.0020 U	<0.0017 U	<0.00070 U	10
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23593	10	CONC <0.012 U	122%	<0.0020 U	<0.0017 U	<0.00070 U	11
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23594	11	CONC <0.012 U	110%	<0.0019 U	<0.0017 U	<0.00068 U	12
	07/17/92	%REC 87.0	126	90.0			
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	

2,4-D 2,4-D
2,4,5-T 2,4,5-T
DINOSEB Dinoseb
2,4-DP 2,4-DP(Surrogate)
2,4,5-TP 2,4,5-TP

JOB FILE: 23583 DATE: 18 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 3) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: WATER EST. COMP. DATE: 21 AUG 9

COLUMN.....	1	2	3	4	5
ANALYTE.....	169	170	171	172	174
PPM.....	2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB

SAMP #	DESCRIPTION							RO
BL#01	METHOD BLANK 01	CONC	<0.012 U	111%	<0.0020 U	<0.0017 U	<0.00070 U	1:
		%REC	67.0	105	76.0			
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	

2,4-D	2,4-D	2,4-DP	2,4-DP(Surrogate)
2,4,5-T	2,4,5-T	2,4,5-TP	2,4,5-TP
DINOSEB	Dinoseb		

JOB FILE: 23709 DATE: 19 JAN 9

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 9

COLUMN.....		1	2	3	4	5	6
ANALYTE.....		1	2	3	4	5	6
MG/KG.....		SB	AS	BE	CD	CR	CU
SAMP # DESCRIPTION							RO
23709 1	CONC	<1.20 U	17.5	1.50	0.141 B	33.5	12.3
07/17/92	%REC						
	DUPL						
	OID	04352349	04352343	01202328	04352345	01202295	01202295
23710 2	CONC	<1.20 U	5.51	0.400 B	1.41	9.80	34.2
07\17\92	%REC						
	DUPL						
	OID	04352349	04352343	01202328	04352345	01202295	01202295
23711 3	CONC	<1.20 U	7.87	0.500	0.434 B	16.5	42.7
07\17\92	%REC						
	DUPL						
	OID	04352349	04352343	01202328	04352345	01202295	01202295
23712 4	CONC	<1.20 U	16.8	1.30	0.190 B	27.4	10.0
07\17\92	%REC						
	DUPL						
	OID	04352349	04352343	01202328	04352345	01202295	01202295
23713 5	CONC	<1.20 U	19.9	1.60	0.208 B	33.1	12.9
07/17/92	%REC						
	DUPL						
	OID	04352349	04352343	01202328	04352345	01202295	01202295
23714 6	CONC	<1.20 U	12.0	0.700	1.31	18.4	53.6
07/17/92	%REC						
	DUPL						
	OID	04352349	04352344	01202328	04352345	01202295	01202295

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 23709 DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET - PAGE 2 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 92
COMPLETION DATE: 17 MAR 93

	COLUMN.....		1	2	3	4	5	6	
	ANALYTE.....		1	2	3	4	5	6	
	MG/KG.....		SB	AS	BE	CD	CR	CU	
SAMP #	DESCRIPTION								ROW
23715	7	CONC	<1.20 U	14.3	0.500	0.911	11.0	36.7	7
	07/17/92	%REC							
		DUPL							
		OID	04352349	04352343	01202328	04352345	01202295	01202295	
23716	8	CONC	<1.20 U	8.69	0.500	0.750	10.7	36.3	8
	07/17/92	%REC							
		DUPL							
		OID	04352349	04352344	01202328	04352346	01202295	01202295	
23717	9	CONC	<1.20 U	20.5	1.10	1.18	34.2	60.5	9
	07/17/92	%REC							
		DUPL							
		OID	04352349	04352344	01202328	04352346	01202295	01202295	
23718	10	CONC	<1.20 U	19.3	1.10	0.960	34.3	58.9	10
	07/17/92	%REC							
		DUPL							
		OID	04352349	04352343	01202328	04352346	01202295	01202295	
23719	11	CONC	<1.20 U	27.4	1.50	0.499 B	45.7	22.5	11
	07/17/92	%REC							
		DUPL							
		OID	04352350	04352343	01202328	04352345	01202295	01202295	
BL#01	METHOD BLANK	CONC	<0.30 U	<0.20 U	<0.100 U	0.022 B	<0.500 U	<1.00 U	12
		%REC							
		DUPL							
		OID	04352350	04352343	01202328	04352345	01202295	01202295	

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 23709 DATE: 19 JAN 9·

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 93

COLUMN.....			1	2	3	4	5	6
ANALYTE.....			1	2	3	4	5	6
MG/KG.....			SB	AS	BE	CD	CR	CU
SAMP #	DESCRIPTION							ROW
BL#02	DUPLICATE	CONC	<1.20 U	28.4	1.60	0.507	46.6	20.9	13
	DIGEST	%REC							
	(23719)	DUPL							
		OID	04352350	04352343	01202328	04352345	01202295	01202295	
BL#03	EXTERNAL QA	CONC	1.22 B	19.1	0.600	3.23	87.3	101	14
		%REC							
		DUPL							
		OID	04352350	04352343	01202328	04352345	01202295	01202295	

SB	Antimony	AS	Arsenic
BE	Beryllium	CD	Cadmium
CR	Chromium	CU	Copper

JOB FILE: 23709 DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 4 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 93

	COLUMN.....	7	8	9	10	11	12	
	ANALYTE.....	7	8	9	10	11	12	
	MG/KG.....	PB	HG	NI	SE	AG	TL	
SAMP #	DESCRIPTION							ROW
23709	1	CONC 26.1	0.135	30.7	0.41 B	<1.00 U	<0.20 U	1
	07/17/92	%REC						
		DUPL	0.180					
		OID 01202296	09652218	01202295	04352342	01202310	04352344	
23710	2	CONC 38.0	0.361	12.7	<0.20 U	<1.00 U	<0.20 U	2
	07\17\92	%REC						
		DUPL	0.362					
		OID 01202296	09652218	01202295	04352342	01202310	04352344	
23711	3	CONC 113.0	<0.100 U	18.9	<0.20 U	<0.999 U	<0.20 U	3
	07\17\92	%REC						
		DUPL	<0.100 U					
		OID 01202296	09652218	01202295	04352342	01202310	04352344	
23712	4	CONC 20.4	<0.100 U	32.3	0.31 B	<1.00 U	<0.20 U	4
	07\17\92	%REC						
		DUPL	<0.100 U					
		OID 01202296	09652218	01202295	04352343	01202310	04352344	
23713	5	CONC 33.5	<0.100 U	44.8	0.47 B	<0.999 U	<0.20 U	5
	07/17/92	%REC						
		DUPL	<0.100 U					
		OID 01202296	09652218	01202295	04352342	01202310	04352344	
23714	6	CONC 75.5	0.121	19.0	<0.20 U	<1.00 U	<0.20 U	6
	07/17/92	%REC						
		DUPL	0.121					
		OID 01202296	09652218	01202295	04352343	01202310	04352344	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 23709 DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 5 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 93

	COLUMN.....		7	8	9	10	11	12	
	ANALYTE.....		7	8	9	10	11	12	
	MG/KG.....		PB	HG	NI	SE	AG	TL	
SAMP #	DESCRIPTION								ROW
23715	7	CONC	44.6	0.121	14.1	<0.20 U	<1.00 U	<0.20 U	7
	07/17/92	%REC							
		DUPL		0.121					
		OID	01202296	09652218	01202295	04352343	01202310	04352344	
23716	8	CONC	39.9	<0.100 U	13.0	<0.20 U	<0.999 U	<0.20 U	8
	07/17/92	%REC							
		DUPL		<0.100 U					
		OID	01202296	09652218	01202295	04352343	01202310	04352344	
23717	9	CONC	76.2	<0.100 U	28.8	<0.20 U	<1.00 U	<0.20 U	9
	07/17/92	%REC							
		DUPL		<0.100 U					
		OID	01202296	09652218	01202295	04352343	01202310	04352344	
23718	10	CONC	85.0	0.121	26.0	0.23 B	<1.00 U	<0.20 U	10
	07/17/92	%REC							
		DUPL		0.121					
		OID	01202296	09652218	01202295	04352343	01202310	04352344	
23719	11	CONC	30.5	<0.100 U	52.3	<0.20 U	<0.999 U	<0.20 U	11
	07/17/92	%REC		111.0					
		DUPL		<0.100 U					
		OID	01202296	09652218	01202295	04352343	01202310	04352344	
BL#01	METHOD BLANK	CONC	<4.00 U	N/A	<1.10	<0.20 U	<1.00 U	<0.20 U	12
		%REC							
		DUPL							
		OID	01202296	09652218	01202295	04352343	01202310	04352344	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 23709 DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 6 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 93

	COLUMN.....		7	8	9	10	11	12	
	ANALYTE.....		7	8	9	10	11	12	
	MG/KG.....		PB	HG	NI	SE	AG	TL	
SAMP #	DESCRIPTION								ROW
BL#02	DUPLICATE	CONC	28.9	N/A	55.2	<0.20 U	<1.00 U	<0.20 U	13
	DIGEST	%REC							
	(23719)	DUPL							
		OID	01202296	09652218	01202295	04352343	01202310	04352344	
BL#03	EXTERNAL QA	CONC	154.0	N/A	38.0	0.64	<0.999 U	0.58 B	14
		%REC							
		DUPL							
		OID	01202296	09652218	01202295	04352343	01202310	04352344	

PB	Lead	HG	Mercury
NI	Nickel	SE	Selenium
AG	Silver	TL	Thallium

JOB FILE: 23709 DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 7 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 93

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	13	24	25	27	29	30	
	MG/KG.....	ZN	AL	BA	CA	CO	FE	
SAMP #	DESCRIPTION							ROW
23709	1	CONC 81.4	6590	86.0	549	33.0	63300	1
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202302	
23710	2	CONC 151.0	4660	80.1	6960	7.60	16200	2
	07\17\92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202302	
23711	3	CONC 127.0	12000	384	26400	15.4	22800	3
	07\17\92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202302	
23712	4	CONC 71.9	4760	73.0	616	22.9	58100	4
	07\17\92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202302	
23713	5	CONC 92.2	5060	89.9	554	37.0	61100	5
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202302	
23714	6	CONC 196.0	7590	273	8310	15.1	30500	6
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 23709

DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 8 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 92
COMPLETION DATE: 17 MAR 93

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	13	24	25	27	29	30	
	MG/KG.....	ZN	AL	BA	CA	CO	FE	
SAMP #	DESCRIPTION							ROW
23715	7	CONC 133	6450	147	6340	10.1	14800	7
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	
23716	8	CONC 123	5330	138	5970	8.79	15000	8
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	
23717	9	CONC 216	12300	324	3060	23.4	46100	9
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	
23718	10	CONC 273	11200	320	2890	20.8	46300	10
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	
23719	11	CONC 142	6550	324	716	35.5	80700	11
	07/17/92	%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	
BL#01	METHOD BLANK	CONC 1.90 B	5.20 B	<2.00 U	37.4 B	<2.00 U	<3.00 U	12
		%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 23709

DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 9 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 92
COMPLETION DATE: 17 MAR 93

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	13	24	25	27	29	30	
	MG/KG.....	ZN	AL	BA	CA	CO	FE	
SAMP #	DESCRIPTION							ROW
BL#02	DUPLICATE	CONC 148	6310.0	279	710	37.5	86200	13
	DIGEST	%REC						
	(23719)	DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	
BL#03	EXTERNAL QA	CONC 421	10400	89.5	23700	13.6	34000	14
		%REC						
		DUPL						
		OID 01202295	01202297	01202295	01252329	01202295	01202300	

ZN	Zinc	AL	Aluminum
BA	Barium	CA	Calcium
CO	Cobalt	FE	Iron

JOB FILE: 23709 DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 10 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 93

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	31	32	34	35	37	39	
	MG/KG.....	MG	MN	K	NA	V	SN	
SAMP #	DESCRIPTION							ROW
23709	1	CONC 752	1670	821	47.9 B	32.9	<5.00 U	1
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23710	2	CONC 1380	350	828	52.1 B	11.5	<5.00 U	2
	07\17\92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23711	3	CONC 4430	879	1270	82.7 B	16.9	<5.00 U	3
	07\17\92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23712	4	CONC 394 B	1400	628	39.3 B	28.4	<5.00 U	4
	07\17\92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23713	5	CONC 392 B	2140	592	39.8 B	36.7	<5.00 U	5
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23714	6	CONC 1800	1040	898	50.4 B	18.7	<5.00 U	6
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

