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MCAS EL TORO
SSIC #5090.3

OHM Remediation Services Corp.
1202 Kettner Boulevard
San Diego, California 92101

# Temporary Accumulation Area 772
# Marine Corps Air Station
# El Toro, California

**SWDIV Contract No. N68711-93-D-1459**
**Delivery Order No. 0070 – Revision 0**
**OHM Project No. 18609 – Document Control No. SW5985**
**December 17, 1999**

# Closure Report

Appendix A - JEG RFA Background Information; Appendix B - BNI VSI Evaluation Report;
Appendix C - Site Photographs; Appendix D - Site Assessment Log; Appendix E - Land Survey Data;
Appendix F - Laboratory Analytical Results for TAA Effluent Treated Water;
Appendix G - Laboratory Analytical Reports; Appendix H - LDC Data Validation Report;
Appendix I - Tentative Reuse Parcel Location of TAA 772

**OHM Remediation Services Corp.**
A Subsidiary of OHM Corporation

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*Marine Corps Air Station*
*El Toro, California*

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# REVIEW AND COMMENTS TO THE CLOSURE REPORT FOR TEMPORARY ACCUMULATION AREA 772 BY DTSC ARE ENTERED INTO DATABASE AND FILED UNDER ADMINISTRATIVE RECORD NO. M60050.000419

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# *Abbreviations and Acronyms*

| | |
|---|---|
| BEHP | bis(2-ethylhexyl) phthalate |
| bgs | below ground surface |
| BNI | Bechtel National Inc. |
| BRAC | Base Realignment and Closure |
| CA LUFT | California Leaking Underground Fuel Tank |
| CCR | California Code of Regulations |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR | Code of Federal Regulations |
| CQC | Contractor Quality Control |
| CTF | central treatment facility |
| DHS | California Department of Health Services |
| DO | delivery order |
| DTSC | Department of Toxic Substances Control |
| EPA | United States Environmental Protection Agency |
| HSO | Health and Safety Officer |
| HSP | Health and Safety Plan |
| IRP | Installation Restoration Program |
| JEG | Jacobs Engineering Group Inc. |
| LCS | laboratory control sample |
| LCSD | laboratory control sample duplicate |
| LDC | Laboratory Data Consultants |
| m/z | mass-to-change |
| MCAS | Marine Corps Air Station |
| MDL | method detection limit |
| mg/kg | milligram per kilogram |
| MS | matrix spike |
| MSD | matrix spike duplicate |
| OHM | OHM Remediation Services Corp. |
| OU | Operable Unit |
| PAH | polynuclear aromatic hydrocarbon |
| PPE | personal protective equipment |
| PRG | Preliminary Remediation Goal |
| QA | quality assurance |
| QC | quality control |
| RCRA | Resource Conservation and Recovery Act |
| RDL | reporting detection limit |
| RI | Remedial Investigation |
| RPD | relative percent difference |
| RRF | relative response factor |
| RWQCB | Regional Water Quality Control Board |
| SIM | selected ion monitoring |
| SVOC | semi-volatile organic compound |
| SWDIV | Southwest Division Naval Facilities Engineering Command |

# *Abbreviations and Acronyms (Cont.)*

| | |
|---|---|
| SWMU | Solid Waste Management Unit |
| TAA | temporary accumulation area |
| TAL | target analyte list |
| TPH | total petroleum hydrocarbons |
| VOA | volatile organic analysis |
| VOC | volatile organic compound |
| VSI | Visual Site Inspection |
| %D | percent difference |
| µg/kg | micrograms per kilogram |

# Section 1
# Introduction

This Closure Report summarizes the sampling and decontamination activities performed at the Temporary Accumulation Area (TAA) 772 Site at the Marine Corps Air Station (MCAS) El Toro (hereinafter referred to as the "Station"), California. OHM Remediation Services Corp (OHM) performed the work for the Southwest Division Naval Facilities Engineering Command (SWDIV) under Remedial Action Contract No. N68711-93-D-1459, Delivery Order (DO) 0070.

Sampling and decontamination activities were conducted in accordance with the Navy, Station, and Department of Toxic Substance Control (DTSC)-approved *Draft Supplemental Work Plan, Closure of Various Temporary Accumulation Areas and RCRA Facility Assessment Sites at the Marine Corps Air Station El Toro, California* (OHM, $1997_a$).

## 1.1 Site Location and Background

The Station is located approximately 45 miles southeast of the city of Los Angeles in Orange County, California, 1 mile north of the intersection of Interstate 5 (Santa Ana) and Interstate 405 (San Diego) freeways. The Station covers approximately 4,738 acres. Approximately 800 acres of the Station property are currently designated for agricultural outlease. Agricultural outleased lands are located at the corners of the Station, and are used for plant nursery and crop production (MCAS El Toro, 1998). The location of the Station is shown in Figure 1-1.

TAA 772, a temporary, less than 90-day, Hazardous Waste Storage Area (HWSA) is located in the southeastern quadrant of the Station, west of the Borrego Canyon Wash. The TAA 772 is located south of former Defense Reutilization and Marketing Office (DRMO) yard number 3 (Figure 1-2) near the intersection of "Z" street and El Toro Boulevard.

The depth to groundwater in the vicinity of the TAA 772 site is based on available water level data collected from the nearest nested groundwater monitoring wells 18_BGMW02A through 18_BGMW02E. The location of these wells is shown in Figure 1-2. Based on this data, the depth to the groundwater at TAA 772 is approximately 160 feet below ground surface (bgs) (OHM, $1997_b$).

## 1.2 Project Objectives

The objectives of this project were the following:

- Verify that all stored hazardous wastes, residues, and constituents that may pose a potential health risk have been removed from TAA 772 in accordance with the MCAS El Toro Detailed Plan (OHM, 1995).
- Perform verification soil sampling and analysis to obtain "closure status" of TAA 772.

Based on a classification in the Draft Supplemental Work Plan, TAA 772 was considered to be a Type 2 facility (i.e., bermed TAA without containment sump). Project operations at Type 2 facilities were defined as decontamination of the interior portion of the structure and soil sampling. (OHM, $1997_a$).

## *1.3 Regulatory Background and Cleanup Goals*

The closure activities at TAA 772 were completed in accordance with the appropriate federal and state requirements. TAA 772 is characterized as "*hazardous waste accumulation areas*" according to the Code of Federal Regulations (CFR), Title 40, Part 262.34, and the California Code of Regulations (CCR), Title 22, Section 66262.34. Because hazardous wastes have been stored at the site, closure of TAA 772 is also subject to federal and state regulations for closure of less than 90 days hazardous waste management facilities (CFR 40, part 264, Subpart G; and CCR 22, Section 66264, Article 7, respectively).

The cleanup goals established for TAA 772 are based on the following:

**Soil**

- United States Environmental Protection Agency (EPA) Region IX Preliminary Remediation Goals (PRGs) dated October 1, 1999 for residential land use for organic contaminants
- Background concentrations for metals contaminants (Bechtel National Inc. [BNI], $1996_b$)
- 5,000-milligrams per kilogram (mg/kg) concentration limit for total petroleum hydrocarbons (TPH)-purgeable
- 10,000-mg/kg concentration limit for TPH-extractable

## *1.4 Project Scope of Work*

The Scope of Work at TAA 772 consisted of the following tasks:

- collection and laboratory analysis of confirmation samples, including soil samples obtained from beneath and adjacent to the TAA structure.
- turning over salvageable and recyclable materials to the Station's Defense Reutilization and Marketing Office for recycling.
- disposal of solid wastes generated during field sampling activities.
- preparation of a Closure Report to describe and document the work performed.

# *Section 2*
# *Previous Investigations and Site Background*

The following section summarizes results from previous investigations and background history at the TAA 772 site. Background information regarding TAA 772 was obtained from the following documents:

1. *Final RCRA Facility Assessment Report, Marine Corps Air Station El Toro, California (Jacobs Engineering Group Inc., [JEG] 1993)*
2. *Final Addendum RCRA Facility Assessment Report, Marine Corps Air Station El Toro, California (BNI, 1996a)*
3. *Final Base Realignment and Closure Cleanup Plan, March 1998, Marine Corps Air Station El Toro, California (MCAS El Toro, 1999)*

## *2.1 RCRA Facility Assessment*

In 1991, JEG, as part of the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA), performed the initial Preliminary Review (PR) and a Visual Site Inspection (VSI) of the 307 Solid Waste Management Units (SWMUs) within the Station. JEG also conducted a site visit to observe the current conditions of the SWMUs and/or TAA, and performed limited sampling. JEG identified SWMU 225 (also known as TAA 772) as a temporary HWSA southeast of former Tank Farm 1 during their field RFA visit in April 1991.

Per JEG VSI Evaluation form, SWMU 225 (TAA 772) was one of the six Department of Health Services permitted HWSA consisting of a concrete pad with berm and aluminum roof but no sump. JEG observed that the TAA 772 was not in use and appeared to be inactive for long time, also concrete pad was covered with about 2-inches of stagnant green liquid. JEG observed no significant stains or cracks on the concrete berms. Although there was no evidence of a release during site visit at SWMU 225 but all past permitted HWSAs were recommended for sampling visit by JEG. Therefore, as part of the VSI evaluation process SWMU 225 (TAA 772) was recommended for *"Sampling Visit"*.

During the sampling visit, JEG advanced one angle soil boring (225A1) to a depth of 60 feet bgs in close proximity of SWMU 225 and collected six soil samples. Analysis of all six-soil samples did not indicate presence of TPH, VOCs, SVOCs, pesticide and PCB compounds. As a results of these findings JEG recommended *"No Further Action (NFA)"* for SWMU 225 (TAA 772). Copies of the VSI form, figure and analytical results table from the JEG RFA report are included in Appendix A, JEG RFA Background Information.

After review of the JEG RFA report, DTSC requested additional information about TAAs to determine the closure requirements. BNI performed the visual assessment of 73 TAA sites to provide more specific information for a closure strategy for TAAs. In November 1995, BNI visited SWMU 225 (TAA 772).

During the BNI VSI in November 1995, TAA 772 was empty, vacant and the concrete pad was clean. Therefore, no soil sampling was performed by BNI. Copies of TAA 772 VSI evaluation forms from the BNI Final RFA Addendum report are included in Appendix B, BNI VSI Evaluation Report.

# *Section 3*
# *Field Activities*

The following subsections describe the activities that were performed by OHM at TAA 772. Field activities were conducted in accordance with the approved *Final Supplemental Work Plan* (OHM, $1997_a$)

Field activities conducted at TAA 772 included a site inspection, preconstruction meeting, a geophysical survey, decontamination and confirmation soil sampling, and waste management. Photograph of the TAA 772 is presented in Appendix C, Site Photographs.

## *3.1 Preparatory Work*

OHM performed a site visit at TAA 772 in January 1997 and October 13, 1997 before performing any field activities. The TAA 772 was observed to be an inactive TAA, consisting of a vacant concrete pad with a berm and roof. No evidence of a release or stains was observed around the TAA 772. A copy of the Site Assessment Log is included as Appendix D.

OHM subcontractor, Geovision, conducted a geophysical survey on January 16, 1997 to identify and locate buried utilities, pipes, and other subsurface anomalies in the vicinity of TAA 772. OHM also notified Underground Service Alert of the intent to hand-auger seven locations up to 3 feet bgs.

OHM, in coordination with the Station's Resident Officer in Charge of Construction (ROICC), conducted a preconstruction meeting. The meeting addressed the Station's regulations for contractors, the construction schedule, health and safety coordination, construction quality control (QC), and tenant notifications.

## *3.2 Site Decontamination*

Decontamination activities at TAA 772 began on August 12, 1998 and included site preparation and concrete floor decontamination as specified in the Supplemental Work Plan (OHM, 1997a).

The following construction management activities were implemented at the TAA 772 site:

- OHM notified Station ROICC of the decontamination area.
- OHM Health and Safety Officer (HSO) implemented site security, health and safety procedures, and dust control activities. The work area was divided into exclusion or hot zone; a contamination reduction zone; and a support zone. The OHM Project Engineer performed a visual inspection for evidence of contamination inside and adjacent to the TAA 772 site.

- OHM field crew prepared the TAA for decontamination. Preparation included initial scraping, vacuuming, and sweeping.

The following decontamination methods were selected to minimize the generation of air emissions and the quantity of decontamination water. The decontamination methods included the following:

- vacuuming of solid materials from floor
- mechanical scrubbing of floor and hand scrubbing of berms
- cold water pressure washing

Vacuuming techniques included the physical removal of dust and other solid dirt particles from the pad surface. Dust and other dirt particles collected as a result of this activity were placed in a 55-gallon steel drum for later disposal. Vacuuming was performed using high-efficiency particle filter vacuums. Visible stains on the berms and floor were wire-brushed or scraped to remove loose particles and stained coatings.

A pressure washer was used to wash down the berms and floor of TAA 772. After completion of two wash cycles, the concrete pad floor was rinsed and pumped out, then a third and final rinse of the pad was performed in a similar manner as described above. After the third rinse, rinse water was allowed to settle on the pad and then a plastic sample bottle was immersed in the standing water to collect the rinse water sample.

Decontamination wastewater was then collected from the pad floor using a trailer-mounted portable skid unit (equipped with vacuum pump and 1,500-gallon steel storage tank). Wastewater was then transferred to the 2,500-gallon polyethylene storage tank located at the Station's central treatment facility (CTF) compound near Installation Restoration Program (IRP) Site 3 at the cross section of North Marine Way and Desert Storm Road.

## *3.3 Confirmation Soil Sampling*

Confirmation soil samples were collected from five hand auger locations at TAA 772 to verify if any spillage occurred during handling of hazardous material drums and the lateral and/or vertical extent of contamination beneath concrete/asphalt paved area. A total of 10 soil samples were collected from five hand auger boring locations (SB-A, SB-B, SB-C, SB-D, and SB-E). Soil sample locations were selected, based on a visual inspection performed during the site visit on October 13, 1997.

Soil samples were collected in standard stainless steel sleeves at two different depths: 18 and 36 inches bgs. Details on the sampling strategy and analytical methods are discussed in Section 4. The locations of the OHM hand-auger borings at TAA 772 are shown on Figure 3-1, Site Plan.