JOB FILE: 23709

DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 11 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 92
COMPLETION DATE: 17 MAR 93

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	31	32	34	35	37	39	
	MG/KG.....	MG	MN	K	NA	V	SN	
SAMP #	DESCRIPTION							ROW
23715	7	CONC 1540	560	1070	56.4 B	14.3	<5.00 U	7
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23716	8	CONC 1360	525	986	57.7 B	12.7	<5.00 U	8
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23717	9	CONC 919	1570	652	63.8 B	32.8	<5.00 U	9
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23718	10	CONC 848	1490	654	53.3 B	31.5	<5.00 U	10
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
23719	11	CONC 352 B	3080	515	39.3 B	42.0	<5.00 U	11
	07/17/92	%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	
BL#01	METHOD BLANK	CONC <20.0 U	<0.600 U	<20.0 U	36.0 B	<1.00 U	<5.00 U	12
		%REC						
		DUPL						
		OID 01252329	01202296	01202295	01252330	01202295	01202297	

MG	Magnésium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

JOB FILE: 23709 DATE: 19 JAN 94

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 12 OF 12) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT COMPLETION DATE: 17 MAR 93

	COLUMN.....		19	20	21	22	23	24	
	ANALYTE.....		31	32	34	35	37	39	
	MG/KG.....		MG	MN	K	NA	V	SN	
SAMP #	DESCRIPTION								ROW
BL#02	DUPLICATE	CONC	364 B	3080	519	43.0 B	42.6	<5.00 U	13
	DIGEST	%REC							
	(23719)	DUPL							
		OID	01252329	01202296	01202295	01252330	01202295	01202297	
BL#03	EXTERNAL QA	CONC	8230	504	1780	122 B	20.6	<5.00 U	14
		%REC							
		DUPL							
		OID	01252329	01202296	01202295	01252330	01202295	01202297	

MG	Magnesium	MN	Manganese
K	Potassium	NA	Sodium
V	Vanadium	SN	Tin

Lab Name: CE-WES ANALYTICAL LAB GRP. Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (ROUND 2) Lab Sample ID: 23731 - 23741

1) Analysis: Nutrients (NO_2, NO_3) Date Extracted/Digested: 7/23/92

2) Analysis: Sediment Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23731 DATE: 17 MAR 93

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 92

COLUMN.....		1	2
ANALYTE.....		69	70
MG/KG.....		NO2-N	NO3-N
SAMP #	DESCRIPTION		ROW
23731	1	CONC <0.97	<3.89 1
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23732	2	CONC <1.03	12.3 2
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23733	3	CONC <1.04	17.5 3
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23734	4	CONC <1.09	13.9 4
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23735	5	CONC <0.96	17.0 5
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23736	6	CONC 1.02	14.7 6
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210

NO2-N Nitrite Nitrogen NO3-N Nitrate Nitrogen

JOB FILE: 23731 DATE: 17 MAR 93

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 92
EST. COMP. DATE: 05 AUG 92

COLUMN.....		1	2
ANALYTE.....		69	70
MG/KG.....		NO2-N	NO3-N
SAMP #	DESCRIPTION		ROW
23737	7	CONC <1.11	15.9
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23738	8	CONC <1.30	21.1
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23739	9	CONC <1.29	21.4
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23740	10	CONC <1.02	13.1
	07/17/92	%REC	
		DUPL	
		OID 20452211	20452210
23741	11	CONC <0.97	17.5
	07/17/92	%REC 93.2	98.3
		DUPL <1.09	17.5
		OID 20452211	20452210

NO2-N Nitrite Nitrogen NO3-N Nitrate Nitrogen

Lab Name: CF-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: July 17, 1992 (Round 2) Lab Sample ID: 23654 - 23664

1) Analysis: Volatiles Date Extracted/Digested: 7/29/92

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	183	184	185	186	187	188
MG/KG.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE

SAMP #	DESCRIPTION								RO
23654	1	CONC	<0.011 U	<0.011 U	<0.011 U	<0.011 U	0.0027 BJ	<0.0057 U	
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23655	2	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	0.0082 B	<0.0060 U	2
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23656	3	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	0.0031 BJ	<0.0060 U	3
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23657	4	CONC	<0.013 U	<0.013 U	<0.013 U	<0.013 U	0.0048 BJ	<0.0063 U	4
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23658	5	CONC	<0.011 U	<0.011 U	<0.011 U	<0.011 U	0.0052 BJ	<0.0053 U	5
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23659	6	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	0.015 B	<0.0060 U	6
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride
BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	183	184	185	186	187	188	
		MG/KG.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE	
SAMP #	DESCRIPTION								RO
23660	7	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	0.0042 BJ	<0.0058 U	7
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23661	8	CONC	<0.013 U	<0.013 U	<0.013 U	<0.013 U	0.0086 B	<0.0067 U	8
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23662	9	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	0.0063 B	<0.0058 U	9
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23663	10	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	<0.0060 U	<0.0060 U	10
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23664	11	CONC	<0.012 U	<0.012 U	<0.012 U	<0.012 U	0.0032 BJ	<0.0062 U	11
	07/17/92	%REC						98.0	
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
BL#01	VLBK01	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0016 J	<0.0050 U	12
	(23654-8)	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride
BrMETH Bromomethane
ClETHA Chloroethane.
11DClETE 1,1-Dichloroethene

JOB FILE: 23654 DATE: 02 SEP 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9:

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	183	184	185	186	187	188
MG/KG.....	ClMETH	BrMETH	VNLCL	ClETHA	MECL	11DClETE

SAMP #	DESCRIPTION											RO
BL#02	VBLK02	CONC	<0.010 U	<0.010 U	<0.010 U	<0.010 U	0.0005 J	<0.0050 U	1
	(23659-64)	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

ClMETH Chloromethane
VNLCL Vinyl Chloride
MECL Methylene Chloride
BrMETH Bromomethane
ClETHA Chloroethane
11DClETE 1,1-Dichloroethene

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		189	190	191	192	193	194
	MG/KG.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							RO
23654	1	CONC	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23655	2	CONC	<0.0060 U	<0.0060 U	<0.0060 U	0.0049 J	<0.0060 U	<0.0060 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23656	3	CONC	<0.0060 U	<0.0060 U	<0.0060 U	0.011	<0.0060 U	<0.0060 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23657	4	CONC	<0.0063 U	<0.0063 U	<0.0063 U	0.011	<0.0063 U	<0.0063 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23658	5	CONC	<0.0053 U	<0.0053 U	<0.0053 U	0.0059	<0.0053 U	<0.0053 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23659	6	CONC	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 7 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN.....	13	14	15	16	17	18
ANALYTE.....	195	196	197	198	199	200
MG/KG.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME

SAMP #	DESCRIPTION								RO
23654	1	CONC	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23655	2	CONC	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	2
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23656	3	CONC	<0.0060 U	0.0009 J	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	3
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23657	4	CONC	<0.0063 U	0.0014 J	<0.0063 U	<0.0063 U	<0.0063 U	<0.0063 U	4
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23658	5	CONC	<0.0053 U	<0.0053 U	<0.0053 U	<0.0053 U	<0.0053 U	<0.0053 U	5
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23659	6	CONC	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	6
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 5 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN.....		7	8	9	10	11	12	
ANALYTE.....		189	190	191	192	193	194	
MG/KG.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA	
SAMP #	DESCRIPTION							RO
23660	7	CONC <0.0058 U	<0.0058 U	<0.0058 U	0.015	<0.0058 U	<0.0058 U	7
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23661	8	CONC <0.0067 U	<0.0067 U	<0.0067 U	0.031	<0.0067 U	<0.0067 U	8
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23662	9	CONC <0.0058 U	<0.0058 U	<0.0058 U	0.039	<0.0058 U	<0.0058 U	9
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23663	10	CONC <0.0060 U	<0.0060 U	<0.0060 U	0.0051 J	<0.0060 U	<0.0060 U	10
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23664	11	CONC <0.0062 U	<0.0062 U	<0.0062 U	0.035	<0.0062 U	<0.0062 U	11
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
BL#01	VLBK01	CONC <0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	12
	(23654-8)	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 6 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		189	190	191	192	193	194
	MG/KG.....		11DCLETA	t-DCLETE	c-DCLETE	CHCL3	12DCLETA	111TCA
SAMP #	DESCRIPTION							RO
BL#02	VBLK02	CONC	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	1
	(23659-64)	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211

11DCLETA 1,1-Dichloroethane
c-DCLETE cis-1,2-Dichloroethene
12DCLETA 1,2-Dichloroethane
t-DCLETE Trans-1,2-Dichloroethene
CHCL3 Chloroform
111TCA 1,1,1-Trichloroethane

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 8 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN.....	13	14	15	16	17	18
ANALYTE.....	195	196	197	198	199	200
MG/KG.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME

SAMP #	DESCRIPTION									RO
23660	7	CONC	<0.0058 U	0.0026 J	<0.0058 U	<0.0058 U	<0.0058 U	<0.0058 U		7
	07/17/92	%REC								
		DUPL								
		OID	08932211	08932211	08932211	08932211	08932211	08932211		
23661	8	CONC	<0.0067 U	0.0062 J	<0.0067 U	<0.0067 U	<0.0067 U	0.0021 J		8
	07/17/92	%REC								
		DUPL								
		OID	08932211	08932211	08932211	08932211	08932211	08932211		
23662	9	CONC	<0.0058 U	0.0073 J	<0.0058 U	<0.0058 U	<0.0058 U	0.0021 J		9
	07/17/92	%REC								
		DUPL								
		OID	08932211	08932211	08932211	08932211	08932211	08932211		
23663	10	CONC	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U		10
	07/17/92	%REC								
		DUPL								
		OID	08932211	08932211	08932211	08932211	08932211	08932211		
23664	11	CONC	<0.0062 U	0.0065	<0.0062 U	<0.0062 U	<0.0062 U	<0.0062 U		11
	07/17/92	%REC					108.6			
		DUPL								
		OID	08932211	08932211	08932211	08932211	08932211	08932211		
BL#01	VLBK01	CONC	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U		12
	(23654-8)	%REC								
		DUPL								
		OID	08932211	08932211	08932211	08932211	08932211	08932211		

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 9 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....	13	14	15	16	17	18
	ANALYTE.....	195	196	197	198	199	200
	MG/KG.....	CCL4	BrDClME	12DClPR	t13ClPRE	TCE	DBrClME
SAMP #	DESCRIPTION						RO
BL#02	VBLK02	CONC <0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	1
	(23659-64)	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	

CCL4 Carbon Tetrachloride
12DClPR 1,2-Dichloropropane
TCE Trichloroethene
BrDClME Bromodichloromethane
t13ClPRE Trans-1,3-Dichloropropene
DBrClME Dibromochloromethane

JOB FILE: 23654 DATE: 02 SEP 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 10 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9:

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	201	202	203	205	206	207	
	MG/KG.....	c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE	
SAMP #	DESCRIPTION							RO
23654	1	CONC <0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	<0.0057 U	1
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23655	2	CONC <0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	2
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23656	3	CONC <0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	3
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23657	4	CONC <0.0063 U	<0.0063 U	<0.0063 U	<0.0063 U	<0.0063 U	<0.0063 U	4
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23658	5	CONC <0.0053 U	<0.0053 U	<0.0053 U	<0.0053 U	<0.0053 U	<0.0053 U	5
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23659	6	CONC <0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	6
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 11 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....		19	20	21	22	23	24
	ANALYTE.....		201	202	203	205	206	207
	MG/KG.....		c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE
SAMP #	DESCRIPTION							RO
23660	7	CONC	<0.0058 U	<0.0058 U	<0.0058 U	<0.0058 U	<0.0058 U	<0.0058 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23661	8	CONC	<0.0067 U	<0.0067 U	<0.0067 U	<0.0067 U	<0.0067 U	<0.0067 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23662	9	CONC	<0.0058 U	<0.0058 U	<0.0058 U	<0.0058 U	<0.0058 U	<0.0058 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23663	10	CONC	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U	<0.0060 U
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23664	11	CONC	<0.0062 U	<0.0062 U	<0.0062 U	<0.0062 U	<0.0062 U	<0.0062 U
	07/17/92	%REC			106.2			
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
BL#01	VLBK01	CONC	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U
	(23654-8)	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 23654

DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 12 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 9
EST. COMP. DATE: 05 AUG 9