## 3.4 Land Surveying

After completing the confirmation soil sampling at TAA 772, the hand auger soil boring locations were surveyed by Cal Vada Surveying Inc., a California-licensed land surveyor. The surveyed locations were measured to ±0.01 foot horizontally and tied to the California State Plane Coordinate Systems, North American Datum 1983. The surveyed elevations were measured to ±0.01 foot vertically and tied to mean sea level datum. The land surveying data for TAA 772 are presented as Appendix E.

## 3.5 Waste Management

Waste generated during the decontamination activities and confirmation soil sampling at the TAA 772 site included the following:

- one bag (55-gallon drum liners) of Personal Protective Equipment (PPE).
- 0.2 cubic yards of debris (e.g., rocks, rust, solid soils, etc) from concrete floor.
- approximately 100 gallons of decontamination wash water stored on-site at the CTF in a closed-top polyethylene storage tank, specifically marked "TAA Water".

All generated wastes have been disposed of in accordance with applicable State and Federal regulations. Based on the results and review of analytical data, OHM disposed of the wastes as follows:

- The bags of PPE was disposed off-site at Bowerman Canyon non-hazardous Class III landfill, based on the results of the sump/floor debris samples.
- 0.2 cubic yards of floor debris, disposed off-site at Bowerman Canyon non-hazardous Class III landfill, based on the confirmation soil sample analytical results.

Wastewater generated from decontamination activities was treated through the Station's CERCLA Carbon Adsorption Treatment System (operated and maintained by OHM) located at the CTF, following the determination that the constituents were within the normal range for treatment. Treated effluent water was sampled and based on the review of the analytical results, transferred to the Station's Golf Course holding tank for reuse (JEG 1991). A copy of the analytical result of the treated water is included in Appendix F, Laboratory Analytical Results for TAA Effluent Treated Water.

# Section 4
# Sampling Analytical Results and Data Quality Assessment

The objective of the sampling and analysis is to provide analytical data to document the successful decontamination of TAA 772 and to characterize the soil condition adjacent to and beneath TAA 772. The sampling methodology, analytical methods, analytical results, and interpretation of confirmation soil sampling have been performed in accordance with the analytical strategy presented in the Draft Supplemental Work Plan (OHM, $1997_a$) and are described in the following text.

The laboratory analyses were performed according to test methods specified in EPA Solid Waste-846 (Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, June 1997) and California Leaking Underground Fuel Tank (CA LUFT) Manual (State Water Resources Control Board, 1989). The test methods used for analyses were selected on the basis of their ability to detect the chemicals of potential concern with suitable detection limits to verify the successful decontamination of TAA 772 and to provide data for assessment of risk to human health and the environment. A list of all the analytical methods that were performed for TAA 772 is provided in Section 4.2.

All samples were analyzed by VOC Analytical Laboratory or EMAX Laboratories, Inc. which are both state of California certified and Naval Facilities Engineering Services Center-approved analytical laboratories.

## 4.1 Field Sampling Summary

### 4.1.1 Confirmation Soil Sampling

The sampling strategy for TAA 772 focused on two aspects of the site: possible releases on the surface of the TAA or possible releases into the soil surrounding the TAA. Soil samples were collected and analyzed for the constituents contained in the wastes that may have been stored at TAA 772.

Sample locations were selected based on visual inspection performed during a site visit, which included any areas where there was evidence of spills, contamination of concrete, or visual signs of secondary containment structure deterioration (cracks in berms). However, no cracks or visual indications of spills were observed at TAA 772. A total of 10 confirmation soil samples (sample numbers 18609-659 through 18609-668) were collected at TAA 772 from 5 hand auger borings (SBA, SBB, SBC, SBD, and SBE). The locations of all the hand auger borings are shown in Figure 3-1.

A concrete-coring machine was used to open a 6-inch diameter hole in the concrete/asphalt, and then a hand auger was used to bore into the soil under the concrete to approximately 18 inches. An undisturbed soil sample was collected at 18 and 36 inches bgs using a

hammer-driven split core sampler that contained a stainless steel sleeve. Following the collection of the soil samples, the excess soil was placed back in the open borehole (no VOCs were identified by the photoionization detector). Concrete (ready mix) was poured into the open hole in the bottom of the sump to seal the opening. The surface was then finished with a trowel to match the existing surface of the asphalt. The Sample Collection Summary Log for TAA 772 is presented in Table 4-1.

### *4.1.2 Rinsate Water Sampling*

Samples collected from large porous (concrete) surfaces using wipe techniques were not considered to be representative by DTSC. Therefore, samples of the rinsate water were collected to provide an indicator of the effectiveness of the decontamination. Rinsate samples were collected to determine the concentrations of any constituents that might be present in any washwater coming in contact with the floors and sump following the wash process.

The fire hydrant located on North Marine Way near IRP Site 3 within the CTF compound was used as the source water for washing and rinsing the concrete pad floor at TAA 772. A sample was collected from the source water (sample number 18609-965), and the rinsate (sample number 18609-966) sample was collected from the third rinse of the floor surface.

### *4.1.3 Quality Control*

Field quality assurance/quality control (QA/QC) samples were collected at the TAA site as follows:

- Equipment rinsate samples were collected at a frequency of 1 per day.
- Trip blank samples were collected at a frequency of 1 per sample cooler for coolers containing samples for volatile analysis.
- Source blank was collected at a frequency of 1 per source.

One equipment rinsate (sample number 18609-642), one trip blank (sample number 18609-637), and one source water sample (sample number 18609-965) were collected for the TAA site.

VOC Analytical Laboratory and EMAX Laboratories, Inc. performed the following laboratory QA/QC sample analysis:

- Laboratory control sample/sample duplicate analysis was performed at a frequency of 1 per 20 samples or per batch.
- Laboratory matrix spike/spike duplicate sample analysis was performed at a frequency of 1 per 20 samples or per batch.
- Laboratory method blank analysis was performed at a frequency of 1 per 20 samples or per batch.

### *4.1.4 Equipment Decontamination*

Equipment used in the exclusion zone was decontaminated prior to removal from the site, as identified in the site specific Health and Safety Plan (HSP). The equipment used for collecting soil samples was decontaminated between each use. The hand auger assembly was washed in a typical three step procedure consisting of: decontaminating the equipment first using a brush in a bucket of Alconox™ detergent and water; then a second bucket of water for immediate rinse; and again in a third bucket of water for the final rinse.

## *4.2 Analytical Methods*

Analytical methods were selected to encompass all the chemicals of potential concern at TAA 772. The following methods were performed to characterize samples collected from TAA 772:

- Volatile organic compounds (VOCs) by EPA Method 8260A
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270B
- Total Petroleum Hydrocarbons (TPH) as Gasoline by CA LUFT 8015 Modified
- TPH as JP-5 and Diesel by CA LUFT 8015 Modified
- Polychlorinated Biphenyls (PCBs) and Pesticides by EPA method 8081
- Metals by EPA Method 6010A and 7000 series
- Total Cyanide by EPA Method 9010
- pH by EPA Method 9045/150.1

Additionally, the Selected Ion Monitoring (SIM) technique was used on the following four semi-volatile organic compounds in order to achieve detection limits lower than the Region IX PRGs (U.S.EPA, October 1999):

- benzo(a)pyrene
- dibenzo(a,h)anthracene
- n-nitrosodi-n-propylamine
- bis(2-chloroethyl)ether

SIM is a recognized gas chromatograph/mass spectrometer technique used to lower detection limits for organic compounds. As specified in EPA Method 8270B, semi-volatile compounds are introduced into the gas chromatograph by direct injection. The components of the sample are separated by the gas chromatograph and detected by the mass spectrometer, which provides both qualitative and quantitative information.

For each component or compound separated by the gas chromatograph, the mass spectrometer produces a characteristic mass spectrum. The mass spectrometer ionizes the sample molecules and separates any resulting fragments by mass-to-charge (m/z) ratios. The

fragmentation pattern is used to determine the structure of the original molecule. The intensity of one or more of the fragments is used to quantitate the identified compound.

Upon identification of a target compound by comparison of the acquired mass spectrum with the mass spectrum of a standard, EPA Method 8270B specifies a fragment or characteristic ion to use for quantitation of the analyte. Method 8270B requires that the mass spectrometer scan from 35 to 500 amu (m/z) every 1-second or less. In SIM, the entire mass range is not scanned. Typically, only a few m/z are monitored. As a result, the mass spectrometer is able to collect more data from a specific m/z, resulting in an improved signal-to-noise ratio, which in turn improves detection limits. There is, however, a practical limitation to the number of m/z that can be monitored at one time so that the total scan time does not exceed 1 second. As a result, the number of compounds that can be measured in a single SIM analysis is limited.

## *4.3 Laboratory Analytical Results*

This section provides summary and assessment of the analytical results from the sampling performed at TAA 772. The analytical results for the confirmation soil samples at TAA 772 with comparison to the background concentrations and PRGs are presented in Table 4-2, Summary of Analytical Results for Confirmation Soil Samples – TAA 772. QC sample analytical data for TAA 772 are presented in Table 4-3, Summary of Analytical Results for QC Samples – TAA 772. Rinse and source water analytical data for TAA 772 are presented in Table 4-4, Summary of Analytical Results for Rinse Water Samples – TAA 772. The hard copies of the analytical results with QA/QC data obtained from VOC Analytical Laboratory are included in Appendix G, Laboratory Analytical Results.

### *4.3.1 Soil Sample Analytical Results*

**Volatile Organic Compounds (VOCs)** — VOCs were not detected above the laboratory reporting limits for all confirmation soil samples collected from TAA 772.

**Semi-Volatile Organic Compounds (SVOCs)** — No SVOCs were detected above the laboratory reporting limits in all confirmation soil samples collected from TAA 772. However, the reporting limit for hexachlorobenzene exceeded the residential PRG for all confirmation soil samples, and the reporting limits for benzo(a)anthracene, benzo(a)pyrene, benzo(b)fluoranthene, benzo(ghi)perlyene, benzo(k)fluoranthene, chrysene, dibenz(a.h)anthracene, fluoranthene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene exceeded the background level concentrations.

The following four SVOCs were analyzed using the SIM technique to ensure that the laboratory reporting limits were lower than the residential PRGs:

- benzo(a)pyrene
- dibenzo(a,h)anthracene
- n-nitrosodi-n-propylamine
- bis(2-chloroethyl)ether

The OHM criterion for acceptance of this SIM data was that the laboratory MDL must be equal to or less than half of the PRG.

**Total Petroleum Hydrocarbons (TPH)** — TPH as gasoline, JP-5, and diesel were not detected above the laboratory reporting limits for all confirmation soil samples collected from TAA 772.

**PCBs/Pesticides** — PCB/pesticide compounds were not detected above the laboratory reporting limits for all confirmation soil samples collected from TAA 772. Additionally, the reporting limits for alpha-chlordane, endosulfan I, endosulfan II, endrin, and endrin aldehyde exceeded the established background concentrations for some of the confirmation soil samples.

**Metals** — Various metal results for the confirmation soil samples were above the established background levels as noted by the "B" qualifier in Table 4-2, Summary of Analytical Results for Confirmation Soil Samples.

The following table illustrates the metal results that are above residential or industrial PRGs:

| Sample Number | Sample Location | Concentrations Exceeding Residential PRGs | Concentrations Exceeding Industrial PRGs |
|---|---|---|---|
| 18609-659 | TAA772-SBB | Arsenic (1.7 mg/kg) | N/A |
| | | Thallium (5.5 U mg/kg) | N/A |
| 18609-661 | TAA772-SBA | Arsenic (2.6 mg/kg) | N/A |
| | | Thallium (5.7 U mg/kg) | N/A |
| 18609-663 | TAA772-SBE | Arsenic (1.4 mg/kg) | N/A |
| 18609-665 | TAA772-SBD | Arsenic (2.4 mg/kg) | N/A |
| | | Thallium (5.6 U mg/kg) | N/A |
| 18609-667 | TAA772-SBC | Arsenic (2.5 mg/kg) | N/A |
| | | Thallium (5.5 U mg/kg) | N/A |

*mg/kg – milligrams per kilogram*
*N/A – not applicable*
*U – not detected*

**Total Cyanide** — Total cyanide was not detected above the laboratory reporting limits for all confirmation soil samples collected from TAA 772.

### *4.3.2 Rinsate Sample Analytical Results*

One source blank sample (18609-965) and one rinse water sample (18609-966) were collected at TAA 772. The samples were analyzed for VOCs, SVOCs, TPH, PCBs/Pesticides, Metals, total cyanide, and pH. Analytes detected in the rinse water are consistent with the analytes present in the source blank sample. Various organic analytes and metals are present in both the rinse and/or the source water sample. Analytes were detected at levels expected in fire hydrant water.

### *4.3.3 QC Sample Analytical Results*

One trip blank was collected for TAA 772 (18609-637). The trip blank was analyzed for TPH as Gasoline and VOCs, and all analytes were not detected

One equipment rinsate sample (18609-642) was collected and analyzed for VOCs, SVOCs, TPH, PCBs/Pesticides, Metals, and pH. All analytes detected were less than the reporting limits.

## *4.4 Data Quality Assessment*

The TAA 772 analytical data were reviewed and validated with respect to the QA/QC parameters specified in the work plan. The following were evaluated:

- EPA recommended holding times
- cooler condition upon receipt by the laboratory
- initial and continuing calibration standards
- method blanks
- surrogate recoveries
- matrix spike/matrix spike duplicate (MS/MSD) recoveries
- laboratory control samples (LCS) recoveries

All samples were prepared and analyzed within EPA recommended holding times. The sample cooler was received intact and within the required temperature range of 4±2 degrees Celsius. Any sample results associated with QC parameters that were out of compliance with the Work Plan have been flagged and annotated in Tables 4-2 through 4-4. All data are useable as qualified.

## *4.5 Data Validation*

This section addresses the validity and quality of the data collected from TAA 772. Analytical data were reviewed and validated in accordance with the EPA *National Functional Guidelines for Organic and Inorganic Data Review* (U.S.EPA, 1994). Laboratory Data Consultants (LDC), an independent data validation company, performed Level III and Level IV validation on the data. A hard copy of the LDC report is provided in Appendix H, Data Validation Reports.

Laboratory analytical data were subjected to a four-stage process of evaluation: completeness checks; verification of hard copy and electronic results; validation of the data; and final evaluation based on the professional judgment of the project chemist.