COLUMN.....		19	20	21	22	23	24	
ANALYTE.....		201	202	203	205	206	207	
MG/KG.....		c13ClPRE	112TCA	BENZENE	CHBr3	1122TClA	TEClETE	
SAMP #	DESCRIPTION							RO
BL#02	VBLK02	CONC	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	<0.0050 U	1
	(23659-64)	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

c13ClPRE Cis-1,3-Dichloropropene
BENZENE Benzene
1122TClA 1,1,2,2-Tetrachloroethane
112TCA 1,1,2-Trichloroethane
CHBr3 Bromoform
TEClETE Tetrachloroethene

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 13 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	208	209	210	213	214	215	
	MG/KG.....	TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION							RO
23654	1	CONC <0.0057 U	<0.0057 U	<0.0057 U	0.013 BJ	<0.11 U	<0.0057 U	
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23655	2	CONC <0.0060 U	<0.0060 U	<0.0060 U	0.0098 BJ	<0.12 U	<0.0060 U	2
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23656	3	CONC <0.0060 U	<0.0060 U	<0.0060 U	<0.012 U	<0.12 U	<0.0060 U	3
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23657	4	CONC <0.0063 U	<0.0063 U	<0.0063 U	0.0086 BJ	<0.13 U	<0.0063 U	4
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23658	5	CONC <0.0053 U	<0.0053 U	<0.0053 U	0.0077 BJ	<0.11 U	<0.0053 U	5
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	
23659	6	CONC <0.0060 U	<0.0060 U	<0.0060 U	0.0077 BJ	0.0022 J	<0.0060 U	6
	07/17/92	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 23654 DATE: 02 SEP 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 14 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9:

	COLUMN.....		25	26	27	28	29	30	
	ANALYTE.....		208	209	210	213	214	215	
	MG/KG.....		TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2	
SAMP #	DESCRIPTION								RO
23660	7	CONC	<0.0058 U	<0.0058 U	<0.0058 U	<0.012 U	<0.12 U	<0.0058 U	7
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23661	8	CONC	<0.0067 U	<0.0067 U	<0.0067 U	0.0066 BJ	<0.13 U	<0.0067 U	8
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23662	9	CONC	<0.0058 U	<0.0058 U	<0.0058 U	<0.012 U	<0.12 U	<0.0058 U	9
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23663	10	CONC	<0.0060 U	<0.0060 U	<0.0060 U	<0.012 U	<0.12 U	<0.0060 U	10
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23664	11	CONC	<0.0062 U	<0.0062 U	<0.0062 U	<0.012 U	<0.12 U	<0.0062 U	11
	07/17/92	%REC	104.8	101.4					
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
BL#01	VLBK01	CONC	<0.0050 U	<0.0050 U	<0.0050 U	0.0035 J	<0.10 U	<0.0050 U	12
	(23654-8)	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

TOLUENE Toluene
ETBEN Ethylbenzene
BUTANO 2-Butanone
ClBEN Chlorobenzene
ACETONE Acetone
CS2 Carbondisulfide

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 15 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		208	209	210	213	214	215
	MG/KG.....		TOLUENE	ClBEN	ETBEN	ACETONE	BUTANO	CS2
SAMP #	DESCRIPTION							RO
BL#02	VBLK02	CONC	<0.0050 U	<0.0050 U	<0.0050 U	0.0076 J	<0.10 U	<0.0050 U	1
	(23659-64)	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

TOLUENE	Toluene	ClBEN	Chlorobenzene
ETBEN	Ethylbenzene	ACETONE	Acetone
BUTANO	2-Butanone	CS2	Carbondisulfide

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 16 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		216	217	218	219	220	221
	MG/KG.....		2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S
SAMP #	DESCRIPTION							RO
23654	1	CONC	<0.057 U	<0.057 U	<0.0057 U	<0.057 U	<0.0057 U	111%
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23655	2	CONC	<0.060 U	<0.060 U	<0.0060 U	<0.060 U	<0.0060 U	114 %
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23656	3	CONC	<0.060 U	<0.060 U	<0.0060 U	<0.060 U	<0.0060 U	116%
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23657	4	CONC	<0.063 U	<0.063 U	<0.0063 U	<0.063 U	<0.0063 U	114%
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23658	5	CONC	<0.053 U	<0.053 U	<0.0053 U	<0.053 U	<0.0053 U	120%
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211
23659	6	CONC	<0.060 U	<0.060 U	<0.0060 U	<0.060 U	0.0011 J	108%
	07/17/92	%REC						
		DUPL						
		OID	08932211	08932211	08932211	08932211	08932211	08932211

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene

4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (70-121))

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 17 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN.....	31	32	33	34	35	36
ANALYTE.....	216	217	218	219	220	221
MG/KG.....	2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S

SAMP #	DESCRIPTION								RO
23660	7	CONC	<0.058 U	<0.058 U	<0.0058 U	<0.058 U	<0.0058 U	112%	
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23661	8	CONC	<0.067 U	<0.067 U	<0.0067 U	<0.067 U	<0.0067 U	108%	8
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23662	9	CONC	<0.058 U	<0.058 U	<0.0058 U	<0.058 U	<0.0058 U	111%	9
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23663	10	CONC	<0.060 U	<0.060 U	<0.0060 U	<0.060 U	<0.0060 U	108%	10
	07/17/92	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
23664	11	CONC	<0.062 U	<0.062 U	<0.0062 U	<0.062 U	<0.0062 U	114%	11
	07/17/92	%REC						109%	
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	
BL#01	VLBK01	CONC	<0.050 U	<0.050 U	<0.0050 U	<0.050 U	<0.0050 U	100%	12
	(23654-8)	%REC							
		DUPL							
		OID	08932211	08932211	08932211	08932211	08932211	08932211	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (70-121))

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 18 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....	31	32	33	34	35	36	
	ANALYTE.....	216	217	218	219	220	221	
	MG/KG.....	2HEXANO	4Me2PE	STYRENE	VNACETA	T-XYLENE	12DClE-S	
SAMP #	DESCRIPTION							RO
BL#02	VBLK02	CONC <0.050 U	<0.050 U	<0.0050 U	<0.050 U	<0.0050 U	105%	1
	(23659-64)	%REC						
		DUPL						
		OID 08932211	08932211	08932211	08932211	08932211	08932211	

2HEXANO 2-Hexanone
STYRENE Styrene
T-XYLENE T-Xylene
4Me2PE 4-Methyl-2-Pentanone
VNACETA Vinyl Acetate
12DClE-S 1,2-Dichloroethane-d4(Surrogate (70-121))

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 19 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN.....	37	38
ANALYTE.....	222	223
MG/KG.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION					RO
23654	1	CONC	100%	99.2%		
	07/17/92	%REC				
		DUPL				
		OID	08932211	08932211		
23655	2	CONC	100%	99.9%		
	07/17/92	%REC				
		DUPL				
		OID	08932211	08932211		
23656	3	CONC	100%	97.8%		
	07/17/92	%REC				
		DUPL				
		OID	08932211	08932211		
23657	4	CONC	99.9%	103%		
	07/17/92	%REC				
		DUPL				
		OID	08932211	08932211		
23658	5	CONC	102%	91.8%		
	07/17/92	%REC				
		DUPL				
		OID	08932211	08932211		
23659	6	CONC	101%	92.4%		
	07/17/92	%REC				
		DUPL				
		OID	08932211	08932211		

TOL-d8-S Toluene-D8(Surrogate (81-117)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (74-121))

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 20 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

	COLUMN.....	37	38
	ANALYTE.....	222	223
	MG/KG.....	TOL-d8-S	4BrFB-S
SAMP #	DESCRIPTION		
23660	7	CONC 103%	97.7%
	07/17/92	%REC	
		DUPL	
		OID 08932211	08932211
23661	8	CONC 101%	95.6%
	07/17/92	%REC	
		DUPL	
		OID 08932211	08932211
23662	9	CONC 103%	98.5%
	07/17/92	%REC	
		DUPL	
		OID 08932211	08932211
23663	10	CONC 98.5%	97.1%
	07/17/92	%REC	
		DUPL	
		OID 08932211	08932211
23664	11	CONC 100%	104%
	07/17/92	%REC 105	105
		DUPL	
		OID 08932211	08932211
BL#01	VLBK01	CONC 102%	98.8%
	(23654-8)	%REC	
		DUPL	
		OID 08932211	08932211

TOL-d8-S Toluene-D8(Surrogate (81-117)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (74-121))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (ROUND 2) Lab Sample ID: 23720

1) Analysis: Cyanide Date Extracted/Digested:

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (ROUND 2) Lab Sample ID: 23720

1) Analysis: Cyanide Date Extracted/Digested:

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23720 DATE: 06 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN..... 1
ANALYTE..... 85
MG/KG..... CN

SAMP #	DESCRIPTION			RC
23720	1	CONC	<0.257 U	
	07/17/92	%REC	92.0	
		DUPL	<0.257 U	
		OID	49402211	
23721	2	CONC	<0.243 U	
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23722	3	CONC	<0.253 U	
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23723	4	CONC	<0.252 U	
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23724	5	CONC	<0.261 U	
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23725	6	CONC	<0.251 U	
	07/17/92	%REC		
		DUPL		
		OID	49402211	

CN Cyanide

JOB FILE: 23720 DATE: 06 AUG

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
JOB NUMBER: RD2G222E1170001
RECEIPT DATE: 18 JUL
CHEM. PRESERVATIVE:
TYPE OF SAMPLE: SEDIMENT
EST. COMP. DATE: 05 AUG

COLUMN..... 1
ANALYTE..... 85
MG/KG..... CN

SAMP #	DESCRIPTION			R
23726	7	CONC	<0.230 U	
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23727	8	CONC	<0.232 U	
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23728	9	CONC	0.336 B	
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23729	10	CONC	0.292 B	1
	07/17/92	%REC		
		DUPL		
		OID	49402211	
23730	11	CONC	<0.251 U	1
	07/17/92	%REC	73.0	
		DUPL	<0.251 U	
		OID	49402211	
BL#01	METHOD BLANK	CONC	<0.247 U	1
		%REC		
		DUPL		
		OID	49402211	

CN Cyanide

JOB FILE: 23654 DATE: 02 SEP 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 21 OF 21) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 05 AUG 9

COLUMN.....	37	38
ANALYTE.....	222	223
MG/KG.....	TOL-d8-S	4BrFB-S

SAMP #	DESCRIPTION					RO
BL#02	VBLK02	CONC	102%	100%		1
	(23659-64)	%REC				
		DUPL				
		OID	08932211	08932211		

TOL-d8-S Toluene-D8(Surrogate (81-117)) 4BrFB-S 4-Bromofluorobenzene(Surrogate (74-121))

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (Round 2) Lab Sample ID: 23665 - 23675

1) Analysis: Explosives Date Extracted/Digested:

2) Analysis: Sediment Date Extracted/Digested:

3) Analysis: Date Extracted/Digested:

4) Analysis: Date Extracted/Digested:

5) Analysis: Date Extracted/Digested:

6) Analysis: Date Extracted/Digested:

7) Analysis: Date Extracted/Digested:

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23665 DATE: 27 AUG 9:

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 1 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9:
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 9:

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	900	901	902	903	904	905	
		MG/KG.....	HMX	RDX	TNB	DNB	TETRYL	TNT	
SAMP #	DESCRIPTION								RO
23665	1	CONC	<2.20	<1.00	<0.250	<0.250	<0.650	<0.250	
	07/17/92	%REC							
		DUPL							
		OID	52702209	52702209	52702209	52702209	52702209	52702209	
23666	2	CONC	<2.20	<1.00	0.050 J	<0.250	<0.650	0.094 J	2
	07/17/92	%REC							
		DUPL							
		OID	52702209	52702209	52702209	52702209	52702209	52702209	
23667	3	CONC	1.70 J	0.405 J	0.200 J	<0.250	<0.650	1.02	3
	07/17/92	%REC							
		DUPL							
		OID	52702209	52702209	52702209	52702209	52702209	52702209	
23668	4	CONC	<2.20	<1.00	<0.250	<0.250	<0.650	<0.250	4
	07/17/92	%REC							
		DUPL							
		OID	52702209	52702209	52702209	52702209	52702209	52702209	
23669	5	CONC	<2.20	<1.00	<0.250	<0.250	<0.650	<0.250	5
	07/17/92	%REC		93.0	96.2			129.9	
		DUPL							
		OID	52702209	52702209	52702209	52702209	52702209	52702209	
23670	6	CONC	1.24 J	1.78	<0.250	<0.250	<0.650	0.140 J	6
	07/17/92	%REC							
		DUPL							
		OID	52702209	52702209	52702209	52702209	52702209	52702209	

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 23665 DATE: 27 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 9