The data were qualified by LDC to indicate whether the data has been affected by any deviation from the analytical protocols established in the Draft Supplemental Work Plan

(OHM, $1997_a$). Unusable data was qualified with an "R" (rejected). All other results were either unqualified (no flag), nondetected ("U" flag), nondetected with uncertainty in the report detection limits ("UJ" flag), or detected with uncertainty in the reported concentration ("J" flag).

### *4.5.1 Analytical Quality Control Program*

This section provides a description of the field and laboratory QC sample results, which were used to evaluate the precision, accuracy, representativeness, completeness, and comparability.

**Precision** — Precision was evaluated based on the QC results submitted from the field and from the laboratory. The calculated relative percent difference (RPD) of MS/MSDs, laboratory control sample/laboratory control sample duplicates (LCS/LCSDs), and the field duplicate pair provided information on the precision of sampling and analytical procedures. RPDs for duplicate samples were not calculable when one or both results were not detected. The precision results for all the samples were within the required limits.

- The RPD for 4-nitrophenol was out of QC limits; therefore, sample 18609-642 was flagged as estimated with "UJ" since the analyte was not detected in this sample.
- The RPD for gamma-BHC, heptachlor, aldrin, dieldrin, endrin, and 4,4'-DDT were out of QC limits; therefore, sample 18609-642 was flagged as estimated with "UJ" since the analytes were not detected in this sample.

**Accuracy** — Evaluation of the percent recovery (%R) of spiked analytes in MS/MSD samples, LCS/LCSDs, and surrogates provide information on accuracy. In addition, the initial and continuing calibration results provided information on analytical accuracy. The accuracy results for all samples were within the required limits with the following exceptions:

- The initial calibration relative response factors (RRF) for acetone and vinyl acetate were out of QC limits; therefore, all soil confirmation samples were flagged as estimated with "UJ" since the analytes were not detected in those samples.
- The percent difference (%D) for acetone was out of QC limits; therefore, samples 18609-660, 18609-662, 18609-664, 18609-666, and 18609-668 were flagged as estimated with "UJ" since the analyte was not detected in those samples.
- The continuing calibration RRFs for vinyl acetate and 2-butanone were out of QC limits; therefore, samples 18609-660, 18609-662, 18609-664, 18609-666, and 18609-668 were flagged as estimated with "UJ" since the analytes were not detected in those samples.
- The continuing calibration RRFs for acetone, vinyl acetate, and 2-butanone were out of QC limits; therefore, samples 18609-659, 18609-661, 18609-663, 18609-665, and 18609-667 were flagged as estimated with "UJ' since the analytes were not detected in those samples.
- The %R for the LCS/LCSD for n-nitroso-di-n-propylamine and pentachlorophenol was out of QC limits; therefore, samples 18609-659, 18609-661, 18609-663,

18609-665, and 18609-667 were flagged as estimated with "UJ" since the analytes were not detected in those samples.

- The %D for zinc in the metals serial dilution sample was out of QC limits; therefore, samples 18609-659, 18609-661, 18609-663, 18609-665, and 18609-667 were flagged as estimated with "J" since the analyte was detected in those samples.
- The initial and continuing calibration RRFs for acetone, vinyl acetate, and 2-butanone were out of QC limits; therefore, samples 18609-637 and 18609-642 were flagged as estimated with "UJ" since the analytes were not detected in those samples.
- The continuing calibration RRF for 2-chloroethylvinyl ether was out of QC limits; therefore, samples 18609-637 and 18609-642 were flagged as estimated with "UJ" since the analyte was not detected in those samples.
- The %R for the MS/MSD for selenium was out of QC limits; therefore, sample 18609-642 was flagged as estimated with "UJ" since the analyte was not detected in this sample.
- The surrogate %R for PCB/pesticide analysis was out of QC limits; therefore, all PCB/pesticide analytes for samples 18609-965 and 18609-966 were flagged as estimated with "UJ" since the analytes were not detected in those samples.
- The %R for gamma-BHC was out of QC limits; therefore, samples 18609-965 and 18609-966 were flagged as estimated with "UJ" since the analyte was not detected in those samples.

**Representativeness** — Representativeness was assessed through the evaluation of method blank and trip blank samples. Target analytes were not detected in the method and trip blank samples with the following exception:

- Di-n-butylphthalate was detected in the method blank; therefore, samples 18609-659, 18609-661, 18609-663, and 18609-665 were changed to the reporting limit and flagged with a "U" for not detected.
- Acetone was detected in the method blank; therefore, sample 18609-642 was changed to the reporting limits and flagged with a "U" for not detected.
- Di-n-butylphthalate was detected in the method blank; therefore, sample 18609-642 was changed to the reporting limit and flagged with a "U" for not detected.

**Completeness** — Completeness was evaluated in two criteria. The first criteria was assuring that all analytical requests were met, samples were received in the proper condition, and all analytes were performed within the technical holding times. The second criterion was evaluating the analytical completeness by calculating the percent of acceptable analytes. The completeness parameters are:

- the completeness goal for holding times is 100 percent
- the goal for sample collection and analysis frequency of duplicate and MS/MSD samples was 10 and 5 percent, respectively
- the percent analytical completeness goal was 90 percent

All samples were extracted and analyzed within the appropriate holding times. No duplicate samples were collected. The percent analytical completeness goal is based on a project-wide sampling program and cannot be assessed on a site-by-site basis.

**Comparability** — To ensure comparability, sampling was performed using standardized procedures. Laboratory procedures follow EPA analytical methods and the CA LUFT Manual guidelines. All soil samples were reported on a dry weight basis. The data were then evaluated for comparability of reporting detection limits (RDLs) and associated dilution factors. RDLs were elevated when samples required dilution to quantify target compounds within the linear range of the instrument or when there was sample matrix interference.

All reporting limits were achieved for VOCs, SVOCs, TPH, PCBs/Pesticides, Metals, total cyanide, and pH by the laboratory.

**Summary** — All data associated with TAA 772 were usable and acceptable as qualified. Overall precision and accuracy were met. The analytical results and associated qualifiers are summarized in Tables 4-2 through 4-4.

# *Section 5*
# *Risk Characterization and Hazard Index Calculation*

This section briefly describes the approach used to estimate risk and summarizes the baseline screening level risk assessment results for TAA 772. A screening level risk assessment for human health was conducted following the guidance provided in the EPA Region IX PRGs Memorandum (U.S. EPA, 1999). The results of confirmation soil sampling conducted at the TAA were used to calculate risks.

## *5.1 Physical Characteristics of TAA 772*

Based on the review of the boring log of the groundwater monitoring wells, 18_BGMW02A through 18_BGMW02E, the subsurface lithology at TAA 772 consists of primarily of silts, sands, and clays. These sediments have moderate-to-high porosity and low permeability. The groundwater is present at a depth of approximately 160 feet bgs. (OHM $1997_b$).

## *5.2 Exposure Assessment*

The TAA 772 was used as a temporary HWSA for storage of hazardous waste drums. The surrounding area to TAA 772 is unpaved. The land use scenario is currently considered to be industrial.

The Station officially closed on July 2, 1999 in accordance with the Base Closure and Realignment Act of 1993 (BRAC III). The TAA 772 is located within a parcel designated for *recreational use (golf)* according to *the El Toro Community Reuse Plan, 1997 Working Draft,* (County of Orange 1997) as shown in Figure 1 of Appendix I. Also, TAA 772 is located within or near an area designated as *park* according to *The Airport and Open Space Plan, Concept C, Year 2020* as published by the County of Orange in August 1998, as shown in Figure 2, Appendix I.

There is limited exposure to soil because there the TAA 772 area is concrete paved. The concrete pad is expected to remain until the future land use as recreational use as a park. However, for screening purposes, the ingestion, dermal contact, and inhalation exposure pathways are assumed to be complete as if there were no cover. Should the screening fail, further evaluation of the exposure pathways would be required. Site conceptual model for TAA 772 is shown on Figure 5-1.

Under an industrial and/or residential land use scenario at TAA 772, workers or humans could be potentially exposed to surrounding soil by ingestion, dermal contact, or inhalation of dust or volatilized contaminants. These are the same exposure pathways evaluated by the EPA PRGs (U.S. EPA, 1999). Figure 5-2 presents the potential migration pathways at TAA 772.

For the purposes of this risk screening evaluation, the residential scenario is used as the worst case scenario. The current industrial use or future use as a terminal complex would have lower exposures and the risk would be less. If the risk is acceptable for the residential land use scenario, the risk would also be acceptable for both the current and future land use scenarios.

## *5.3 Toxicity Assessment*

The PRGs incorporate the toxicity values from the Integrated Risk Information System, the Health Effects Assessment Summary Tables, and the National Center for Environmental Assessment. Cancer PRGs incorporate cancer toxicity values and the noncancer PRGs incorporate the toxicity values for chronic health effects other than cancer (EPA, 1999). Both cancer risk and noncancer hazards were evaluated in this screening risk assessment.

## *5.4 Risk Characterization*

The PRGs are concentrations calculated using standard exposure factors that are protective of humans, including sensitive groups, over a lifetime. These PRG concentrations pose acceptable cancer risk or non-cancer hazard under the exposure scenarios evaluated. Generally, a cancer risk of $10^{-6}$ to $10^{-4}$ and a non-cancer hazard index of 1 or less are considered acceptable levels of exposure. The PRG concentrations are calculated to at a cancer risk level of $1x10^{-6}$ and a non-cancer hazard index of 1.

Cancer risk is calculated by dividing the site concentration by the PRG for each chemical. The ratios are added and multiplied by $10^{-6}$. The hazard index is calculated by dividing the site concentration by the PRG for each chemical and adding the ratios.

At TAA 772, the detected carcinogens include arsenic and chromium. Both were detected below background concentrations. The summed cancer risk for the potential future residential scenario after subtracting background is less than $10^{-6}$ as shown in Table 5-1, Risk Screening Worksheet for soil using Residential PRG values. The residential scenario is considered the worst-case scenario. Under the current industrial scenario the risk is even less than $10^{-6}$ as shown in Table 5-2, Risk Screening Worksheet for soil using Industrial PRG values.

The non-cancer hazard index (HI) for the potential future residential scenario is 1.2 using maximum concentrations (Table 5-1). The contributors are antimony and thallium, which were detected in only one of the five soil samples and were not detected, in the same sample. However, the HI for the current industrial scenario is less than 1.0 (Table 5-2).

A rinse water sample was collected from the concrete pad floor after decontamination activities at TAA 772. Rinse water sample analytes were compared to source water concentrations. The rinse water was determined to be within the range of source water concentrations.

## Summary

The site-related incremental cancer risk and non-cancer hazard index at TAA 772 is acceptable for the following reasons:

- The net carcinogenic risk is less than $10^{-6}$ for the residential scenario and the industrial scenario.
- The non-cancer hazard index for detected chemicals is less than 1.0 for the current industrial scenario.
- The non-cancer hazard index for the potential future residential land use scenario was 1.2. The contributors were detected only once out of five samples.

# *Section 6*
# *Conclusions and Recommendations*

The following conclusions are based upon existing background information, previous field investigations, and OHM's confirmation soil sampling analytical results and screening level risk assessment calculations:

- The TAA 772 (SWMU 225), a former DHS-permitted temporary HWSA was identified by JEG during the RFA PR/VSI field visit in May 1991. JEG observed that the TAA 772 was not in use and no significant stains or cracks on the concrete berm. Although there was no evidence of a release during site visit at TAA 772, but since all past permitted HWSAs were recommended for sampling visit by JEG. Therefore, as part of the VSI evaluation process JEG recommended *"Sampling Visit"* for TAA 772.
- During the sampling visit, JEG advanced one angle soil boring (225A1) to a depth of 60 feet bgs in close proximity of TAA 772 and collected six samples. Analysis of all six-soil samples did not indicate presence of TPH, VOCs, SVOCs, pesticide and PCB compounds. As a results of these findings JEG recommended *"NFA"* for SWMU 225 (TAA 772).
- BNI visited TAA 772 in November 1995 and found inactive, vacant concrete pad. No waste or staining from release was observed at the TAA 772 site. Therefore, BNI performed no soil sampling at the TAA 772 site.
- OHM observed vacant TAA 772 during the site visits conducted in January 1996 and October 13, 1997. No visible stains or evidence of spills were observed at the TAA 772 site.
- OHM collected 10 confirmation soil samples from five hand augur borings at TAA 772. Based on the review of analytical data, no indications of hazardous contaminants (i.e., previous spills) were found in the soil under or around TAA 772. Therefore, the temporary use of the DSA did not impact the concrete pad and soil beneath or around the TAA 772.
- TPH, VOCs, SVOCs, pesticides, and most of the metal compounds from all 10-confirmation soil samples were not detected above the laboratory reporting limits. Arsenic and chromium (only carcinogens) were detected in the soil above the laboratory reporting limits and were analyzed to determine the risk associated with their presence.
- The various metal compounds detected in the rinsate sample were consistent in identity and concentration with the metals and levels measured in the source water. Alkali metals, iron, zinc, THMs and BEHP are commonly found in chlorinated potable water supplies such as the source water used for the decontamination of TAA 772.

- The residential and industrial risk calculations for TAA 772 resulted in a site-related cancer risk less background risk of less than $10^{-6}$ and a site-related residential noncancer HI of 1.2. Both of which are generally accepted levels of exposure.

The objectives of this project are considered to be achieved, since TAA 772 is no longer used for storage of hazardous wastes. Decontamination activities (vacuuming, scrubbing, and pressure washing) were performed at TAA 772 to remove any possible contamination, and confirmation soil sampling was conducted at the TAA 772 site to verify that concentrations of contaminants were at or below acceptable background or health-risk based concentrations.

Based on the information provided, closure goals were achieved with respect to soil and rinsate water for TAA 772; therefore, TAA 772 (also known as SWMU 225) should be identified as "closed."