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		900	901	902	903	904	905
	MG/KG.....		HMX	RDX	TNB	DNB	TETRYL	TNT
SAMP #	DESCRIPTION							RO
23671	7	CONC	0.250 J	<1.00	0.070 J	<0.250	<0.650	0.070 J
	07/17/92	%REC						
		DUPL						
		OID	52702209	52702209	52702209	52702209	52702209	52702209
23672	8	CONC	0.850 J	<1.00	<0.250	<0.250	<0.650	0.995
	07/17/92	%REC						
		DUPL						
		OID	52702209	52702209	52702209	52702209	52702209	52702209
23673	9	CONC	0.170 J	<1.00	0.085 J	<0.250	<0.650	0.795
	07/17/92	%REC						
		DUPL						
		OID	52702209	52702209	52702209	52702209	52702209	52702209
23674	10	CONC	0.145 J	<1.00	0.085 J	<0.250	<0.650	0.675
	07/17/92	%REC						
		DUPL						
		OID	52702209	52702209	52702209	52702209	52702209	52702209
23675	11	CONC	<2.20	<1.00	<0.250	<0.250	<0.650	0.180 J
	07/17/92	%REC		94.1	95.7			124.2
		DUPL	<2.20	<1.00	<0.250	<0.250	<0.650	0.065 J
		OID	52702209	52702209	52702209	52702209	52702209	52702209
BL#01	METHOD BLANK	CONC	<2.200	<1.00	<0.250	<0.250	<0.650	<0.250
		%REC		95.0	98.7			135.3
		DUPL						
		OID	52702209	52702209	52702209	52702209	52702209	52702209

HMX	HMX	RDX	RDX
TNB	TNB	DNB	DNB
TETRYL	TETRYL	TNT	TNT

JOB FILE: 23665 DATE: 27 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 3 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 9

COLUMN.....	7	8
ANALYTE.....	906	907
MG/KG.....	2,4-DNT	2,6-DNT

SAMP #	DESCRIPTION				ROW
23665	1	CONC	<0.250	<0.260	1
	07/17/92	%REC			
		DUPL			
		OID	52702209	52702209	
23666	2	CONC	<0.250	<0.260	2
	07/17/92	%REC			
		DUPL			
		OID	52702209	52702209	
23667	3	CONC	0.530	<0.260	3
	07/17/92	%REC			
		DUPL			
		OID	52702209	52702209	
23668	4	CONC	<0.250	<0.260	4
	07/17/92	%REC			
		DUPL			
		OID	52702209	52702209	
23669	5	CONC	<0.250	<0.260	5
	07/17/92	%REC	95.4		
		DUPL			
		OID	52702209	52702209	
23670	6	CONC	0.105 J	<0.260	6
	07/17/92	%REC			
		DUPL			
		OID	52702209	52702209	

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

JOB FILE: 23665 DATE: 27 AUG 9

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 4 OF 4) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 9
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 9

	COLUMN.....	7	8
	ANALYTE.....	906	907
	MG/KG.....	2,4-DNT	2,6-DNT

SAMP #	DESCRIPTION					RO
23671	7	CONC	<0.250	<0.260		7
	07/17/92	%REC				
		DUPL				
		OID	52702209	52702209		
23672	8	CONC	<0.250	<0.260		8
	07/17/92	%REC				
		DUPL				
		OID	52702209	52702209		
23673	9	CONC	<0.250	<0.260		9
	07/17/92	%REC				
		DUPL				
		OID	52702209	52702209		
23674	10	CONC	<0.250	<0.260		10
	07/17/92	%REC				
		DUPL				
		OID	52702209	52702209		
23675	11	CONC	<0.250	<0.250		11
	07/17/92	%REC	95.4			
		DUPL		<0.250		
		OID	52702209	52702209		
BL#01	METHOD BLANK	CONC	<0.250	<0.260		12
		%REC	99.0			
		DUPL				
		OID	52702209	52702209		

2,4-DNT 2,4-DNT 2,6-DNT 2,6-DNT

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: Crane Soil DATE: 22 09

ANALYST: Erika McCormick INSTRUMENT: 96

PROBLEM: Sample Conc. and Duplicate for 23675 Do not match up well.

SAMPLE NUMBER(S) AFFECTED: 23675, 23675D

RECOMMENDED CORRECTIVE ACTION: Reextract soil samples 23675 and 23675D

CORRECTIVE ACTION TAKEN BY ANALYST: Reextracted soil samples 23675 and 23675D.

COMMENTS: Obtained similar results on 1st extraction. Soil sample is not homogeneous.

DATE CORRECTIVE ACTION TAKEN: 22/9

REVIEWED BY: Karen F Myers

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (ROUND 2) Lab Sample ID: 23687 - 23697

1) Analysis: Pesticides Date Extracted/Digested: 7/22/92

2) Analysis: Sediment Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121
MG/KG.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								ROW
23687	1	CONC	<0.0034 U	<0.0026 U	0.0012 BJ	<0.0034 U	<0.0075 U	<0.0091 U	1
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23688	2	CONC	<0.0034 U	<0.0026 U	0.00096 BJ	<0.0034 U	<0.0077 U	<0.0095 U	2
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23689	3	CONC	<0.0032 U	<0.0024 U	<0.0049 U	<0.0032 U	<0.0073 U	<0.0089 U	3
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23690	4	CONC	<0.0034 U	<0.0026 U	0.0011 BJ	<0.0034 U	<0.0077 U	<0.0094 U	4
	07/17/92	%REC							
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	
23691	5	CONC	<0.0030 U	<0.0023 U	<0.0045 U	<0.0030 U	<0.0068 U	<0.0083 U	5
	07/17/92	%REC							
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	
23692	6	CONC	<0.0033 U	0.0022 J	<0.0049 U	<0.0033 U	<0.0073 U	<0.0089 U	6
	07/17/92	%REC							
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	1	2	3	4	5	6	
	ANALYTE.....	116	117	118	119	120	121	
	MG/KG.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD	
SAMP #	DESCRIPTION							ROW
23693	7	CONC <0.0036 U	0.0041	<0.0055 U	<0.0036 U	0.00093 J	0.0032 BJ	7
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23694	8	CONC <0.0035 U	0.0029	<0.0053 U	<0.0035 U	<0.0080 U	<0.0097 U	8
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23695	9	CONC <0.0035 U	<0.0026 U	<0.0051 U	<0.0035 U	<0.0077 U	<0.0094 U	9
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23696	10	CONC <0.0033 U	0.0039	<0.0050 U	<0.0033 U	<0.0075 U	<0.0092 U	10
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23697	11	CONC <0.0033 U	0.0044	<0.0050 U	<0.0033 U	<0.0075 U	<0.0092 U	11
	07/17/92	%REC 66.0			66.0			
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
BL#01	PBLK 01	CONC <0.0027 U	<0.0020 U	0.00064 J	<0.0027 U	<0.0060 U	<0.0074 U	12
	(23687-90)	%REC 66.0			63.0			
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 3 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	1	2	3	4	5	6
ANALYTE.....	116	117	118	119	120	121
MG/KG.....	ALDRIN	A-BHC	B-BHC	G-BHC	D-BHC	PPDDD

SAMP #	DESCRIPTION								ROW
BL#02	PBLK 02	CONC	<0.0027 U	<0.0020 U	<0.0040 U	<0.0027 U	<0.0060 U	0.0011 J	13
	(23691-97)	%REC	80.0			77.0			
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	

ALDRIN	Aldrin	A-BHC	A-BHC
B-BHC	B-BHC	G-BHC	G-BHC
D-BHC	D-BHC	PPDDD	PPDDD

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 4 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	7	8	9	10	11	12	
	ANALYTE.....	122	123	124	125	126	127	
	MG/KG.....	PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII	
SAMP #	DESCRIPTION							ROW
23687	1	CONC 0.0010 J	<0.010 U	0.0012 J	<0.0017 U	<0.012 U	<0.0034 U	1
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23688	2	CONC 0.00044 J	<0.010 U	<0.0026 U	<0.0017 U	<0.012 U	<0.0034 U	2
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23689	3	CONC 0.00079 J	<0.0097 U	<0.0024 U	<0.0016 U	<0.011 U	<0.0032 U	3
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23690	4	CONC <0.0034 U	<0.010 U	<0.0026 U	<0.0017 U	<0.012 U	<0.0034 U	4
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23691	5	CONC 0.00035 J	0.0019 J	0.0016 BJ	0.0053 BJ	<0.011 U	<0.0030 U	5
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23692	6	CONC 0.00074 J	<0.0098 U	0.0036 B	<0.0016 U	<0.011 U	<0.0033 U	6
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	

PPDDE PPDDE
HPTCL Heptachlor
ENDOI A-Endosulfan
PPDDT PPDDT
DIELDRIN Dieldrin
ENDOII B-Endosulfan

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 5 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	7	8	9	10	11	12
ANALYTE.....	122	123	124	125	126	127
MG/KG.....	PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII

SAMP #	DESCRIPTION								ROW
23693	7	CONC	0.0015 J	0.0021 J	0.0028 B	<0.0018 U	<0.013 U	<0.0036 U	7
	07/17/92	%REC							
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	
23694	8	CONC	0.0023 J	0.0027 J	0.0040 B	0.00031 BJ	<0.012 U	<0.0035 U	8
	07/17/92	%REC							
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	
23695	9	CONC	0.00041 J	<0.012 U	0.0024 BJ	<0.0017 U	<0.012 U	<0.0034 U	9
	07/17/92	%REC							
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	
23696	10	CONC	<0.0033 U	<0.012 U	0.0055 B	<0.0017 U	<0.012 U	<0.0034 U	10
	07/17/92	%REC							
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	
23697	11	CONC	<0.0033 U	<0.012 U	0.0026 B	<0.0017 U	<0.012 U	<0.0034 U	11
	07/17/92	%REC		76.0	68.0	72.0			
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	
BL#01	PBLK 01	CONC	<0.0027 U	<0.0080 U	<0.0020 U	<0.0013 U	<0.0094 U	<0.0027 U	12
	(23687-90)	%REC		88.0	69.0	76.0			
		DUPL							
		OID	07972234	07972234	07972234	07972234	07972234	07972234	

PPDDE	PPDDE	PPDDT	PPDDT
HPTCL	Heptachlor	DIELDRIN	Dieldrin
ENDOI	A-Endosulfan	ENDOII	B-Endosulfan

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 6 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		7	8	9	10	11	12
	ANALYTE.....		122	123	124	125	126	127
	MG/KG.....		PPDDE	PPDDT	HPTCL	DIELDRIN	ENDOI	ENDOII
SAMP #	DESCRIPTION							ROW
BL#02	PBLK 02	CONC	<0.0027 U	<0.0080 U	0.0014 J	0.0026	0.0021 J	0.0022 J	13
	(23691-97)	%REC		88.0	82.0	88.0			
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	

PPDDE	PPDDE	PPDDT	PPDDT
HPTCL	Heptachlor	DIELDRIN	Dieldrin
ENDOI	A-Endosulfan	ENDOII	B-Endosulfan

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 7 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	128	129	130	131	133	134	
	MG/KG.....	ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S	
SAMP #	DESCRIPTION							ROW
23687	1	CONC <0.055 U	<0.0050 U	<0.019 U	<0.069 U	<0.15 U	98%	1
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23688	2	CONC <0.057 U	<0.0052 U	<0.020 U	<0.071 U	<0.15 U	110%	2
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23689	3	CONC <0.053 U	<0.0049 U	<0.019 U	<0.067 U	<0.14 U	110%	3
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23690	4	CONC <0.057 U	<0.0051 U	<0.020 U	<0.071 U	<0.15 U	100%	4
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23691	5	CONC <0.050 U	<0.0045 U	<0.017 U	<0.062 U	<0.13 U	96%	5
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23692	6	CONC <0.054 U	<0.0049 U	<0.019 U	<0.068 U	<0.14 U	89%	6
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 8 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	13	14	15	16	17	18	
	ANALYTE.....	128	129	130	131	133	134	
	MG/KG.....	ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S	
SAMP #	DESCRIPTION							ROW
23693	7	CONC 0.0096 J	0.00065 J	<0.021 U	<0.075 U	<0.16 U	110%	7
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23694	8	CONC <0.058 U	<0.0053 U	<0.020 U	<0.074 U	<0.16 U	95%	8
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23695	9	CONC <0.056 U	<0.0051 U	<0.020 U	<0.070 U	<0.15 U	94%	9
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23696	10	CONC <0.056 U	<0.0051 U	<0.020 U	<0.070 U	<0.15 U	91%	10
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23697	11	CONC <0.055 U	<0.0050 U	<0.019 U	<0.069 U	<0.15 U	93%	11
	07/17/92	%REC	52.0				87	
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
BL#01	PBLK 01	CONC <0.044 U	<0.0040 U	<0.015	<0.056 U	<0.12 U	91%	12
	(23687-90)	%REC	60.0				110	
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 9 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		13	14	15	16	17	18	
	ANALYTE.....		128	129	130	131	133	134	
	MG/KG.....		ENDOSU	ENDRIN	ENDALD	HPTCLE	METOXYCL	DIBUCL-S	
SAMP #	DESCRIPTION								ROW
BL#02	PBLK 02	CONC	<0.044 U	<0.0040 U	0.0018 J	<0.056 U	0.014 J	100%	13
	(23691-97)	%REC		56.0				100	
		DUPL							
		OID	07972275	07972275	07972275	07972275	07972275	07972275	

ENDOSU Endosulfan sulfate
ENDALD Endrin Aldehyde
METOXYCL Methoxychlor
ENDRIN Endrin
HPTCLE Heptachlor Epoxide
DIBUCL-S Dibutylchlorendate(Surrogate (24-154))

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 10 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: _ TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	136	137	138	139	140	141	
	MG/KG.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	
SAMP #	DESCRIPTION							ROW
23687	1	CONC <0.20 U	<0.054 U	<0.054 U	<0.054 U	<0.054 U	<0.054 U	1
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23688	2	CONC <0.21 U	<0.056 U	<0.056 U	<0.056 U	<0.056 U	<0.056 U	2
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23689	3	CONC <0.19 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	3
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23690	4	CONC <0.21 U	<0.056 U	<0.056 U	<0.056 U	<0.056 U	<0.056 U	4
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	
23691	5	CONC <0.18 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	<0.049 U	5
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23692	6	CONC <0.20 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	<0.053 U	6
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242
PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 11 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	19	20	21	22	23	24	
	ANALYTE.....	136	137	138	139	140	141	
	MG/KG.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248	
SAMP #	DESCRIPTION							ROW
23693	7	CONC <0.22 U	<0.059 U	<0.059 U	<0.059 U	<0.059 U	<0.059 U	7
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23694	8	CONC <0.21 U	<0.058 U	<0.058 U	<0.058 U	<0.058 U	<0.058 U	8
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23695	9	CONC <0.21 U	<0.056 U	<0.056 U	<0.056 U	<0.056 U	<0.056 U	9
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23696	10	CONC <0.20 U	<0.054 U	<0.054 U	<0.054 U	<0.054 U	<0.054 U	10
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
23697	11	CONC <0.20 U	<0.054 U	<0.054 U	<0.054 U	<0.054 U	<0.054 U	11
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	
BL#01	PBLK 01	CONC <0.16 U	<0.044 U	<0.044 U	<0.044 U	<0.044 U	<0.044 U	12
	(23687-90)	%REC						
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242
PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 12 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	19	20	21	22	23	24
	ANALYTE.....	136	137	138	139	140	141
	MG/KG.....	TOXAPHEN	PCB-1016	PCB-1221	PCB-1232	PCB-1242	PCB-1248
SAMP #	DESCRIPTION						ROW
BL#02	PBLK 02	CONC <0.16 U	<0.044 U	<0.044 U	<0.044 U	<0.044 U	<0.044 U	13
	(23691-97)	%REC					
		DUPL					
		OID 07972275	07972275	07972275	07972275	07972275	07972275

TOXAPHEN Toxaphene
PCB-1221 PCB-1221
PCB-1242 PCB-1242
PCB-1016 PCB-1016
PCB-1232 PCB-1232
PCB-1248 PCB-1248

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 13 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD26222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	142	143	154	158	159	160	
	MG/KG.....	PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO	
SAMP #	DESCRIPTION							ROW
23687	1	CONC <0.11 U	<0.11 U	<0.025 U	<0.050 U	100%	<0.029 U	1
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	54942227	54942227	54942227	54942227	
23688	2	CONC <0.11 U	<0.011 U	<0.026 U	<0.051 U	112%	<0.030 U	2
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	54942227	54942227	54942227	54942227	
23689	3	CONC <0.11 U	<0.011 U	<0.024 U	<0.048 U	116%	<0.028 U	3
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	54942227	54942227	54942227	54942227	
23690	4	CONC <0.11 U	<0.011 U	<0.026 U	<0.051 U	112%	<0.030 U	4
	07/17/92	%REC						
		DUPL						
		OID 07972234	07972234	54942227	54942227	54942227	54942227	
23691	5	CONC <0.098 U	<0.098 U	<0.022 U	<0.045 U	138%	<0.026 U	5
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	54942227	54942227	54942227	54942227	
23692	6	CONC <0.11 U	<0.11 U	<0.024 U	<0.048 U	150%	<0.028 U	6
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	54942227	54942227	54942227	54942227	

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)
PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 14 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	142	143	154	158	159	160	
	MG/KG.....	PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO	
SAMP #	DESCRIPTION							ROW
23693	7	CONC <0.12 U	<0.12 U	<0.027 U	<0.054 U	138%	<0.032 U	7
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	54942227	54942227	54942227	54942227	
23694	8	CONC 0.046 J	<0.12 U	<0.026 U	<0.053 U	123%	<0.031 U	8
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	54942227	54942227	54942227	54942227	
23695	9	CONC <0.11 U	<0.11 U	<0.026 U	<0.051 U	134%	<0.030 U	9
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	54942227	54942227	54942227	54942227	
23696	10	CONC <0.11 U	<0.11 U	<0.025 U	<0.050 U	133%	<0.029 U	10
	07/17/92	%REC						
		DUPL						
		OID 07972275	07972275	54942227	54942227	54942227	54942227	
23697	11	CONC <0.11 U	<0.11 U	<0.025 U	<0.050 U	109%	<0.029 U	11
	07/17/92	%REC		138.2	90.0	139	83.3	
		DUPL						
		OID 07972275	07972275	54942227	54942227	54942227	54942227	
BL#01	PBLK 01	CONC <0.087 U	<0.087 U	<0.020 U	<0.040 U	83%	<0.023 U	12
	(23687-90)	%REC		28.3	15.0	98%	92.4	
		DUPL						
		OID 07972234	07972234	07972234	07972234	07972234	07972234	

PCB-1254 PCB-1254 PCB-1260 PCB-1260
ETPATH Ethyl Parathion METPATH Methyl Parathion
AZINPHOS Azinphosmethyl(Surrogate) DISULFTO Disulfoton

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 15 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	25	26	27	28	29	30	
	ANALYTE.....	142	143	154	158	159	160	
	MG/KG.....	PCB-1254	PCB-1260	ETPATH	METPATH	AZINPHOS	DISULFTO	
SAMP #	DESCRIPTION							ROW
BL#02	PBLK 02	CONC <0.087 U	<0.087 U	<0.020 U	<0.040 U	85%	<0.023 U	13
	(23691-97)	%REC		68.4	45.0	116%	81.1	
		DUPL						
		OID 07972275	07972275	07972275	07972275	07972275	07972275	

PCB-1254 PCB-1254
ETPATH Ethyl Parathion
AZINPHOS Azinphosmethyl(Surrogate)
PCB-1260 PCB-1260
METPATH Methyl Parathion
DISULFTO Disulfoton

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 16 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	31	32	33	34	35
ANALYTE.....	161	162	900	901	902
MG/KG.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE

SAMP #	DESCRIPTION							ROW
23687	1	CONC	<0.050 U	<0.016 U	0.0016 BJ	0.00066 J	<0.50 U	1
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23688	2	CONC	<0.051 U	<0.017 U	0.0013 BJ	<0.0043 U	<0.52 U	2
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23689	3	CONC	<0.048 U	<0.016 U	0.0014 BJ	<0.0040 U	<0.49 U	3
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23690	4	CONC	<0.051 U	<0.017 U	0.00092 BJ	<0.0043 U	<0.51 U	4
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972234	07972234	07972234	
23691	5	CONC	<0.045 U	<0.015 U	0.00057 BJ	<0.0038 U	<0.45 U	5
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972275	07972275	07972275	
23692	6	CONC	<0.048 U	<0.016 U	0.00042 BJ	<0.0041 U	<0.49 U	6
	07/17/92	%REC						
		DUPL						
		OID	54942227	54942227	07972275	07972275	07972275	

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE

PHORATE Phorate
g-CHLRDN g-CHLORDANE

JOB FILE: 23687

DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 17 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 92
EST. COMP. DATE: 21 AUG 92

	COLUMN.....	31	32	33	34	35	
	ANALYTE.....	161	162	900	901	902	
	MG/KG.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE	
SAMP #	DESCRIPTION						ROW
23693	7	CONC <0.054 U	<0.018 U	0.0012 BJ	<0.0045 U	<0.55 U	7
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972275	07972275	07972275	
23694	8	CONC <0.053 U	<0.018 U	0.0013 BJ	<0.0044 U	<0.53 U	8
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972275	07972275	07972275	
23695	9	CONC <0.051 U	<0.017 U	<0.0043 U	<0.0043 U	<0.51 U	9
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972275	07972275	07972275	
23696	10	CONC <0.050 U	<0.016 U	<0.0043 U	<0.0043 U	<0.50 U	10
	07/17/92	%REC					
		DUPL					
		OID 54942227	54942227	07972275	07972275	07972275	
23697	11	CONC <0.050 U	<0.017 U	0.00067 BJ	<0.0043 U	<0.50 U	11
	07/17/92	%REC 86.0	126.8				
		DUPL					
		OID 54942227	54942227	07972275	07972275	07972275	
BL#01	PBLK 01	CONC <0.040 U	<0.013 U	0.0013 J	<0.0034 U	<0.40 U	12
	(23687-90)	%REC 86.0	126.3				
		DUPL					
		OID 07972234	07972234	07972234	07972234	07972234	

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE

PHORATE Phorate
g-CHLRDN g-CHLORDANE

JOB FILE: 23687 DATE: 22 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 18 OF 18) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	31	32	33	34	35	
	ANALYTE.....	161	162	900	901	902	
	MG/KG.....	FAMPHUR	PHORATE	a-CHLRDN	g-CHLRDN	KEPONE	
SAMP #	DESCRIPTION						ROW
BL#02	PBLK 02	CONC <0.040 U	<0.013 U	0.0010 J	<0.0034 U	<0.40 U	13
	(23691-97)	%REC 119.0	134.1				
		DUPL					
		OID 07972275	07972275	07972275	07972275	07972275	

FAMPHUR Famphur
a-CHLRDN a-CHLORDANE
KEPONE KEPONE
PHORATE Phorate
g-CHLRDN g-CHLORDANE

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (ROUND 2) Lab Sample ID: 23698 - 23708

1) Analysis: Herbicides Date Extracted/Digested: 7/28/92

2) Analysis: Sediment Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23698 DATE: 21 APR 93

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	1	2	3	4	5
ANALYTE.....	169	170	171	172	174
MG/KG.....	2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB

SAMP #	DESCRIPTION							ROW
23698	1	CONC	<0.50 U	74%	<0.083 U	<0.070 U	<0.029 U	1
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23699	2	CONC	<0.50 U	93%	<0.084 U	<0.070 U	<0.029 U	2
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23700	3	CONC	<0.49 U	116 %	<0.081 U	<0.070 U	0.00035 J	3
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23701	4	CONC	<0.51 U	109%	0.00055 J	<0.070 U	<0.030	4
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23702	5	CONC	<0.45 U	93%	<0.074	<0.070 U	<0.026 U	5
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23703	6	CONC	<0.48 U	93%	<0.080 U	<0.068 U	<0.028 U	6
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	

2,4-D 2,4-D'
2,4,5-T 2,4,5-T
DINOSEB Dinoseb

2,4-DP 2,4-DP(Surrogate)
2,4,5-TP 2,4,5-TP

JOB FILE: 23698 DATE: 21 APR 93

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....		1	2	3	4	5	
ANALYTE.....		169	170	171	172	174	
MG/KG.....		2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB	
SAMP #	DESCRIPTION						ROW
23704	7	CONC <0.54 U	93%	<0.090 U	<0.077 U	<0.032 U	7
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23705	8	CONC <0.53 U	87%	<0.088 U	<0.075 U	<0.031 U	8
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23706	9	CONC <0.50 U	112%	<0.084 U	<0.075 U	<0.029 U	9
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23707	10	CONC <0.49 U	110%	<0.082 U	<0.070 U	<0.029 U	10
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23708	11	CONC <0.50 U	106%	<0.084 U	<0.070 U	<0.029 U	11
	07/17/92	%REC 63.0	82	71.0	72.0		
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
BL#01	METHOD BLANK 01	CONC <0.24 U	62%	<0.040 U	<0.034 U	<0.014 U	12
	(23698-708)	%REC 69.0	109	60.0	52.0		
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	

2,4-D	2,4-D	2,4-DP	2,4-DP(Surrogate)
2,4,5-T	2,4,5-T	2,4,5-TP	2,4,5-TP
DINOSEB	Dinoseb		

04/22/93 09:23 USAE WATERWAYS EXPERIMENT STA. 003

JOB FILE: 23698 DATE: 21 APR 93

********** ENVIRONMENTAL CHEMISTRY BRANCH DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: GRANB MONITORING WELL MURPHY
CHEM. PRESERVATIVE:

JOB NUMBER: RD26P22E1170001 RECEIPT DATE: 18 JUL 92
TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

revised 4/22/93

COLUMN.....	1	2	3	4	5
ANALYTE.....	169	170	171	172	174
MU/KG.....	2,4 D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB

SAMP #	DESCRIPTION							ROW
23704	7	CONC	<0.54 U	93%	<0.090 U	<0.077 U	<0.032 U	7
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23705	8	CONC	<0.53 U	87%	<0.088 U	<0.075 U	<0.031 U	8
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23706	9	CONC	<0.50 U	112%	<0.084 U	<0.075 U	<0.029 U	9
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23707	10	CONC	<0.49 U	110%	<0.082 U	<0.070 U	<0.029 U	10
	07/17/92	%REC						
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
23708	11	CONC	<0.50 U	106%	<0.084 U	<0.070 U	<0.029 U	11
	07/17/92	%REC	63.0	82	71.0	72.0		
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	
BL#01	METHOD BLANK 01	CONC	<0.24 U	62%	<0.040 U	<0.034 U	<0.014 U	1
	(23698-708)	%REC	69.0	109	60.0	52.0		
		DUPL						
		OID	54922220	54922220	54922220	54922220	54922220	

2,4-D	2,4-D	2,4-DP	2,4 DP(Surrogate)
2,4,5-T	2,4,5-T	2,4,5-TP	2,4,5-TP
DINOSEB	Dinoseb		

JOB FILE: 23698 DATE: 13 AUG 92

********** ANALYTICAL LABORATORY GROUP - DATA REPORTING SHEET (PAGE 2 OF 2) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	1	2	3	4	5	
	ANALYTE.....	169	170	171	172	174	
	MG/KG.....	2,4-D	2,4-DP	2,4,5-T	2,4,5-TP	DINOSEB	
SAMP #	DESCRIPTION						ROW
23704	7	CONC <0.54 U	93%	<0.090 U	0.0053 BJ	<0.032 U	7
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23705	8	CONC <0.53 U	87%	<0.088 U	0.0046 BJ	<0.031 U	8
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23706	9	CONC <0.50 U	112%	<0.084 U	0.0063 BJ	<0.029 U	9
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23707	10	CONC <0.49 U	110%	<0.082 U	0.0060 BJ	<0.029 U	10
	07/17/92	%REC					
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
23708	11	CONC <0.50 U	106%	<0.084 U	0.0077 BJ	<0.029 U	11
	07/17/92	%REC 63.0	82	71.0	72.0		
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	
BL#01	METHOD BLANK 01	CONC <0.24 U	62%	<0.040 U	0.0018 J	<0.014 U	12
	(23698-708)	%REC 69.0	109	60.0	52.0		
		DUPL					
		OID 54922220	54922220	54922220	54922220	54922220	

2,4-D 2,4-D
2,4,5-T 2,4,5-T
DINOSEB Dinoseb

2,4-DP 2,4-DP(Surrogate)
2,4,5-TP 2,4,5-TP

Lab Name: CE-WES ANALYTICAL LAB GRP Project: CRANE MONITORING WELLS

SDG: JULY 17, 1992 (ROUND 2) Lab Sample ID: 23676 - 23686

1) Analysis: BNA Date Extracted/Digested: 7/22/92

2) Analysis: Sediment Date Extracted/Digested: _____

3) Analysis: _____ Date Extracted/Digested: _____

4) Analysis: _____ Date Extracted/Digested: _____

5) Analysis: _____ Date Extracted/Digested: _____

6) Analysis: _____ Date Extracted/Digested: _____

7) Analysis: _____ Date Extracted/Digested: _____

INORGANIC QUALIFIERS

B - Indicates reported value is less than the Contract Required detection limit (CRDL) but greater than the Instrument Detection Limit.

U - Indicates analyte was analyzed for but not detected.

W - Indicates post-digestion spike for Furnace AA analysis is out of control limits (85-115%), while sample absorbance is less than 50% of spike absorbance.

N - Spiked sample recovery not within control limits.

* - Duplicate analysis not within control limits.

ORGANIC QUALIFIERS

U - Indicates compound was analyzed for but not detected.

J - Indicates an estimated value below instrument detection limit.

B - Indicates analyte is found in the associated blank as well as in the sample.

E - Identifies compounds whose concentrations exceed the calibration range of th GC/MS instrument for that specific analysis.

D - Indentifies all compounds identified in an analysis at a secondary dilution factor.

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 1 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

		COLUMN.....	1	2	3	4	5	6	
		ANALYTE.....	234	235	236	237	238	239	
		MG/KG.....	PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH	
SAMP #	DESCRIPTION								ROW
23676	1	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<1.6 U	1
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	2
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<1.6 U	3
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	4
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<1.5 U	5
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<1.6 U	6
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 2 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		1	2	3	4	5	6
	ANALYTE.....		234	235	236	237	238	239
	MG/KG.....		PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH
SAMP #	DESCRIPTION							ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<1.8 U	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<1.8 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC	<0.83 U	<0.083 U	<0.83 U	<0.83 U	<0.83 U	<1.7 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<1.7 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<1.7 U	11
	07/17/92	%REC	76.5	63.5				73.0	
		DUPL		149/200					
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<1.3 U	12
	(23676)	%REC	61.0	51.5				70.0	
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 3 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		1	2	3	4	5	6	
	ANALYTE.....		234	235	236	237	238	239	
	MG/KG.....		PHENOL	2ClPHEN	2NIPHE	24DMePHE	24DClPHE	4Cl3MePH	
SAMP #	DESCRIPTION								ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<1.3 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<1.3 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

PHENOL Phenol
2NIPHE 2-Nitrophenol
24DClPHE 2,4-Dichlorophenol
2ClPHEN 2-Chlorophenol
24DMePHE 2,4-Dimethylphenol
4Cl3MePH 4-Chloro-3-Methylphenol

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 4 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	7	8	9	10	11	12
ANALYTE.....	240	241	242	243	244	245
MG/KG.....	246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC

SAMP #	DESCRIPTION								ROW
23676	1	CONC	<0.82 U	<4.1 U	<4.1 U	<4.1 U	<4.1 U	<4.1 U	1
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC	<0.85 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	2
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC	<0.81 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	3
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC	<0.85 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	4
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC	<0.75 U	<3.8 U	<3.8 U	<3.8 U	<3.8 U	<3.8 U	5
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC	<0.79 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	<4.0 U	6
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 5 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

		COLUMN.....	7	8	9	10	11	12	
		ANALYTE.....	240	241	242	243	244	245	
		MG/KG.....	246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC	
SAMP #	DESCRIPTION								ROW
23682	7	CONC	<0.90 U	<4.5 U	<4.5 U	<4.5 U	<4.5 U	<4.5 U	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<4.5 U	<4.5 U	<4.5 U	<4.5 U	<4.5 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC	<0.83 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC	<0.83 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC	<0.83 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	<4.2 U	11
	07/17/92	%REC			137.0		96.0		
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC	<0.66 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	12
	(23676)	%REC			105.0		70.5		
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 6 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		7	8	9	10	11	12	
	ANALYTE.....		240	241	242	243	244	245	
	MG/KG.....		246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC	
SAMP #	DESCRIPTION								ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyl-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 23676

DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 6 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
JOB NUMBER: RD2G222E1170001
RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: -
TYPE OF SAMPLE: SEDIMENT
EST. COMP. DATE: 21 AUG 92

		COLUMN.....	7	8	9	10	11	12	
		ANALYTE.....	240	241	242	243	244	245	
		MG/KG.....	246TClPH	24DNPH	4NPHE	2M46DNPH	PClPHE	BENZOAC	
SAMP #	DESCRIPTION								ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	<3.3 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

246TClPH 2,4,6-Trichlorophenol
4NPHE 4-Nitrophenol
PClPHE Pentachlorophenol
24DNPH 2,4-Dinitrophenol
2M46DNPH 2-Methyt-4,6-Dinotrophenol
BENZOAC Benzoic Acid

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 7 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	13	14	15	16	17	18
ANALYTE.....	246	247	248	249	250	251
MG/KG.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S

SAMP #	DESCRIPTION								ROW
23676	1	CONC	<0.82 U	<0.82 U	<0.82 U	<1.6 U	36.8%	48.7%	1
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC	<0.85 U	<0.85 U	<0.85 U	<1.7 U	37.5%	45.8%	2
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC	<0.81 U	<0.81 U	<0.81 U	<1.6 U	50.9%	58.0%	3
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC	<0.85 U	<0.85 U	<0.85 U	<1.7 U	48.1%	52.7%	4
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC	<0.75 U	<0.75 U	<0.75 U	<1.5 U	33.8%	46.6%	5
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC	<0.79 U	<0.79 U	<0.79 U	<1.6 U	45.4%	48.3%	6
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (25-121))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (24-113))

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 8 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: _ TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

		COLUMN.....	13	14	15	16	17	18
		ANALYTE.....	246	247	248	249	250	251
		MG/KG.....	2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S
SAMP #	DESCRIPTION							ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<1.8 U	37.3%	45.1%	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<1.8 U	48.7%	53.5%	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	<1.7 U	53.4%	62.1%	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<1.7 U	55.4%	61.9%	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	<1.7 U	66.3%	82.1%	11
	07/17/92	%REC					60.8	75.5	
		DUPL					66.1%	83.3	
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<1.3 U	16.7%	49.3%	12
	(23676)	%REC					49.2%	62.0%	
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (25-121))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (24-113))

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 9 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		13	14	15	16	17	18
	ANALYTE.....		246	247	248	249	250	251
	MG/KG.....		2MEPHE	4MEPHE	245TClPH	BZLAL	2FPHE-S	PHE-D6-S
SAMP #	DESCRIPTION							ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	<1.3 U	58.6%	64.5% 13
	(23677-8)	%REC						
	(23681,83)	DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<1.3 U	57.0%	65.7% 14
	(23684-6)	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237

2MEPHE 2-Methylphenol
245TClPH 2,4,5-Trichlorophenol
2FPHE-S 2-Fluorophenol(Surrogate (25-121))
4MEPHE 4-Methylphenol
BZLAL Benzyl Alcohol
PHE-D6-S Phenol-D6(Surrogate (24-113))

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 10 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....		19	20	21	22	23	24	
ANALYTE.....		252	263	264	265	266	267	
MG/KG.....		246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR	
SAMP #	DESCRIPTION							ROW
23676	1	CONC 70.8%	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC 75.2%	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC 77.5%	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC 77.3%	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC 79.5%	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC 72.6%	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	

246TBP-S 2,4,6-Tribromophenol(Surrogate (19-122))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 11 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: _ TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	19	20	21	22	23	24
ANALYTE.....	252	263	264	265	266	267
MG/KG.....	246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR
SAMP # DESCRIPTION						ROW
23682 7	CONC 79.3%	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	7
07/17/92	%REC						
	DUPL						
	OID 08952238	08952238	08952238	08952238	08952238	08952238	
23683 8	CONC 79.3%	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	8
07/17/92	%REC						
	DUPL						
	OID 08952240	08952240	08952240	08952240	08952240	08952240	
23684 9	CONC 77.0%	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	9
07/17/92	%REC						
	DUPL						
	OID 08952237	08952237	08952237	08952237	08952237	08952237	
23685 10	CONC 72.2%	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	10
07/17/92	%REC						
	DUPL						
	OID 08952237	08952237	08952237	08952237	08952237	08952237	
23686 11	CONC 73.3%	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	11
07/17/92	%REC 79.9%			60.0			
	DUPL						
	OID 08952237	08952237	08952237	08952237	08952237	08952237	
BL#01 SV-BLK 01	CONC <5%	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	12
(23676)	%REC 48.4%			46.9			
(23679-80, 82)	DUPL						
	OID 08952238	08952238	08952238	08952238	08952238	08952238	

246TBP-S 2,4,6-Tribromophenol(Surrogate (19-122))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 12 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....		19	20	21	22	23	24	
ANALYTE.....		252	263	264	265	266	267	
MG/KG.....		246TBP-S	NNDMeAM	BClIPrE	NNDNPAM	NITROBEN	ISOPHOR	
SAMP #	DESCRIPTION							ROW
BL#02	SV-BLK 02	CONC 51.6%	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	13
	(23677-8)	%REC						
	(23681,83)	DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC 66.6%	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	14
	(23684-6)	%REC						
		DUPL						
		OID 08952237	08952237	08952237	08952237	08952237	08952237	

246TBP-S 2,4,6-Tribromophenol(Surrogate (19-122))
BClIPrE Bis(2-Chloroisopropyl)Ether
NITROBEN Nitrobenzene
NNDMeAM N-Nitrosodimethylamine
NNDNPAM N-Nitroso-Di-N-Propylamine
ISOPHOR Isophorone

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 13 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		25	26	27	28	29	30
	ANALYTE.....		268	269	270	271	272	273
	MG/KG.....		BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ
SAMP #	DESCRIPTION							ROW
23676	1	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<4.1 U	<1.6 U	1
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<4.2 U	<1.7 U	2
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC	<0.81 U	<0.81 U	0.55 J	<0.81 U	<4.0 U	<1.6 U	3
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<4.2 U	<1.7 U	4
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<3.8 U	<1.5 U	5
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<4.0 U	<1.6 U	6
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 23676

DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 14 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY
CHEM. PRESERVATIVE: -

JOB NUMBER: RD2G222E1170001
TYPE OF SAMPLE: SEDIMENT

RECEIPT DATE: 18 JUL 92
EST. COMP. DATE: 21 AUG 92

		COLUMN.....	25	26	27	28	29	30	
		ANALYTE.....	268	269	270	271	272	273	
		MG/KG.....	BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ	
SAMP #	DESCRIPTION								ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<4.5 U	<1.8 U	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<4.5 U	<1.8 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<4.2 U	<1.7 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<4.2 U	<1.7 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC	<0.83 U	<0.83 U	2.3	<0.83 U	<0.42 U	<1.7 U	11
	07/17/92	%REC			42.2				
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<3.3 U	<1.3 U	12
	(23676)	%REC			36.8				
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 15 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	25	26	27	28	29	30
ANALYTE.....	268	269	270	271	272	273
MG/KG.....	BClEtoME	26DNTOL	24DNTOL	12DPHYD	BENZIDI	33DClBEZ

SAMP #	DESCRIPTION								ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<3.3 U	<1.3 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<3.3 U	<1.3 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

BClEtoME Bis(2-Chloroethoxy)Methane
24DNTOL 2,4-Dinitrotoluene
BENZIDI Benzidine
26DNTOL 2,6-Dinitrotoluene
12DPHYD 1,2-Diphenylhydrazine
33DClBEZ 3,3'Dichlorobenzidine

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 16 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....		31	32	33	34	35	36	
ANALYTE.....		284	285	286	287	288	289	
MG/KG.....		BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB	
SAMP #	DESCRIPTION							ROW
23676	1	CONC <0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC <0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC <0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC <0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 17 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	31	32	33	34	35	36
ANALYTE.....	284	285	286	287	288	289
MG/KG.....	BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB

SAMP #	DESCRIPTION								ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	11
	07/17/92	%REC			46.8			54.1	
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	12
	(23676)	%REC			46.9			54.6	
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 18 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		31	32	33	34	35	36
	ANALYTE.....		284	285	286	287	288	289
	MG/KG.....		BClEtE	13DClB	14DClB	12DClB	HClETA	124TClB
SAMP #	DESCRIPTION							ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	13
	(23677-8)	%REC						54.6	
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

BClEtE Bis(2-Chloroethyl)Ether
14DClB 1,4-Dichlorobenzene
HClETA Hexachloroethane
13DClB 1,3-Dichlorobenzene
12DClB 1,2-Dichlorobenzene
124TClB 1,2,4-Trichlorobenzene

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 19 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		37	38	39	40	41	42
	ANALYTE.....		290	291	292	293	294	295
	MG/KG.....		NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH
SAMP #	DESCRIPTION							ROW
23676	1	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23677	2	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	2
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
23678	3	CONC	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	3
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
23679	4	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23680	5	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	5
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23681	6	CONC	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	6
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 20 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		37	38	39	40	41	42	
	ANALYTE.....		290	291	292	293	294	295	
	MG/KG.....		NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION								ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	11
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	12
	(23676)	%REC							
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

NAPHTH Naphthalene
HClCYPD Hexachlorocyclopentadiene
ACENAY Acenaphthylene
HClBU Hexachlorobutadiene
2ClNAPH 2-Chloronaphthalene
DMePHTH Dimethyl Phthalate

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 21 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		37	38	39	40	41	42	
	ANALYTE.....		290	291	292	293	294	295	
	MG/KG.....		NAPHTH	HClBU	HClCYPD	2ClNAPH	ACENAY	DMePHTH	
SAMP #	DESCRIPTION								ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

NAPHTH Naphthalene
HClBU Hexachlorobutadiene
HClCYPD Hexachlorocyclopentadiene
2ClNAPH 2-Chloronaphthalene
ACENAY Acenaphthylene
DMePHTH Dimethyl Phthalate

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 22 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	43	44	45	46	47	48	
	ANALYTE.....	296	297	298	299	300	301	
	MG/KG.....	ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION							ROW
23676	1	CONC <0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC <0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC <0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC <0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 23 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		43	44	45	46	47	48	
	ANALYTE.....		296	297	298	299	300	301	
	MG/KG.....		ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION								ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	0.34 J	<0.83 U	11
	07/17/92	%REC	70.0						
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	12
	(23676)	%REC	69.8						
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 24 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		43	44	45	46	47	48	
	ANALYTE.....		296	297	298	299	300	301	
	MG/KG.....		ACENAP	FLUORE	DEtPHTH	4ClPHPHE	NNDPHAM	4BrPHET	
SAMP #	DESCRIPTION								ROW
BL#02	SV-BLK 02	CONC	<0.66	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

ACENAP Acenaphthene
DEtPHTH Diethyl Phthalate
NNDPHAM N-Nitrosodiphenyl Amine
FLUORE Fluorene
4ClPHPHE 4-Chlorophenyl Phenyl Ether
4BrPHET 4-Bromophenyl Ether

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********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 25 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	49	50	51	52	53	54	
	ANALYTE.....	302	303	304	305	306	307	
	MG/KG.....	HClBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE	
SAMP #	DESCRIPTION							ROW
23676	1	CONC <0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC <0.85 U	<0.85 U	<0.85 U	0.14 BJ	<0.85 U	<0.85 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC <0.81 U	<0.81 U	<0.81 U	0.43 BJ	<0.81 U	<0.81 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC <0.75 U	<0.75 U	<0.75 U	0.15 BJ	<0.75 U	<0.75 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC <0.79 U	<0.79 U	<0.79 U	0.48 BJ	<0.79 U	<0.79 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	

HClBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

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********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 26 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		49	50	51	52	53	54
	ANALYTE.....		302	303	304	305	306	307
	MG/KG.....		HCLBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE
SAMP #	DESCRIPTION							ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	7
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	0.82 BJ	<0.90 U	<0.90 U	8
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	0.11 J	<0.83 U	<0.83 U	9
	07/17/92	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	10
	07/17/92	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	0.074 J	<0.83 U	<0.83 U	11
	07/17/92	%REC						96.0
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	0.069 J	<0.66 U	<0.66 U	12
	(23676)	%REC						86.6
	(23679-80, 82)	DUPL						<0.66
		OID	08952238	08952238	08952238	08952238	08952238	08952238

HCLBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

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********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 27 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		49	50	51	52	53	54
	ANALYTE.....		302	303	304	305	306	307
	MG/KG.....		HClBEN	PHENAN	ANTRAC	DBuPHTH	FLANTHE	PYRENE
SAMP #	DESCRIPTION							ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	0.26 J	<0.66 U	<0.66 U	13
	(23677-8)	%REC						
	(23681,83)	DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	14
	(23684-6)	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237

HClBEN Hexachlorobenzene
ANTRAC Anthracene
FLANTHE Fluoranthene
PHENAN Phenanthrene
DBuPHTH Dibutylphthalate
PYRENE Pyrene

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********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 28 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		55	56	57	58	59	60
	ANALYTE.....		308	309	310	311	312	313
	MG/KG.....		BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT
SAMP #	DESCRIPTION							ROW
23676	1	CONC	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	1
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23677	2	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	2
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
23678	3	CONC	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	3
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
23679	4	CONC	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	4
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23680	5	CONC	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	5
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23681	6	CONC	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	6
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

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********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 29 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		55	56	57	58	59	60
	ANALYTE.....		308	309	310	311	312	313
	MG/KG.....		BuBePHTH	CHRYSE	BAANTHR	B2EHPH	DNOcPHT	BBFLANT
SAMP #	DESCRIPTION							ROW
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	7
	07/17/92	%REC						
		DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	8
	07/17/92	%REC						
		DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	9
	07/17/92	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	10
	07/17/92	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	11
	07/17/92	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	12
	(23676)	%REC						
	(23679-80, 82)	DUPL						
		OID	08952238	08952238	08952238	08952238	08952238	08952238

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
B2EHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

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********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 30 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		55	56	57	58	59	60
	ANALYTE.....		308	309	310	311	312	313
	MG/KG.....		BuBePHTH	CHRYSE	BAANTHR	BZEHPH	DNOcPHT	BBFLANT
SAMP #	DESCRIPTION							ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952237	

BuBePHTH Butylbenzylphthalate
BAANTHR Benzo(a)Anthracene
DNOcPHT Di-N-Octylphthalate
CHRYSE Chrysene
BZEHPH Bis(2-Ethylhexyl)Phthalate
BBFLANT Benzo(b)Fluoranthene

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 31 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	61	62	63	64	65	66	
	ANALYTE.....	314	315	316	317	318	319	
	MG/KG.....	BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION							ROW
23676	1	CONC <0.82 U	<0.82 U	<0.82 U	<0.82 U	<0.82 U	<1.6 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952238	
23678	3	CONC <0.81 U	<0.81 U	<0.81 U	<0.81 U	<0.81 U	<1.6 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952238	
23679	4	CONC <0.85 U	<0.85 U	<0.85 U	<0.85 U	<0.85 U	<1.7 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC <0.75 U	<0.75 U	<0.75 U	<0.75 U	<0.75 U	<1.5 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC <0.79 U	<0.79 U	<0.79 U	<0.79 U	<0.79 U	<1.6 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952238	

BKFLANT Benzb(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 32 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

SAMP #	DESCRIPTION		COLUMN..... 61	62	63	64	65	66	ROW
			ANALYTE..... 314	315	316	317	318	319	
			MG/KG..... BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
23682	7	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<1.8 U	7
	07/17/92	%REC							
		DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<0.90 U	<1.8 U	8
	07/17/92	%REC							
		DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952238	
23684	9	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<1.7 U	9
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952238	
23685	10	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<1.7 U	10
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952238	
23686	11	CONC	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<0.83 U	<1.7 U	11
	07/17/92	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952238	
BL#01	SV-BLK 01	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<1.3 U	12
	(23676)	%REC							
	(23679-80, 82)	DUPL							
		OID	08952238	08952238	08952238	08952238	08952238	08952238	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 33 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		61	62	63	64	65	66	
	ANALYTE.....		314	315	316	317	318	319	
	MG/KG.....		BKFLANT	BAPYRE	I123PYR	DBAHANT	B-GHI-PY	ANILINE	
SAMP #	DESCRIPTION								ROW
BL#02	SV-BLK 02	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<1.3 U	13
	(23677-8)	%REC							
	(23681,83)	DUPL							
		OID	08952240	08952240	08952240	08952240	08952240	08952238	
BL#03	SV-BLK 03	CONC	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<0.66 U	<1.3 U	14
	(23684-6)	%REC							
		DUPL							
		OID	08952237	08952237	08952237	08952237	08952237	08952238	

BKFLANT Benzo(k)Fluoranthene
I123PYR Indeno(1,2,3-C,D)Pyrene
B-GHI-PY Benzo(G,H,I)Perylene
BAPYRE Benzo(a)Pyrene
DBAHANT Dibenzo(A,H)Anthracene
ANILINE Aniline

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 34 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	67	68	69	70	71	72	
	ANALYTE.....	320	321	322	323	324	325	
	MG/KG.....	4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL	
SAMP #	DESCRIPTION							ROW
23676	1	CONC <1.6 U	<0.82 U	<0.82 U	<4.1 U	<4.1 U	<4.1 U	1
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23677	2	CONC <1.7 U	<0.85 U	<0.85 U	<4.2 U	<4.2 U	<4.2 U	2
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23678	3	CONC <1.6 U	<0.81 U	<0.81 U	<4.0 U	<4.0 U	<4.0 U	3
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23679	4	CONC <1.7 U	<0.85 U	<0.85 U	<4.2 U	<4.2 U	<4.2 U	4
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23680	5	CONC <1.5 U	<0.75 U	<0.75 U	<3.8 U	<3.8 U	<3.8 U	5
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23681	6	CONC <1.6 U	<0.79 U	<0.79 U	<4.0 U	<4.0 U	<4.0 U	6
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 35 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....	67	68	69	70	71	72	
	ANALYTE.....	320	321	322	323	324	325	
	MG/KG.....	4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL	
SAMP #	DESCRIPTION							ROW
23682	7	CONC <1.8 U	<0.90 U	<0.90 U	<4.5 U	<4.5 U	<4.5 U	7
	07/17/92	%REC						
		DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	
23683	8	CONC <1.8 U	<0.90 U	<0.90 U	<4.5 U	<4.5 U	<4.5 U	8
	07/17/92	%REC						
		DUPL						
		OID 08952240	08952240	08952240	08952240	08952240	08952240	
23684	9	CONC <1.7 U	<0.83 U	<0.83 U	<4.2 U	<4.2 U	<4.2 U	9
	07/17/92	%REC						
		DUPL						
		OID 08952237	08952237	08952237	08952237	08952237	08952237	
23685	10	CONC <1.7 U	<0.83 U	<0.83 U	<4.2 U	<4.2 U	<4.2 U	10
	07/17/92	%REC						
		DUPL						
		OID 08952237	08952237	08952237	08952237	08952237	08952237	
23686	11	CONC <1.7 U	<0.83 U	<0.83 U	<4.2 U	<4.2 U	<4.2 U	11
	07/17/92	%REC						
		DUPL						
		OID 08952237	08952237	08952237	08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC <1.3 U	<0.66 U	<0.66 U	<3.3 U	<3.3 U	<3.3 U	12
	(23676)	%REC						
	(23679-80, 82)	DUPL						
		OID 08952238	08952238	08952238	08952238	08952238	08952238	

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 36 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

	COLUMN.....		67	68	69	70	71	72
	ANALYTE.....		320	321	322	323	324	325
	MG/KG.....		4ClANIL	DBENZOFU	2MeNAPH	2NANIL	3NANIL	4NANIL
SAMP #	DESCRIPTION							ROW
BL#02	SV-BLK 02	CONC	<1.3 U	<0.66 U	<0.66 U	<3.3 U	<3.3 U	<3.3 U 13
	(23677-8)	%REC						
	(23681,83)	DUPL						
		OID	08952240	08952240	08952240	08952240	08952240	08952240
BL#03	SV-BLK 03	CONC	<1.3 U	<0.66 U	<0.66 U	<3.3 U	<3.3 U	<3.3 U 14
	(23684-6)	%REC						
		DUPL						
		OID	08952237	08952237	08952237	08952237	08952237	08952237

4ClANIL 4-Chloroaniline
2MeNAPH 2-Methylnaphthalene
3NANIL 3-Nitroaniline
DBENZOFU Dibenzofuran
2NANIL 2-Nitroaniline
4NANIL 4-Nitroaniline

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 37 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: - TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	73	74	75
ANALYTE.....	326	327	328
MG/KG.....	NB-D5-S	2FlBP-S	PTERP-S

SAMP #	DESCRIPTION					ROW
23676	1	CONC	31.5%	51.4%	109%	1
	07/17/92	%REC				
		DUPL				
		OID	08952238	08952238	08952238	
23677	2	CONC	38.7%	50.8%	110%	2
	07/17/92	%REC				
		DUPL				
		OID	08952240	08952240	08952240	
23678	3	CONC	50.0%	60.8%	122%	3
	07/17/92	%REC				
		DUPL				
		OID	08952240	08952240	08952240	
23679	4	CONC	42.4%	56.8%	104%	4
	07/17/92	%REC				
		DUPL				
		OID	08952238	08952238	08952238	
23680	5	CONC	26.0%	45.0%	111%	5
	07/17/92	%REC				
		DUPL				
		OID	08952238	08952238	08952238	
23681	6	CONC	44.9%	54.5%	145%	6
	07/17/92	%REC				
		DUPL				
		OID	08952240	08952240	08952240	

NB-D5-S Nitrobenzene-D5(Surrogate (23-120)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (30-115))
PTERP-S p-Terphenyl-D14(Surrogate (18-137))

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 38 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: _ TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....		73	74	75
ANALYTE.....		326	327	328
MG/KG.....		NB-D5-S	2FlBP-S	PTERP-S
SAMP #	DESCRIPTION				ROW
23682	7	CONC 32.7%	48.1%	107%	7
	07/17/92	%REC			
		DUPL			
		OID 08952238	08952238	08952238	
23683	8	CONC 46.8%	58.8%	125%	8
	07/17/92	%REC			
		DUPL			
		OID 08952240	08952240	08952240	
23684	9	CONC 50.9%	60.9%	141%	9
	07/17/92	%REC			
		DUPL			
		OID 08952237	08952237	08952237	
23685	10	CONC 53.7%	60.6%	129%	10
	07/17/92	%REC			
		DUPL			
		OID 08952237	08952237	08952237	
23686	11	CONC 71.7%	77.8%	97.1%	11
	07/17/92	%REC 57.8%	70.2	99.1	
		DUPL			
		OID 08952237	08952237	08952237	
BL#01	SV-BLK 01	CONC 4.5%	69.5%	92.4%	12
	(23676)	%REC 44.4	69.3	89.4%	
	(23679-80, 82)	DUPL			
		OID 08952238	08952237	08952238	

NB-D5-S Nitrobenzene-D5(Surrogate (23-120)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (30-115))
PTERP-S p-Terphenyl-D14(Surrogate (18-137))

JOB FILE: 23676 DATE: 05 OCT 92

********** ENVIRONMENTAL CHEMISTRY BRANCH - DATA REPORTING SHEET (PAGE 39 OF 39) **********

JOB DESCRIPTION: CRANE MONITORING WELL - MURPHY JOB NUMBER: RD2G222E1170001 RECEIPT DATE: 18 JUL 92
CHEM. PRESERVATIVE: _ TYPE OF SAMPLE: SEDIMENT EST. COMP. DATE: 21 AUG 92

COLUMN.....	73	74	75
ANALYTE.....	326	327	328
MG/KG.....	NB-D5-S	2FlBP-S	PTERP-S

SAMP #	DESCRIPTION					ROW
BL#02	SV-BLK 02	CONC	56.0%	68.8%	98.3%	13
	(23677-8)	%REC				
	(23681,83)	DUPL				
		OID	08952240	08952240	08952240	
BL#03	SV-BLK 03	CONC	50.0%	62.9%	97.1%	14
	(23684-6)	%REC				
		DUPL				
		OID	08952237	08952237	08952237	

NB-D5-S Nitrobenzene-D5(Surrogate (23-120)) 2FlBP-S 2-Fluorobiphenyl(Surrogate (30-115))
PTERP-S p-Terphenyl-D14(Surrogate (18-137))

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 10/2/92

ANALYST: R. Karn INSTRUMENT: 95-HP5985B

PROBLEM: 1) Low perylene d12 internal standard area
2) Low chrysene d12 internal standard area
3) High terphenyl-d14 surrogate recovery

SAMPLE NUMBER(S) AFFECTED: 1) 24794-5, 24797-8, 24800, 23677-8, 23681 & 3
2) 23678, 23681 & 3
3) 23681

RECOMMENDED CORRECTIVE ACTION: 1 & 2) Clean-up of dirty sample extracts & re-analyze
3) monitor this surrogate to see if a continuing problem exists.

CORRECTIVE ACTION TAKEN BY ANALYST: 1 & 2 Clean-up of extracts not possible.
3) will monitor this surrogate to see if a problem exists. all other samples in this set were OK

COMMENTS:

DATE CORRECTIVE ACTION TAKEN: 8/28/92

REVIEWED BY: R. Karn

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 9/26/92

ANALYST: R. Karn INSTRUMENT: 95-NP5985B

PROBLEM: 1) Low response - d12 internal standard area
2) high MS, MSD for 4-nitrophenol & 2,4-dinitrotoluene
3) high terphenyl-d14

SAMPLE NUMBER(S) AFFECTED: 1) 24801, 23686MS, 23686MSD, 23684-5
2) 23686 MS, MSD
3) 23684

RECOMMENDED CORRECTIVE ACTION: 1) Clean-up these soil extracts. 2&3) monitor to see if a problem exists with prep and/or spikes

CORRECTIVE ACTION TAKEN BY ANALYST: 1) Clean-up of extract not possible at this time.
2&3) Sample prep and/or spiking solns will be monitored to see if a continuing problem exists.

COMMENTS:

DATE CORRECTIVE ACTION TAKEN: 8/25/92

REVIEWED BY: Richard Karn

ALG QUALITY ASSURANCE CORRECTIVE ACTION FORM

ANALYSIS: BNA DATE: 9/28/92

ANALYST: R. Kar INSTRUMENT: 95-HP5985B

PROBLEM: 1) Low surrogate recovery in the blank
2) Low perylene-d12 internal std area

SAMPLE NUMBER(S) AFFECTED: 1) SU-BIKØ2
2) 23676, 23679-80, 24796, 24798MS & MSD, 24799

RECOMMENDED CORRECTIVE ACTION: 1) Re-extraction & re-analysis of samples
2) Clean-up of dirty sample extracts

CORRECTIVE ACTION TAKEN BY ANALYST: 1) This is a re-extraction. The original runs were on 8/17 & 8/18. There was a problem with the blanks & samples that was identified in sample prep and corrected at a later date. Since the blank spike was ~~COMMENTS~~: OK the run was accepted.
2) Clean-up of samples were not possible at this time.

DATE CORRECTIVE ACTION TAKEN: 8/26/92

REVIEWED BY: [signature]

REPORT DOCUMENTATION PAGE

Form Approved
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4.TITLE AND SUBTITLE
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5.FUNDING NUMBERS

6.AUTHOR(S)
William L. Murphy and Roy Wade

7.PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
U.S. Army Engineer Waterways Experiment Station
3909 Halls Ferry Road, Vicksburg, MS 39180-6199

8.PERFORMING ORGANIZATION REPORT NUMBER
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11.SUPPLEMENTARY NOTES

12a.DISTRIBUTION/AVAILABILITY STATEMENT
Further dissemination of this document only as directed by Department of the Navy, Southern Division, Naval Facilities Engineering Command, Charleston, SC 29411-0068; February 1998; or higher DOD authority.

12b.DISTRIBUTION CODE

13.ABSTRACT *(Maximum 200 words)*

A Phase II Release Assessment of Surface Water was performed for the Ammunition Burning Ground at the Naval Surface Warfare Center Crane, Indiana. Investigators conducted two rounds of sampling of water and bottom sediments of Little Sulphur Creek. Samples were analyzed for inorganic and organic constituents to determine the presence or absence of contamination in Little Sulphur Creek. The upper portion of Little Sulphur Creek flows only during wet periods. The lower 1/2 mile of the creek, below the burning ground, is fed by springs year-round. Sampling and analysis indicate that operations at the burning ground have released contaminants to the water and sediment of Little Sulphur Creek. Specific site-related analytes present in the surface water include the metals barium, aluminum, manganese, magnesium, chromium, cadmium, copper, lead, and zinc; nitrates; the explosives RDX, HMX, and 2,4-DNT; and the semivolatile organic bis(2-ethylhexyl) phthalate. Generally, analytes were detected more frequently in sediments than in the water. Metals, nitrates, and explosives in the surface water occurred somewhat more frequently or at higher levels in the second round (summer) than in the first. Bottom sediments did not show a similar trend.

14.SUBJECT TERMS

Contaminants	Heavy metals	Pollutants	Surface water
Environmental	HMX	RDX	TNT
Explosives	Military contaminants	Sediment	Water sampling
Groundwater	Naval Surface Warfare Center, Crane	Spring flow	

15.NUMBER OF PAGES
584

16.PRICE CODE

17.SECURITY CLASSIFICATION OF REPORT	18.SECURITY CLASSIFICATION OF THIS PAGE	19.SECURITY CLASSIFICATION OF ABSTRACT	20.LIMITATION OF ABSTRACT
UNCLASSIFIED	UNCLASSIFIED		