# *Section 7*
# *References*


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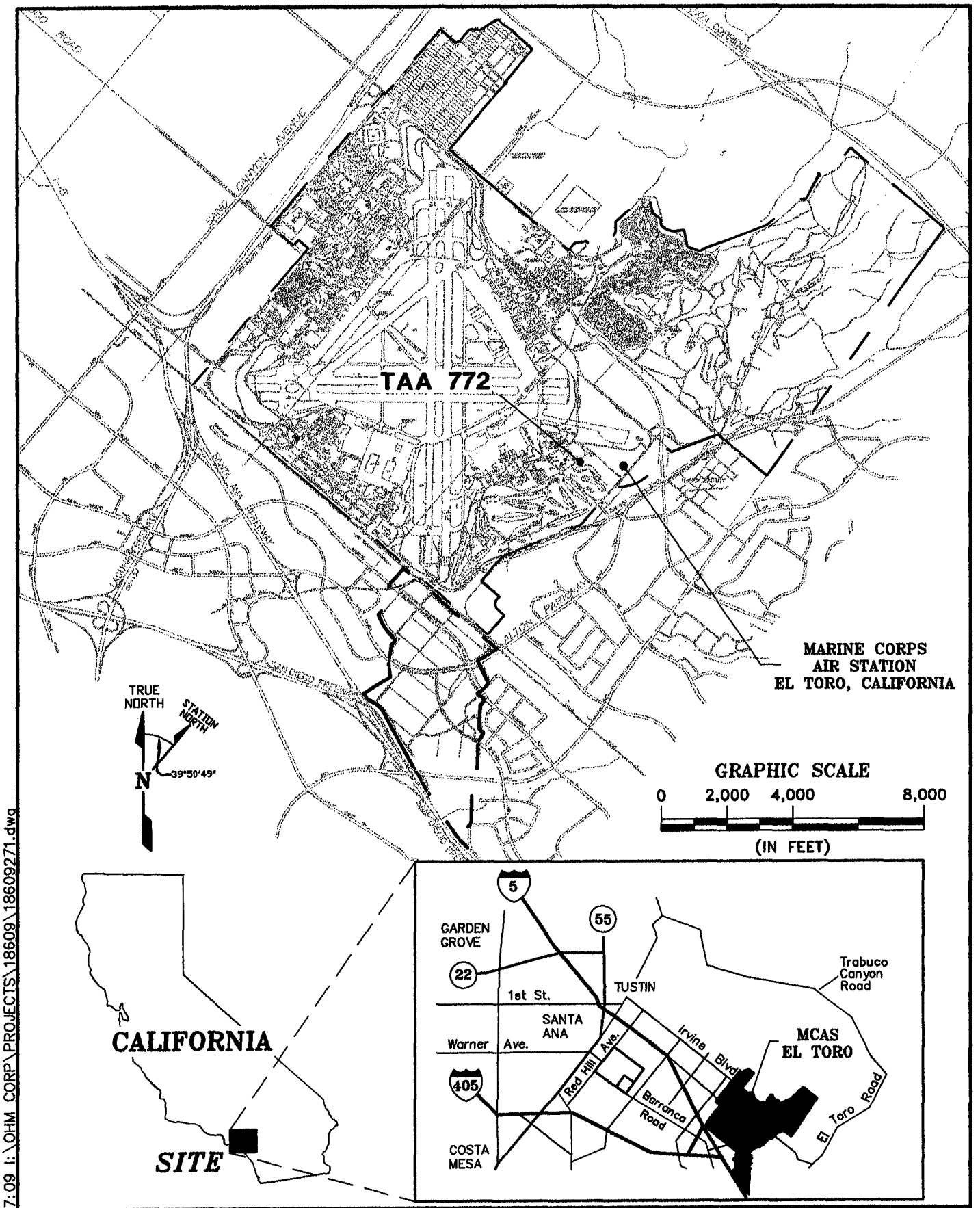
# *Figures*

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| | CHECKED BY DR | DATE 12/16/99 | | | | | |
| | APPROVED BY | DATE | | | | | |
| CONTRACT NAME SWDIV | PROJECT MANAGER W Seeller | DATE 12/17/99 | MARINE CORPS AIR STATION EL TORO, CALIFORNIA | | | | |
| AUTOCAD FILE No. 18609271.DWG | PLOT SCALE 1=1 | SHEET 1 | OF 1 | SCALE 1"=4,000' | DOCUMENT CONTROL No. SW5985 | OHM PROJECT No. 18609 | FIGURE No. FIG 1-1 | REVISION 0 |

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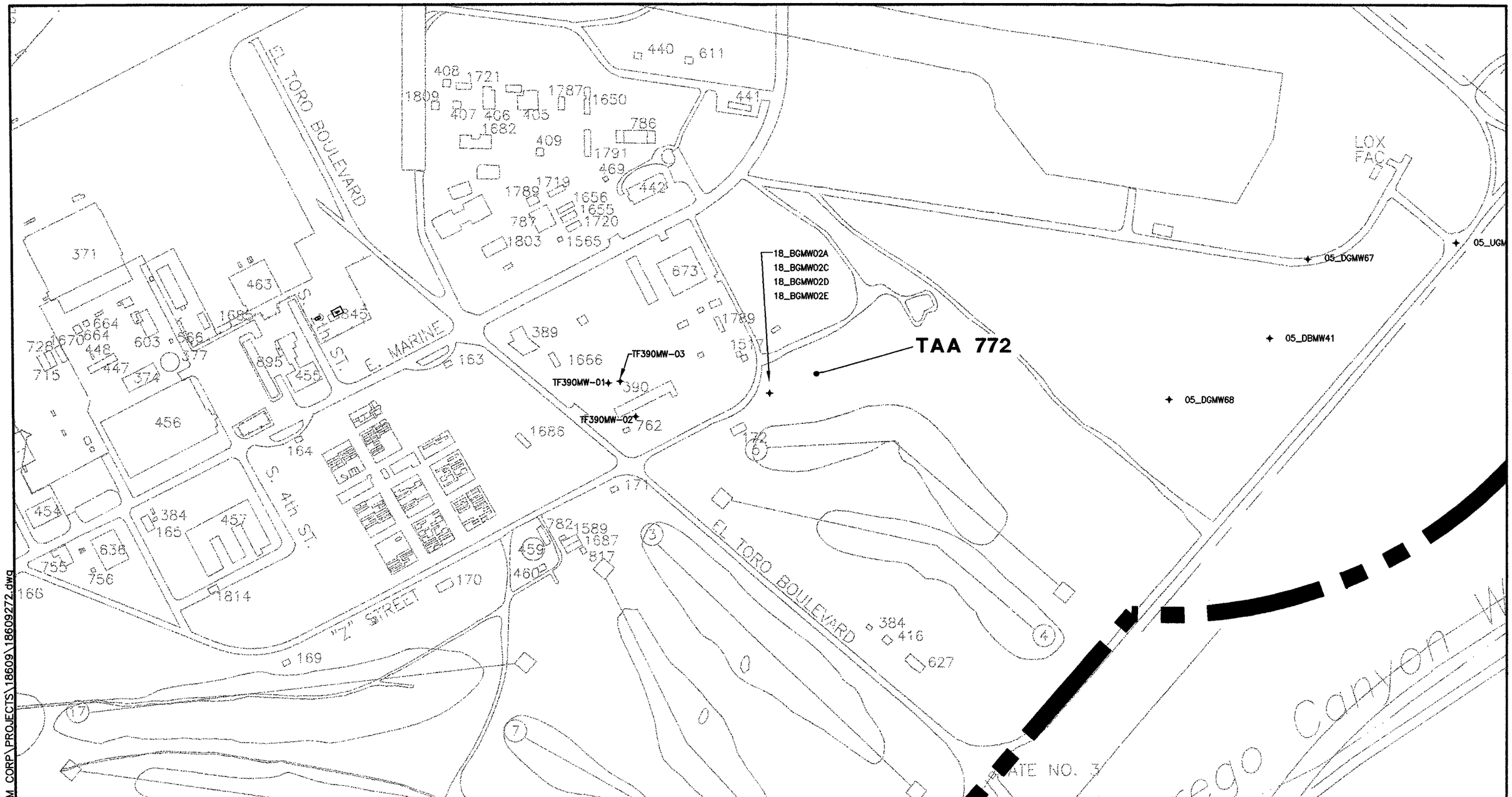



**EXPLANATION:**

- • UNDERGROUND STORAGE TANKS
- ✦ GROUNDWATER MONITORING WELL

TRUE NORTH
STATION NORTH
N
39°50'49"

**GRAPHIC SCALE**

0 150 300 600

(IN FEET)

| REVISIONS | | | |
|---|---|---|---|
| REV. No. | DESCRIPTION | DATE | APPROVED |
| | | | |

| | |
|---|---|
| CONTRACT NAME | SWDIV |
| DRAWN BY | R. PIRMORADIAN — DATE 12/13/99 |
| CHECKED BY | DR — DATE 12/14/99 |
| APPROVED BY | DATE |
| PROJECT MANAGER | DATE 12/17/99 |
| AUTOCAD FILE No. | 18609272.DWG |

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation
IRVINE, CA

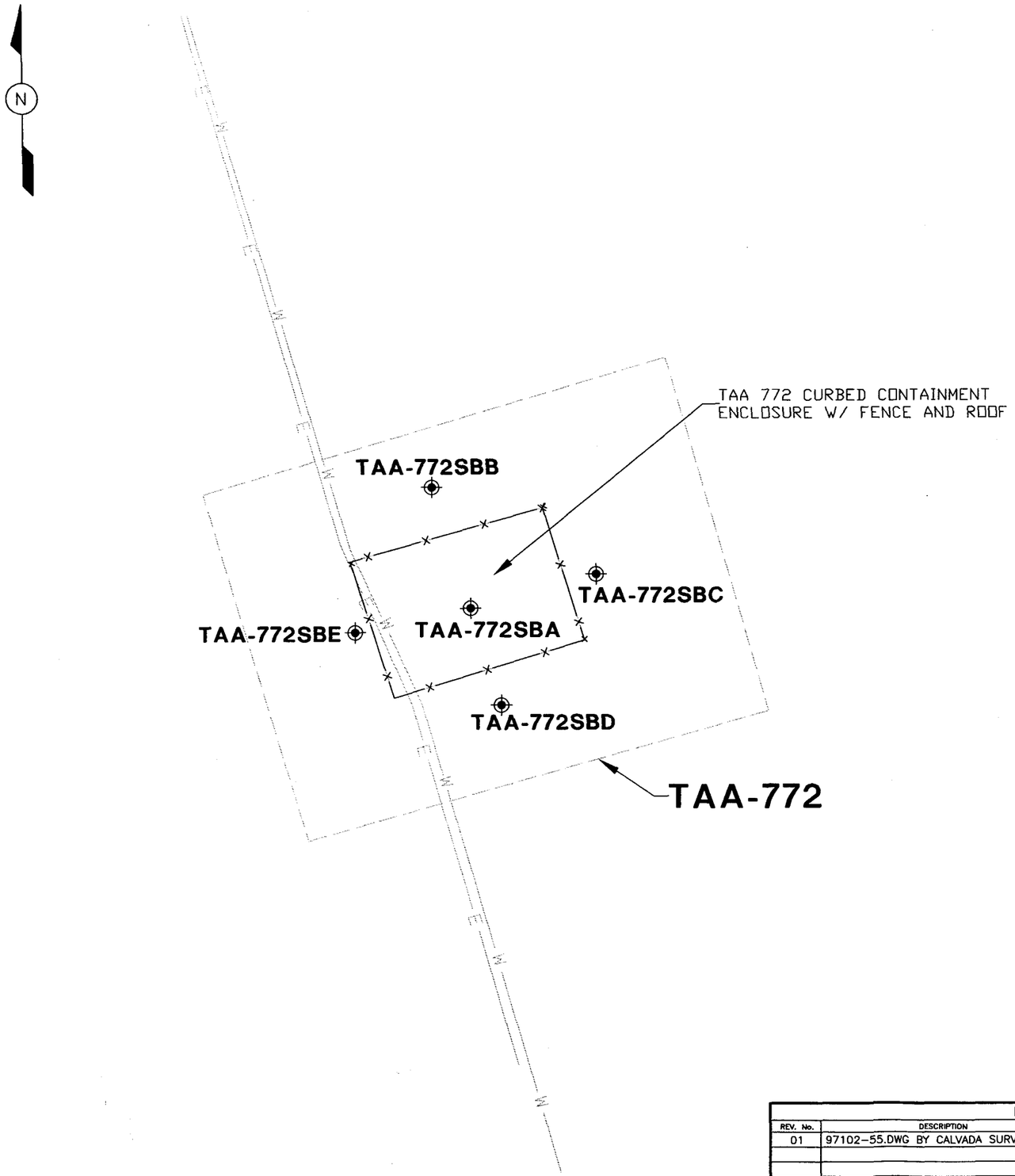
LOCATION MAP
TAA 772

MARINE CORPS AIR STATION
EL TORO, CALIFORNIA

| SCALE | SHEET | OF | DOCUMENT CONTROL No. | OHM PROJECT No. | DRAWING No. |
|---|---|---|---|---|---|
| 1"=300' | 1 | 1 | SW5985 | 18609 | FIG 1-2 |

## SAMPELING LOCATIONS COORDINATES LISTING

| NORTHING | EASTING | ELEV. | SAMPLE # |
|---|---|---|---|
| 2188788.3631 | 6116110.3619 | 393.2 | TAA-772-SBA |
| 2188798.4588 | 6116107.1929 | 393.2 | TAA-772-SBB |
| 2188791.1980 | 6116120.7174 | 393.3 | TAA-772-SBC |
| 2188780.2969 | 6116112.8558 | 393.3 | TAA-772-SBD |
| 2188786.3643 | 6116100.7483 | 393.0 | TAA-772-SBE |




**EXPLANATION:**

SAMPLE LOCATION

CHAINLINK FENCE

FS FINISH SURFACE

DATE OF SURVEY: 10/23/97

GRAPHIC SCALE

0 5 10 20

(IN FEET)

| REVISIONS | | | |
|---|---|---|---|
| REV. No. | DESCRIPTION | DATE | APPROVED |
| 01 | 97102-55.DWG BY CALVADA SURVEYING INC. | 10/23/97 | |

CONTRACT NAME: SWDIV

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation
IRVINE, CA

DRAWN BY: R. PIRMORADIAN DATE: 12/13/99

CHECKED BY: DR DATE: 12/16/99

APPROVED BY: DATE:

PROJECT MANAGER: W Sedlak DATE: 12/17/99

AUTOCAD FILE No.: 18609270.DWG

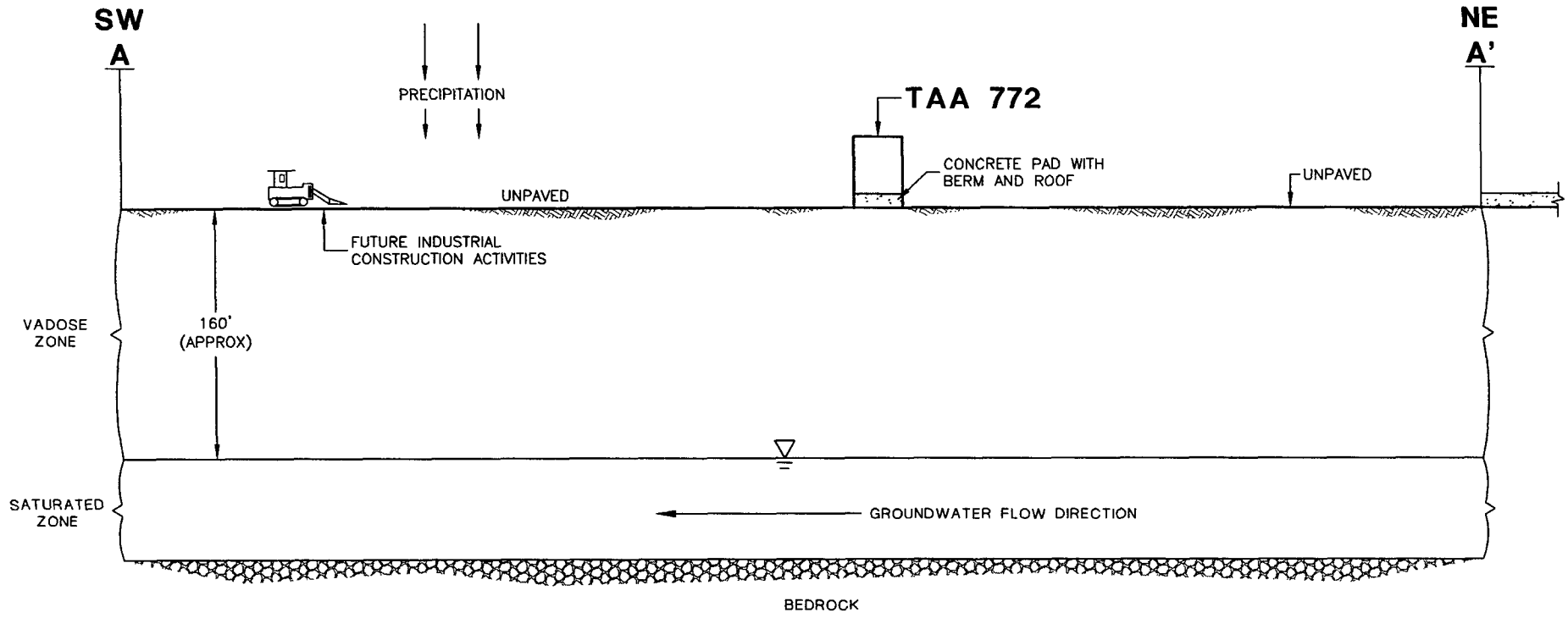
SITE PLAN
TAA 772

MARINE CORPS AIR STATION
EL TORO, CALIFORNIA

| SCALE | SHEET | OF | DOCUMENT CONTROL No. | OHM PROJECT No. | DRAWING No. |
|---|---|---|---|---|---|
| 1"=10' | 1 | 1 | SW5985 | 18609 | FIG 3-1 |

Dec 13, 1999 – 11:50:28 I:\OHM CORP\PROJECTS\18609\18609270.dwg

Dec 16, 1999 – 17:11:19 I:\OHM CORP\PROJECTS\18609\18609282.dwg




**EXPLANATION:**

RECEPTORS:

WORKERS

PATHWAYS:

GROUNDWATER

PRECIPITATION

REFERENCE:
103M2088.DWG

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| OHM Remediation Services Corp. A Subsidiary of OHM Corporation SAN DIEGO, CA | | | DRAWN BY R. PIRMORADIAN | DATE 11/10/99 | CONCEPTUAL SITE MODEL TAA 772 | | |
| | | | CHECKED BY DR | DATE 12/16/99 | | | |
| | | | APPROVED BY | DATE | | | |
| CONTRACT NAME SWDIV | | | PROJECT MANAGER | DATE 12/17/99 | MARINE CORPS AIR STATION EL TORO, CALIFORNIA | | |
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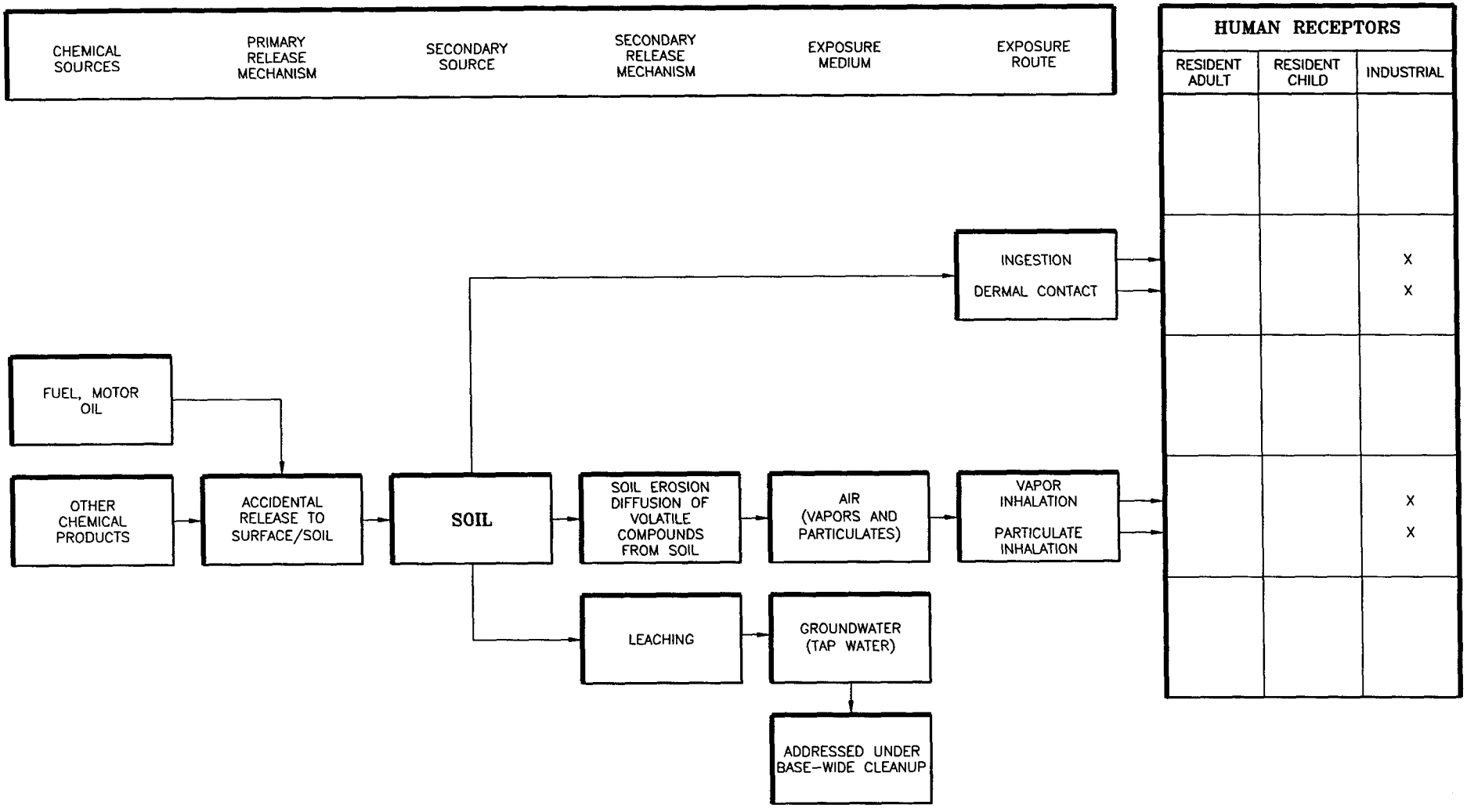


EXPLANATION:

X COMPLETE PATHWAY

REFERENCE:
103C2089.DXF

| | | | | | |
|---|---|---|---|---|---|
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| | CHECKED BY DR | DATE 12/16/99 | | | |
| | APPROVED BY | DATE | | | |
| CONTRACT NAME SWDIV | PROJECT MANAGER | DATE 12/17/99 | MARINE CORPS AIR STATION EL TORO, CALIFORNIA | | |
| AUTOCAD FILE No. 18609283.DWG | PLOT SCALE 1=1 | SHEET 1 | OF 1 | SCALE NONE | DOCUMENT CONTROL No. SW5985 |
| OHM PROJECT No. 18609 | FIGURE No. FIG 5-2 | | | | |

# *Tables*

## Table 4 - 1
## Sample Collection Summary Log — TAA 772

| Field Sample Identification | Sample Location | Sample Depth | Date Sampled | TPH AS GASOLINE | TPH AS DIESEL | TPH AS JP-5 | EPA 8260A | EPA 8270B | EPA 8081 | EPA 6010A | EPA 7060A |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 18609-637 | Trip Blank | - | 10/17/97 | X | | | X | | | | |
| 18609-642 | Equipment Rinsate | - | 10/17/97 | X | X | X | X | X | X | X | X |
| 18609-659 | TAA772-SBB | 1.5 | 10/17/97 | X | X | X | X | X | X | X | X |
| 18609-660 | TAA772-SBB | 3.0 | 10/17/97 | | | | X | | | | |
| 18609-661 | TAA772-SBA | 1.5 | 10/17/97 | X | X | X | X | X | X | X | X |
| 18609-662 | TAA772-SBA | 3.0 | 10/17/97 | | | | X | | | | |
| 18609-663 | TAA772-SBE | 1.5 | 10/17/97 | X | X | X | X | X | X | X | X |
| 18609-664 | TAA772-SBE | 3.0 | 10/17/97 | | | | X | | | | |
| 18609-665 | TAA772-SBD | 1.5 | 10/17/97 | X | X | X | X | X | X | X | X |
| 18609-666 | TAA772-SBD | 3.0 | 10/17/97 | | | | X | | | | |
| 18609-667 | TAA772-SBC | 1.5 | 10/17/97 | X | X | X | X | X | X | X | X |
| 18609-668 | TAA772-SBC | 3.0 | 10/17/97 | | | | X | | | | |
| 18609-965 | Source Blank | - | 08/12/98 | X | X | | X | X | X | X | X |
| 18609-966 | TAA772-Rinse | - | 08/12/98 | X | X | | X | X | X | X | X |

## Table 4 - 1
## Sample Collection Summary Log — TAA 772

| Field Sample Identification | Sample Location | Sample Depth | Date Sampled | EPA 7421 | EPA 7470A | EPA 7471A | EPA 7740 | EPA 9010A | EPA 9045/150.1 |
|---|---|---|---|---|---|---|---|---|---|
| 18609-637 | Trip Blank | - | 10/17/97 | | | | | | |
| 18609-642 | Equipment Rinsate | - | 10/17/97 | X | X | | X | | X |
| 18609-659 | TAA772-SBB | 1.5 | 10/17/97 | X | | X | X | X | X |
| 18609-660 | TAA772-SBB | 3.0 | 10/17/97 | | | | | | |
| 18609-661 | TAA772-SBA | 1.5 | 10/17/97 | X | | X | X | X | X |
| 18609-662 | TAA772-SBA | 3.0 | 10/17/97 | | | | | | |
| 18609-663 | TAA772-SBE | 1.5 | 10/17/97 | X | | X | X | X | X |
| 18609-664 | TAA772-SBE | 3.0 | 10/17/97 | | | | | | |
| 18609-665 | TAA772-SBD | 1.5 | 10/17/97 | X | | X | X | X | X |
| 18609-666 | TAA772-SBD | 3.0 | 10/17/97 | | | | | | |
| 18609-667 | TAA772-SBC | 1.5 | 10/17/97 | X | | X | X | X | X |
| 18609-668 | TAA772-SBC | 3.0 | 10/17/97 | | | | | | |
| 18609-965 | Source Blank | - | 08/12/98 | X | X | | | X | |
| 18609-966 | TAA772-Rinse | - | 08/12/98 | X | X | | | X | |

# Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-661 | 18609-662 | 18609-659 | 18609-660 | 18609-667 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBA | TAA772-SBA | TAA772-SBB | TAA772-SBB | TAA772-SBC |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 |
| | **Unit** | **Background** | **PRG Residential** | **PRG Industrial** | | | | | |
| **CA LUFT 8015M** | | | | | | | | | |
| TPH as Diesel | mg/kg | NE | NE | NE | 11 U | NA | 11 U | NA | 11 U |
| TPH as Gasoline | mg/kg | NE | NE | NE | 11 U | NA | 11 U | NA | 11 U |
| TPH as JP-5 | mg/kg | NE | NE | NE | 11 U | NA | 11 U | NA | 11 U |
| **EPA 8081** | | | | | | | | | |
| 4,4'-DDD | µg/kg | 36.1 | 2400 | 17000 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| 4,4'-DDE | µg/kg | 145 | 1700 | 12000 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| 4,4'-DDT | µg/kg | 236 | 1700 | 12000 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Aldrin | µg/kg | NE | 29 | 150 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| alpha-BHC | µg/kg | NE | 90 | 590 | 0.8 U | NA | 0.77 U | NA | 0.78 U |
| alpha-Chlordane | µg/kg | 2.24 | 1600 | 11000 | 2.3 U B | NA | 2.2 U | NA | 2.2 U |
| Aroclor-1016 | µg/kg | NE | 3900 | 29000 | 38 U | NA | 37 U | NA | 37 U |
| Aroclor-1221 | µg/kg | NE | 220 | 1000 | 38 U | NA | 37 U | NA | 37 U |
| Aroclor-1232 | µg/kg | NE | 220 | 1000 | 38 U | NA | 37 U | NA | 37 U |
| Aroclor-1242 | µg/kg | NE | 220 | 1000 | 38 U | NA | 37 U | NA | 37 U |
| Aroclor-1248 | µg/kg | NE | 220 | 1000 | 38 U | NA | 37 U | NA | 37 U |
| Aroclor-1254 | µg/kg | NE | 220 | 1000 | 38 U | NA | 37 U | NA | 37 U |
| Aroclor-1260 | µg/kg | NE | 220 | 1000 | 38 U | NA | 37 U | NA | 37 U |
| Beta-BHC | µg/kg | NE | 320 | 2100 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Delta-BHC | µg/kg | NE | NE | NE | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Dieldrin | µg/kg | 19.9 | 30 | 150 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Endosulfan I | µg/kg | 0.179 | 370000 | 5300000 | 0.8 U B | NA | 0.77 U B | NA | 0.78 U B |
| Endosulfan II | µg/kg | 2.22 | 370000 | 5300000 | 2.3 U B | NA | 2.2 U | NA | 2.2 U |
| Endosulfan sulfate | µg/kg | 3.1 | NE | NE | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Endrin | µg/kg | 2.22 | 18000 | 260000 | 2.3 U B | NA | 2.2 U | NA | 2.2 U |
| Endrin aldehyde | µg/kg | 2.22 | NE | NE | 2.3 U B | NA | 2.2 U | NA | 2.2 U |
| gamma-BHC | µg/kg | NE | 440 | 2900 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| gamma-Chlordane | µg/kg | 2.7 | 1600 | 11000 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Heptachlor | µg/kg | NE | 110 | 550 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Heptachlor epoxide | µg/kg | NE | 53 | 270 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Methoxychlor | µg/kg | NE | 310000 | 4400000 | 2.3 U | NA | 2.2 U | NA | 2.2 U |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-661 | 18609-662 | 18609-659 | 18609-660 | 18609-667 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBA | TAA772-SBA | TAA772-SBB | TAA772-SBB | TAA772-SBC |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| **EPA 8260A** | | | | | | | | | |
| 1,1,1-Trichloroethane | µg/kg | NE | 770000 | 1400000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| 1,1,2,2-Tetrachloroethane | µg/kg | NE | 380 | 900 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| 1,1,2-Trichloroethane | µg/kg | NE | 840 | 1900 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| 1,1-Dichloroethane | µg/kg | NE | 590000 | 2100000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| 1,1-Dichloroethene | µg/kg | NE | 54 | 120 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| 1,2-Dichloroethane | µg/kg | NE | 350 | 760 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| 1,2-Dichloropropane | µg/kg | NE | 350 | 770 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| 2-Butanone (MEK) | µg/kg | NE | 7300000 | 28000000 | 57 UJ | 54 UJ | 55 UJ | 53 UJ | 55 UJ |
| 2-Chloroethyl vinyl ether | µg/kg | NE | NE | NE | 57 U | 54 U | 55 U | 53 U | 55 U |
| 2-Hexanone | µg/kg | NE | NE | NE | 57 U | 54 U | 55 U | 53 U | 55 U |
| 4-Methyl-2-pentanone (MIBK) | µg/kg | NE | 790000 | 2900000 | 57 U | 54 U | 55 U | 53 U | 55 U |
| Acetone | µg/kg | NE | 1600000 | 6200000 | 57 UJ | 54 UJ | 55 UJ | 53 UJ | 55 UJ |
| Benzene | µg/kg | NE | 670 | 1500 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Bromodichloromethane | µg/kg | NE | 1000 | 2400 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Bromoform | µg/kg | NE | 62000 | 310000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Bromomethane | µg/kg | NE | 3900 | 13000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Carbon disulfide | µg/kg | NE | 360000 | 720000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Carbon tetrachloride | µg/kg | NE | 240 | 530 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Chlorobenzene | µg/kg | NE | 150000 | 540000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Chloroethane | µg/kg | NE | 3000 | 6500 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Chloroform | µg/kg | NE | 240 | 520 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Chloromethane | µg/kg | NE | 1200 | 2700 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| cis-1,2-Dichloroethene | µg/kg | NE | 43000 | 150000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| cis-1,3-Dichloropropene | µg/kg | NE | 82 | 180 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Dibromochloromethane | µg/kg | NE | 1100 | 2700 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Ethylbenzene | µg/kg | NE | 230000 | 230000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Methyl tert-butyl ether (MTBE) | µg/kg | NE | NE | NE | 11 U | 11 U | 11 U | 11 U | 11 U |
| Methylene chloride | µg/kg | NE | 8900 | 21000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Styrene | µg/kg | NE | 1700000 | 1700000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Tetrachloroethene | µg/kg | NE | 5700 | 19000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-661 | 18609-662 | 18609-659 | 18609-660 | 18609-667 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBA | TAA772-SBA | TAA772-SBB | TAA772-SBB | TAA772-SBC |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 |
| | **Unit** | **Background** | **PRG Residential** | **PRG Industrial** | | | | | |
| Toluene | µg/kg | NE | 520000 | 520000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| trans-1,2-Dichloroethene | µg/kg | NE | 63000 | 210000 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| trans-1,3-Dichloropropene | µg/kg | NE | 82 | 180 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Trichloroethene | µg/kg | NE | 2800 | 6100 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Vinyl acetate | µg/kg | NE | 430000 | 1400000 | 11 UJ | 11 UJ | 11 UJ | 11 UJ | 11 UJ |
| Vinyl chloride | µg/kg | NE | 22 | 49 | 5.7 U | 5.4 U | 5.5 U | 5.3 U | 5.5 U |
| Xylenes (total) | µg/kg | NE | 210000 | 210000 | 17 U | 16 U | 17 U | 16 U | 17 U |
| **EPA 8270B** | | | | | | | | | |
| 1,2,4-Trichlorobenzene | µg/kg | NE | 650000 | 3000000 | 380 U | NA | 370 U | NA | 370 U |
| 1,2-Dichlorobenzene | µg/kg | NE | 370000 | 370000 | 380 U | NA | 370 U | NA | 370 U |
| 1,3-Dichlorobenzene | µg/kg | NE | 13000 | 52000 | 380 U | NA | 370 U | NA | 370 U |
| 1,4-Dichlorobenzene | µg/kg | NE | 3400 | 8100 | 380 U | NA | 370 U | NA | 370 U |
| 2,4,5-Trichlorophenol | µg/kg | NE | 6100000 | 88000000 | 380 U | NA | 370 U | NA | 370 U |
| 2,4,6-Trichlorophenol | µg/kg | NE | 44000 | 220000 | 380 U | NA | 370 U | NA | 370 U |
| 2,4-Dichlorophenol | µg/kg | NE | 180000 | 2600000 | 380 U | NA | 370 U | NA | 370 U |
| 2,4-Dimethylphenol | µg/kg | NE | 1200000 | 18000000 | 380 U | NA | 370 U | NA | 370 U |
| 2,4-Dinitrophenol | µg/kg | NE | 120000 | 1800000 | 950 U | NA | 920 U | NA | 920 U |
| 2,4-Dinitrotoluene | µg/kg | NE | 120000 | 1800000 | 380 U | NA | 370 U | NA | 370 U |
| 2,6-Dinitrotoluene | µg/kg | NE | 61000 | 880000 | 380 U | NA | 370 U | NA | 370 U |
| 2-Chloronaphthalene | µg/kg | NE | 4900000 | 27000000 | 380 U | NA | 370 U | NA | 370 U |
| 2-Chlorophenol | µg/kg | NE | 63000 | 240000 | 380 U | NA | 370 U | NA | 370 U |
| 2-Methyl-4,6-dinitrophenol | µg/kg | NE | NE | NE | 950 U | NA | 920 U | NA | 920 U |
| 2-Methylnaphthalene | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| 2-Methylphenol | µg/kg | NE | 3100000 | 44000000 | 380 U | NA | 370 U | NA | 370 U |
| 2-Nitroaniline | µg/kg | NE | 3500 | 50000 | 380 U | NA | 370 U | NA | 370 U |
| 2-Nitrophenol | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| 3,3'-Dichlorobenzidine | µg/kg | NE | 1100 | 5500 | 380 U | NA | 370 U | NA | 370 U |
| 3-Methyl-4-chlorophenol | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| 3-Nitroaniline | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| 4-Bromophenyl phenyl ether | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| 4-Chloroaniline | µg/kg | NE | 240000 | 3500000 | 380 U | NA | 370 U | NA | 370 U |

# Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-661 | 18609-662 | 18609-659 | 18609-660 | 18609-667 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBA | TAA772-SBA | TAA772-SBB | TAA772-SBB | TAA772-SBC |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| 4-Chlorophenyl phenyl ether | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| 4-Methylphenol | µg/kg | NE | 310000 | 4400000 | 380 U | NA | 370 U | NA | 370 U |
| 4-Nitroaniline | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| 4-Nitrophenol | µg/kg | NE | 490000 | 7000000 | 950 U | NA | 920 U | NA | 920 U |
| Acenaphthene | µg/kg | NE | 3700000 | 38000000 | 380 U | NA | 370 U | NA | 370 U |
| Acenaphthylene | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| Anthracene | µg/kg | NE | 22000000 | 100000000 | 380 U | NA | 370 U | NA | 370 U |
| Benzo[a]anthracene | µg/kg | 22 | 620 | 2900 | 380 U B | NA | 370 U B | NA | 370 U B |
| Benzo[a]pyrene | µg/kg | 27 | 62 | 290 | 38 U B | NA | 37 U B | NA | 37 U B |
| Benzo[b]fluoranthene | µg/kg | 28 | 620 | 2900 | 380 U B | NA | 370 U B | NA | 370 U B |
| Benzo[ghi]perylene | µg/kg | 29 | NE | NE | 380 U B | NA | 370 U B | NA | 370 U B |
| Benzo[k]fluoranthene | µg/kg | 24 | 6200 | 29000 | 380 U B | NA | 370 U B | NA | 370 U B |
| Bis (2-chloroethoxy)methane | µg/kg | NE | NE | NE | 380 U | NA | 370 U | NA | 370 U |
| Bis (2-chloroethyl)ether | µg/kg | NE | 210 | 620 | 38 U | NA | 37 U | NA | 37 U |
| Bis (2-chloroisopropyl)ether | µg/kg | NE | 2900 | 8100 | 380 U | NA | 370 U | NA | 370 U |
| Bis (2-ethylhexyl)phthalate | µg/kg | NE | 35000 | 180000 | 380 U | NA | 370 U | NA | 370 U |
| Butyl benzyl phthalate | µg/kg | NE | 12000000 | 100000000 | 380 U | NA | 370 U | NA | 370 U |
| Chrysene | µg/kg | 31 | 6100 | 290000 | 380 U B | NA | 370 U B | NA | 370 U B |
| Di-n-butyl phthalate | µg/kg | NE | 6100000 | 88000000 | 380 U | NA | 370 U | NA | 370 U |
| Di-n-octyl phthalate | µg/kg | NE | 1200000 | 10000000 | 380 U | NA | 370 U | NA | 370 U |
| Dibenz[a,h]anthracene | µg/kg | 8 | 62 | 290 | 38 U B | NA | 37 U B | NA | 37 U B |
| Dibenzofuran | µg/kg | NE | 290000 | 5100000 | 380 U | NA | 370 U | NA | 370 U |
| Diethyl phthalate | µg/kg | NE | 49000000 | 100000000 | 380 U | NA | 370 U | NA | 370 U |
| Dimethyl phthalate | µg/kg | NE | 100000000 | 100000000 | 380 U | NA | 370 U | NA | 370 U |
| Fluoranthene | µg/kg | 45 | 2300000 | 30000000 | 380 U B | NA | 370 U B | NA | 370 U B |
| Fluorene | µg/kg | NE | 2600000 | 33000000 | 380 U | NA | 370 U | NA | 370 U |
| Hexachlorobenzene | µg/kg | NE | 300 | 1500 | 380 U Y1* | NA | 370 U Y1* | NA | 370 U Y1* |
| Hexachlorobutadiene | µg/kg | NE | 6200 | 32000 | 380 U | NA | 370 U | NA | 370 U |
| Hexachlorocyclopentadiene | µg/kg | NE | 420000 | 5900000 | 380 U | NA | 370 U | NA | 370 U |
| Hexachloroethane | µg/kg | NE | 35000 | 180000 | 380 U | NA | 370 U | NA | 370 U |
| Indeno[1,2,3-cd]pyrene | µg/kg | 21 | 620 | 2900 | 380 U B | NA | 370 U B | NA | 370 U B |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-661 | 18609-662 | 18609-659 | 18609-660 | 18609-667 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBA | TAA772-SBA | TAA772-SBB | TAA772-SBB | TAA772-SBC |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| N-Nitrosodi-n-propylamine | µg/kg | NE | 69 | 350 | 38 UJ | NA | 37 UJ | NA | 37 UJ |
| N-Nitrosodiphenylamine | µg/kg | NE | 99000 | 500000 | 380 U | NA | 370 U | NA | 370 U |
| Naphthalene | µg/kg | NE | 56000 | 190000 | 380 U | NA | 370 U | NA | 370 U |
| Nitrobenzene | µg/kg | NE | 20000 | 110000 | 380 U | NA | 370 U | NA | 370 U |
| Pentachlorophenol | µg/kg | NE | 3000 | 11000 | 760 UJ | NA | 730 UJ | NA | 730 UJ |
| Phenanthrene | µg/kg | 18 | NE | NE | 380 U B | NA | 370 U B | NA | 370 U B |
| Phenol | µg/kg | NE | 37000000 | 100000000 | 380 U | NA | 370 U | NA | 370 U |
| Pyrene | µg/kg | 41 | 2300000 | 54000000 | 380 U B | NA | 370 U B | NA | 370 U B |
| **EPA 6010A** | | | | | | | | | |
| Aluminum | mg/kg | 14800 | 76000 | 100000 | 6200 | NA | 10000 | NA | 8100 |
| Antimony | mg/kg | 3.06 | 31 | 820 | 5.7 U B | NA | 22 B | NA | 5.5 U B |
| Barium | mg/kg | 173 | 5400 | 100000 | 110 | NA | 120 | NA | 130 |
| Beryllium | mg/kg | 0.669 | 150 | 2200 | 0.51 | NA | 0.61 | NA | 0.62 |
| Cadmium | mg/kg | 2.35 | 9.0 | 810 | 0.57 U | NA | 0.55 U | NA | 0.55 U |
| Calcium | mg/kg | 46000 | NE | NE | 5100 | NA | 5300 | NA | 5400 |
| Chromium | mg/kg | 26.9 | 210 | 450 | 7.2 | NA | 11 | NA | 8.9 |
| Cobalt | mg/kg | 6.98 | 4700 | 100000 | 6.4 | NA | 6.5 | NA | 6.8 |
| Copper | mg/kg | 10.5 | 2900 | 76000 | 15 B | NA | 40 B | NA | 8.6 |
| Iron | mg/kg | 18400 | 23000 | 100000 | 9700 | NA | 17000 | NA | 12000 |
| Magnesium | mg/kg | 8370 | NE | NE | 4000 | NA | 5500 | NA | 5000 |
| Manganese | mg/kg | 291 | 1800 | 32000 | 230 | NA | 270 | NA | 250 |
| Molybdenum | mg/kg | NE | 390 | 10000 | 2.3 U | NA | 2.2 U | NA | 2.2 U |
| Nickel | mg/kg | 15.3 | 150 | 41000 | 10.0 | NA | 12 | NA | 11.0 |
| Potassium | mg/kg | 4890 | NE | NE | 2300 | NA | 3200 | NA | 2800 |
| Silver | mg/kg | 0.539 | 390 | 10000 | 1.1 U B | NA | 1.1 U B | NA | 1.1 U B |
| Sodium | mg/kg | 405 | NE | NE | 110 | NA | 180 | NA | 170 |
| Thallium | mg/kg | 0.42 | 5.5 | 140 | 5.7 U BY | NA | 5.5 U BY | NA | 5.5 U BY |
| Vanadium | mg/kg | 71.8 | 550 | 14000 | 24 | NA | 34 | NA | 29 |
| Zinc | mg/kg | 77.9 | 23000 | 100000 | 48 J | NA | 67 J | NA | 38 J |
| **EPA 7060A** | | | | | | | | | |
| Arsenic | mg/kg | 6.86 | 0.39 | 2.7 | 2.6 Y | NA | 1.7 Y | NA | 2.5 Y |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-661 | 18609-662 | 18609-659 | 18609-660 | 18609-667 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBA | TAA772-SBA | TAA772-SBB | TAA772-SBB | TAA772-SBC |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 1.5 | 3.0 | 1.5 | 3.0 | 1.5 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| **EPA 7421** | | | | | | | | | |
| Lead | mg/kg | 15.1 | 400 | 1000 | 3.3 | NA | 3.0 | NA | 3.2 |
| **EPA 7471A** | | | | | | | | | |
| Mercury | mg/kg | 0.22 | 23 | 610 | 0.092 U | NA | 0.088 U | NA | 0.089 U |
| **EPA 7740** | | | | | | | | | |
| Selenium | mg/kg | 0.32 | 390 | 10000 | 0.57 U B | NA | 0.55 U B | NA | 0.55 U B |
| **EPA 9010A** | | | | | | | | | |
| Cyanide | mg/kg | NE | 310 | 4400 | 0.57 U | NA | 0.55 U | NA | 0.55 U |
| **EPA 9045** | | | | | | | | | |
| pH | pH units | NE | NE | NE | 7.1 | NA | 6.7 | NA | 6.9 |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-668 | 18609-665 | 18609-666 | 18609-663 | 18609-664 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBC | TAA772-SBD | TAA772-SBD | TAA772-SBE | TAA772-SBE |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| **CA LUFT 8015M** | | | | | | | | | |
| TPH as Diesel | mg/kg | NE | NE | NE | NA | 11 U | NA | 11 U | NA |
| TPH as Gasoline | mg/kg | NE | NE | NE | NA | 11 U | NA | 11 U | NA |
| TPH as JP-5 | mg/kg | NE | NE | NE | NA | 11 U | NA | 11 U | NA |
| **EPA 8081** | | | | | | | | | |
| 4,4'-DDD | µg/kg | 36.1 | 2400 | 17000 | NA | 2.2 U | NA | 2.2 U | NA |
| 4,4'-DDE | µg/kg | 145 | 1700 | 12000 | NA | 2.2 U | NA | 2.2 U | NA |
| 4,4'-DDT | µg/kg | 236 | 1700 | 12000 | NA | 2.2 U | NA | 2.2 U | NA |
| Aldrin | µg/kg | NE | 29 | 150 | NA | 2.2 U | NA | 2.2 U | NA |
| alpha-BHC | µg/kg | NE | 90 | 590 | NA | 0.78 U | NA | 0.77 U | NA |
| alpha-Chlordane | µg/kg | 2.24 | 1600 | 11000 | NA | 2.2 U | NA | 2.2 U | NA |
| Aroclor-1016 | µg/kg | NE | 3900 | 29000 | NA | 37 U | NA | 36 U | NA |
| Aroclor-1221 | µg/kg | NE | 220 | 1000 | NA | 37 U | NA | 36 U | NA |
| Aroclor-1232 | µg/kg | NE | 220 | 1000 | NA | 37 U | NA | 36 U | NA |
| Aroclor-1242 | µg/kg | NE | 220 | 1000 | NA | 37 U | NA | 36 U | NA |
| Aroclor-1248 | µg/kg | NE | 220 | 1000 | NA | 37 U | NA | 36 U | NA |
| Aroclor-1254 | µg/kg | NE | 220 | 1000 | NA | 37 U | NA | 36 U | NA |
| Aroclor-1260 | µg/kg | NE | 220 | 1000 | NA | 37 U | NA | 36 U | NA |
| Beta-BHC | µg/kg | NE | 320 | 2100 | NA | 2.2 U | NA | 2.2 U | NA |
| Delta-BHC | µg/kg | NE | NE | NE | NA | 2.2 U | NA | 2.2 U | NA |
| Dieldrin | µg/kg | 19.9 | 30 | 150 | NA | 2.2 U | NA | 2.2 U | NA |
| Endosulfan I | µg/kg | 0.179 | 370000 | 5300000 | NA | 0.78 U B | NA | 0.77 U B | NA |
| Endosulfan II | µg/kg | 2.22 | 370000 | 5300000 | NA | 2.2 U | NA | 2.2 U | NA |
| Endosulfan sulfate | µg/kg | 3.1 | NE | NE | NA | 2.2 U | NA | 2.2 U | NA |
| Endrin | µg/kg | 2.22 | 18000 | 260000 | NA | 2.2 U | NA | 2.2 U | NA |
| Endrin aldehyde | µg/kg | 2.22 | NE | NE | NA | 2.2 U | NA | 2.2 U | NA |
| gamma-BHC | µg/kg | NE | 440 | 2900 | NA | 2.2 U | NA | 2.2 U | NA |
| gamma-Chlordane | µg/kg | 2.7 | 1600 | 11000 | NA | 2.2 U | NA | 2.2 U | NA |
| Heptachlor | µg/kg | NE | 110 | 550 | NA | 2.2 U | NA | 2.2 U | NA |
| Heptachlor epoxide | µg/kg | NE | 53 | 270 | NA | 2.2 U | NA | 2.2 U | NA |
| Methoxychlor | µg/kg | NE | 310000 | 4400000 | NA | 2.2 U | NA | 2.2 U | NA |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-668 | 18609-665 | 18609-666 | 18609-663 | 18609-664 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBC | TAA772-SBD | TAA772-SBD | TAA772-SBE | TAA772-SBE |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| **EPA 8260A** | | | | | | | | | |
| 1,1,1-Trichloroethane | µg/kg | NE | 770000 | 1400000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| 1,1,2,2-Tetrachloroethane | µg/kg | NE | 380 | 900 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| 1,1,2-Trichloroethane | µg/kg | NE | 840 | 1900 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| 1,1-Dichloroethane | µg/kg | NE | 590000 | 2100000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| 1,1-Dichloroethene | µg/kg | NE | 54 | 120 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| 1,2-Dichloroethane | µg/kg | NE | 350 | 760 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| 1,2-Dichloropropane | µg/kg | NE | 350 | 770 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| 2-Butanone (MEK) | µg/kg | NE | 7300000 | 28000000 | 54 UJ | 56 UJ | 54 UJ | 55 UJ | 54 UJ |
| 2-Chloroethyl vinyl ether | µg/kg | NE | NE | NE | 54 U | 56 U | 54 U | 55 U | 54 U |
| 2-Hexanone | µg/kg | NE | NE | NE | 54 U | 56 U | 54 U | 55 U | 54 U |
| 4-Methyl-2-pentanone (MIBK) | µg/kg | NE | 790000 | 2900000 | 54 U | 56 U | 54 U | 55 U | 54 U |
| Acetone | µg/kg | NE | 1600000 | 6200000 | 54 UJ | 56 UJ | 54 UJ | 55 UJ | 54 UJ |
| Benzene | µg/kg | NE | 670 | 1500 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Bromodichloromethane | µg/kg | NE | 1000 | 2400 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Bromoform | µg/kg | NE | 62000 | 310000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Bromomethane | µg/kg | NE | 3900 | 13000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Carbon disulfide | µg/kg | NE | 360000 | 720000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Carbon tetrachloride | µg/kg | NE | 240 | 530 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Chlorobenzene | µg/kg | NE | 150000 | 540000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Chloroethane | µg/kg | NE | 3000 | 6500 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Chloroform | µg/kg | NE | 240 | 520 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Chloromethane | µg/kg | NE | 1200 | 2700 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| cis-1,2-Dichloroethene | µg/kg | NE | 43000 | 150000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| cis-1,3-Dichloropropene | µg/kg | NE | 82 | 180 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Dibromochloromethane | µg/kg | NE | 1100 | 2700 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Ethylbenzene | µg/kg | NE | 230000 | 230000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Methyl tert-butyl ether (MTBE) | µg/kg | NE | NE | NE | 11 U | 11 U | 11 U | 11 U | 11 U |
| Methylene chloride | µg/kg | NE | 8900 | 21000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Styrene | µg/kg | NE | 1700000 | 1700000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Tetrachloroethene | µg/kg | NE | 5700 | 19000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-668 | 18609-665 | 18609-666 | 18609-663 | 18609-664 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBC | TAA772-SBD | TAA772-SBD | TAA772-SBE | TAA772-SBE |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| Toluene | µg/kg | NE | 520000 | 520000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| trans-1,2-Dichloroethene | µg/kg | NE | 63000 | 210000 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| trans-1,3-Dichloropropene | µg/kg | NE | 82 | 180 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Trichloroethene | µg/kg | NE | 2800 | 6100 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Vinyl acetate | µg/kg | NE | 430000 | 1400000 | 11 UJ | 11 UJ | 11 UJ | 11 UJ | 11 UJ |
| Vinyl chloride | µg/kg | NE | 22 | 49 | 5.4 U | 5.6 U | 5.4 U | 5.5 U | 5.4 U |
| Xylenes (total) | µg/kg | NE | 210000 | 210000 | 16 U | 17 U | 16 U | 17 U | 16 U |
| **EPA 8270B** | | | | | | | | | |
| 1,2,4-Trichlorobenzene | µg/kg | NE | 650000 | 3000000 | NA | 370 U | NA | 360 U | NA |
| 1,2-Dichlorobenzene | µg/kg | NE | 370000 | 370000 | NA | 370 U | NA | 360 U | NA |
| 1,3-Dichlorobenzene | µg/kg | NE | 13000 | 52000 | NA | 370 U | NA | 360 U | NA |
| 1,4-Dichlorobenzene | µg/kg | NE | 3400 | 8100 | NA | 370 U | NA | 360 U | NA |
| 2,4,5-Trichlorophenol | µg/kg | NE | 6100000 | 88000000 | NA | 370 U | NA | 360 U | NA |
| 2,4,6-Trichlorophenol | µg/kg | NE | 44000 | 220000 | NA | 370 U | NA | 360 U | NA |
| 2,4-Dichlorophenol | µg/kg | NE | 180000 | 2600000 | NA | 370 U | NA | 360 U | NA |
| 2,4-Dimethylphenol | µg/kg | NE | 1200000 | 18000000 | NA | 370 U | NA | 360 U | NA |
| 2,4-Dinitrophenol | µg/kg | NE | 120000 | 1800000 | NA | 920 U | NA | 920 U | NA |
| 2,4-Dinitrotoluene | µg/kg | NE | 120000 | 1800000 | NA | 370 U | NA | 360 U | NA |
| 2,6-Dinitrotoluene | µg/kg | NE | 61000 | 880000 | NA | 370 U | NA | 360 U | NA |
| 2-Chloronaphthalene | µg/kg | NE | 4900000 | 27000000 | NA | 370 U | NA | 360 U | NA |
| 2-Chlorophenol | µg/kg | NE | 63000 | 240000 | NA | 370 U | NA | 360 U | NA |
| 2-Methyl-4,6-dinitrophenol | µg/kg | NE | NE | NE | NA | 920 U | NA | 920 U | NA |
| 2-Methylnaphthalene | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| 2-Methylphenol | µg/kg | NE | 3100000 | 44000000 | NA | 370 U | NA | 360 U | NA |
| 2-Nitroaniline | µg/kg | NE | 3500 | 50000 | NA | 370 U | NA | 360 U | NA |
| 2-Nitrophenol | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| 3,3'-Dichlorobenzidine | µg/kg | NE | 1100 | 5500 | NA | 370 U | NA | 360 U | NA |
| 3-Methyl-4-chlorophenol | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| 3-Nitroaniline | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| 4-Bromophenyl phenyl ether | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| 4-Chloroaniline | µg/kg | NE | 240000 | 3500000 | NA | 370 U | NA | 360 U | NA |

# Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-668 | 18609-665 | 18609-666 | 18609-663 | 18609-664 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBC | TAA772-SBD | TAA772-SBD | TAA772-SBE | TAA772-SBE |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 |
| | Unit | Background | PRG Residential | PRG Industrial | | | | | |
| 4-Chlorophenyl phenyl ether | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| 4-Methylphenol | µg/kg | NE | 310000 | 4400000 | NA | 370 U | NA | 360 U | NA |
| 4-Nitroaniline | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| 4-Nitrophenol | µg/kg | NE | 490000 | 7000000 | NA | 920 U | NA | 920 U | NA |
| Acenaphthene | µg/kg | NE | 3700000 | 38000000 | NA | 370 U | NA | 360 U | NA |
| Acenaphthylene | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| Anthracene | µg/kg | NE | 22000000 | 100000000 | NA | 370 U | NA | 360 U | NA |
| Benzo[a]anthracene | µg/kg | 22 | 620 | 2900 | NA | 370 U B | NA | 360 U B | NA |
| Benzo[a]pyrene | µg/kg | 27 | 62 | 290 | NA | 37 U B | NA | 36 U B | NA |
| Benzo[b]fluoranthene | µg/kg | 28 | 620 | 2900 | NA | 370 U B | NA | 360 U B | NA |
| Benzo[ghi]perylene | µg/kg | 29 | NE | NE | NA | 370 U B | NA | 360 U B | NA |
| Benzo[k]fluoranthene | µg/kg | 24 | 6200 | 29000 | NA | 370 U B | NA | 360 U B | NA |
| Bis (2-chloroethoxy)methane | µg/kg | NE | NE | NE | NA | 370 U | NA | 360 U | NA |
| Bis (2-chloroethyl)ether | µg/kg | NE | 210 | 620 | NA | 37 U | NA | 36 U | NA |
| Bis (2-chloroisopropyl)ether | µg/kg | NE | 2900 | 8100 | NA | 370 U | NA | 360 U | NA |
| Bis (2-ethylhexyl)phthalate | µg/kg | NE | 35000 | 180000 | NA | 370 U | NA | 360 U | NA |
| Butyl benzyl phthalate | µg/kg | NE | 12000000 | 100000000 | NA | 370 U | NA | 360 U | NA |
| Chrysene | µg/kg | 31 | 6100 | 290000 | NA | 370 U B | NA | 360 U B | NA |
| Di-n-butyl phthalate | µg/kg | NE | 6100000 | 88000000 | NA | 370 U | NA | 360 U | NA |
| Di-n-octyl phthalate | µg/kg | NE | 1200000 | 10000000 | NA | 370 U | NA | 360 U | NA |
| Dibenz[a,h]anthracene | µg/kg | 8 | 62 | 290 | NA | 37 U B | NA | 36 U B | NA |
| Dibenzofuran | µg/kg | NE | 290000 | 5100000 | NA | 370 U | NA | 360 U | NA |
| Diethyl phthalate | µg/kg | NE | 49000000 | 100000000 | NA | 370 U | NA | 360 U | NA |
| Dimethyl phthalate | µg/kg | NE | 100000000 | 100000000 | NA | 370 U | NA | 360 U | NA |
| Fluoranthene | µg/kg | 45 | 2300000 | 30000000 | NA | 370 U B | NA | 360 U B | NA |
| Fluorene | µg/kg | NE | 2600000 | 33000000 | NA | 370 U | NA | 360 U | NA |
| Hexachlorobenzene | µg/kg | NE | 300 | 1500 | NA | 370 U Y1* | NA | 360 U Y1* | NA |
| Hexachlorobutadiene | µg/kg | NE | 6200 | 32000 | NA | 370 U | NA | 360 U | NA |
| Hexachlorocyclopentadiene | µg/kg | NE | 420000 | 5900000 | NA | 370 U | NA | 360 U | NA |
| Hexachloroethane | µg/kg | NE | 35000 | 180000 | NA | 370 U | NA | 360 U | NA |
| Indeno[1,2,3-cd]pyrene | µg/kg | 21 | 620 | 2900 | NA | 370 U B | NA | 360 U B | NA |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-668 | 18609-665 | 18609-666 | 18609-663 | 18609-664 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBC | TAA772-SBD | TAA772-SBD | TAA772-SBE | TAA772-SBE |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 |
| | **Unit** | **Background** | **PRG Residential** | **PRG Industrial** | | | | | |
| N-Nitrosodi-n-propylamine | µg/kg | NE | 69 | 350 | NA | 37 UJ | NA | 36 UJ | NA |
| N-Nitrosodiphenylamine | µg/kg | NE | 99000 | 500000 | NA | 370 U | NA | 360 U | NA |
| Naphthalene | µg/kg | NE | 56000 | 190000 | NA | 370 U | NA | 360 U | NA |
| Nitrobenzene | µg/kg | NE | 20000 | 110000 | NA | 370 U | NA | 360 U | NA |
| Pentachlorophenol | µg/kg | NE | 3000 | 11000 | NA | 730 UJ | NA | 730 UJ | NA |
| Phenanthrene | µg/kg | 18 | NE | NE | NA | 370 U B | NA | 360 U B | NA |
| Phenol | µg/kg | NE | 37000000 | 100000000 | NA | 370 U | NA | 360 U | NA |
| Pyrene | µg/kg | 41 | 2300000 | 54000000 | NA | 370 U B | NA | 360 U B | NA |
| **EPA 6010A** | | | | | | | | | |
| Aluminum | mg/kg | 14800 | 76000 | 100000 | NA | 8800 | NA | 6100 | NA |
| Antimony | mg/kg | 3.06 | 31 | 820 | NA | 5.6 U B | NA | 5.5 U B | NA |
| Barium | mg/kg | 173 | 5400 | 100000 | NA | 120 | NA | 98 | NA |
| Beryllium | mg/kg | 0.669 | 150 | 2200 | NA | 0.59 | NA | 0.52 | NA |
| Cadmium | mg/kg | 2.35 | 9.0 | 810 | NA | 0.56 U | NA | 0.55 U | NA |
| Calcium | mg/kg | 46000 | NE | NE | NA | 5000 | NA | 5100 | NA |
| Chromium | mg/kg | 26.9 | 210 | 450 | NA | 10.0 | NA | 7.7 | NA |
| Cobalt | mg/kg | 6.98 | 4700 | 100000 | NA | 7.0 B | NA | 6.3 | NA |
| Copper | mg/kg | 10.5 | 2900 | 76000 | NA | 9.1 | NA | 8.2 | NA |
| Iron | mg/kg | 18400 | 23000 | 100000 | NA | 14000 | NA | 9400 | NA |
| Magnesium | mg/kg | 8370 | NE | NE | NA | 4900 | NA | 4000 | NA |
| Manganese | mg/kg | 291 | 1800 | 32000 | NA | 260 | NA | 230 | NA |
| Molybdenum | mg/kg | NE | 390 | 10000 | NA | 2.2 U | NA | 2.2 U | NA |
| Nickel | mg/kg | 15.3 | 150 | 41000 | NA | 11 | NA | 11 | NA |
| Potassium | mg/kg | 4890 | NE | NE | NA | 3000 | NA | 2100 | NA |
| Silver | mg/kg | 0.539 | 390 | 10000 | NA | 1.1 U B | NA | 1.1 U B | NA |
| Sodium | mg/kg | 405 | NE | NE | NA | 140 | NA | 140 | NA |
| Thallium | mg/kg | 0.42 | 5.5 | 140 | NA | 5.6 U BY | NA | 2.3 J B | NA |
| Vanadium | mg/kg | 71.8 | 550 | 14000 | NA | 30 | NA | 23 | NA |
| Zinc | mg/kg | 77.9 | 23000 | 100000 | NA | 40 J | NA | 30 J | NA |
| **EPA 7060A** | | | | | | | | | |
| Arsenic | mg/kg | 6.86 | 0.39 | 2.7 | NA | 2.4 Y | NA | 1.4 Y | NA |

## Table 4 - 2
## Summary of Analytical Results for Confirmation Soil Samples — TAA 772

| OHM Sample Number | | | | | 18609-668 | 18609-665 | 18609-666 | 18609-663 | 18609-664 |
|---|---|---|---|---|---|---|---|---|---|
| Sample Location | | | | | TAA772-SBC | TAA772-SBD | TAA772-SBD | TAA772-SBE | TAA772-SBE |
| Date Collected | | | | | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 | 10/17/97 |
| Sample Depth (feet below ground surface) | | | | | 3.0 | 1.5 | 3.0 | 1.5 | 3.0 |
| | **Unit** | **Background** | **PRG Residential** | **PRG Industrial** | | | | | |
| **EPA 7421** | | | | | | | | | |
| Lead | mg/kg | 15.1 | 400 | 1000 | NA | 2.3 | NA | 2.8 | NA |
| **EPA 7471A** | | | | | | | | | |
| Mercury | mg/kg | 0.22 | 23 | 610 | NA | 0.089 U | NA | 0.088 U | NA |
| **EPA 7740** | | | | | | | | | |
| Selenium | mg/kg | 0.32 | 390 | 10000 | NA | 0.56 U B | NA | 0.55 U B | NA |
| **EPA 9010A** | | | | | | | | | |
| Cyanide | mg/kg | NE | 310 | 4400 | NA | 0.56 U | NA | 0.55 U | NA |
| **EPA 9045** | | | | | | | | | |
| pH | pH units | NE | NE | NE | NA | 6.8 | NA | 7.0 | NA |

# Table 4 - 2
# Summary of Analytical Results for Confirmation Soil Samples — TAA 772

Explanation:
B - result exceeds established background limits
CA LUFT - California Leaking Underground Fuel Tank
EPA - United States Environmental Protection Agency
J - estimated
M - Modified
MDL - method detection limit
mg/kg - milligrams per kilogram
NA - not analyzed
NE - not established
OHM - OHM Remediation Services Corp.
PRG - Preliminary Remediation Goal, EPA Region IX, October 1999
RL - reporting limit
SB - soil boring
TAA - temporary accumulation area
TPH - total petroleum hydrocarbons
U - not detected above or equal to the stated reporting limit
X - result exceeds industrial PRGs
Y - result exceeds residential PRGs
µg/kg - micrograms per kilogram
1 - MDL = 110 ug/kg
* If the analyte had been detected bewteen the MDL and RL the actual value would have been reported and flagged with a "J" qualifier. For the samples in question, the laboratory did not detect analyte concentrations between the MDL and the RL. As a result, the samples are qualified as non-detect ("U").

## Table 4 - 3
## Summary of Analytical Results for QC Samples — TAA 772

| OHM Sample Number | | 18609-637 | 18609-642 |
|---|---|---|---|
| Sample Location | | Trip Blank | Equipment Rinsate |
| Date Collected | | 10/17/97 | 10/17/97 |
| | Unit | | |
| **CA LUFT 8015M** | | | |
| TPH as Diesel | mg/L | NA | 0.5 U |
| TPH as Gasoline | mg/L | 0.1 U | 0.055 J |
| TPH as JP-5 | mg/L | NA | 0.5 U |
| **EPA 8081** | | | |
| 4,4'-DDD | µg/L | NA | 0.03 U |
| 4,4'-DDE | µg/L | NA | 0.03 U |
| 4,4'-DDT | µg/L | NA | 0.05 UJ |
| Aldrin | µg/L | NA | 0.03 UJ |
| alpha-BHC | µg/L | NA | 0.03 U |
| alpha-Chlordane | µg/L | NA | 0.03 U |
| Aroclor-1016 | µg/L | NA | 1 U |
| Aroclor-1221 | µg/L | NA | 1 U |
| Aroclor-1232 | µg/L | NA | 1 U |
| Aroclor-1242 | µg/L | NA | 1 U |
| Aroclor-1248 | µg/L | NA | 1 U |
| Aroclor-1254 | µg/L | NA | 1 U |
| Aroclor-1260 | µg/L | NA | 1 U |
| Beta-BHC | µg/L | NA | 0.03 U |
| Delta-BHC | µg/L | NA | 0.03 U |
| Dieldrin | µg/L | NA | 0.03 UJ |
| Endosulfan I | µg/L | NA | 0.03 U |
| Endosulfan II | µg/L | NA | 0.03 U |
| Endosulfan sulfate | µg/L | NA | 0.05 U |
| Endrin | µg/L | NA | 0.03 UJ |
| Endrin aldehyde | µg/L | NA | 0.03 U |
| gamma-BHC | µg/L | NA | 0.03 UJ |
| gamma-Chlordane | µg/L | NA | 0.03 U |
| Heptachlor | µg/L | NA | 0.03 UJ |
| Heptachlor epoxide | µg/L | NA | 0.03 U |
| Methoxychlor | µg/L | NA | 0.05 U |

## Table 4 - 3
## Summary of Analytical Results for QC Samples — TAA 772

| OHM Sample Number | | 18609-637 | 18609-642 |
|---|---|---|---|
| Sample Location | | Trip Blank | Equipment Rinsate |
| Date Collected | | 10/17/97 | 10/17/97 |
| | Unit | | |
| **EPA 8260A** | | | |
| 1,1,1-Trichloroethane | µg/L | 5 U | 5 U |
| 1,1,2,2-Tetrachloroethane | µg/L | 5 U | 5 U |
| 1,1,2-Trichloroethane | µg/L | 5 U | 5 U |
| 1,1-Dichloroethane | µg/L | 5 U | 5 U |
| 1,1-Dichloroethene | µg/L | 5 U | 5 U |
| 1,2-Dichloroethane | µg/L | 5 U | 5 U |
| 1,2-Dichloropropane | µg/L | 5 U | 5 U |
| 2-Butanone (MEK) | µg/L | 50 UJ | 50 UJ |
| 2-Chloroethyl vinyl ether | µg/L | 50 UJ | 50 UJ |
| 2-Hexanone | µg/L | 50 U | 50 U |
| 4-Methyl-2-pentanone (MIBK) | µg/L | 50 U | 50 U |
| Acetone | µg/L | 50 UJ | 50 UJ |
| Benzene | µg/L | 5 U | 5 U |
| Bromodichloromethane | µg/L | 5 U | 5 U |
| Bromoform | µg/L | 5 U | 5 U |
| Bromomethane | µg/L | 5 U | 5 U |
| Carbon disulfide | µg/L | 5 U | 5 U |
| Carbon tetrachloride | µg/L | 5 U | 5 U |
| Chlorobenzene | µg/L | 5 U | 5 U |
| Chloroethane | µg/L | 5 U | 5 U |
| Chloroform | µg/L | 5 U | 5 U |
| Chloromethane | µg/L | 5 U | 5 U |
| cis-1,2-Dichloroethene | µg/L | 5 U | 5 U |
| cis-1,3-Dichloropropene | µg/L | 5 U | 5 U |
| Dibromochloromethane | µg/L | 5 U | 5 U |
| Ethylbenzene | µg/L | 5 U | 5 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 10 U | 10 U |
| Methylene chloride | µg/L | 5 U | 5 U |
| Styrene | µg/L | 5 U | 5 U |
| Tetrachloroethene | µg/L | 5 U | 5 U |
| Toluene | µg/L | 5 U | 5 U |

## Table 4 - 3
## Summary of Analytical Results for QC Samples — TAA 772

| OHM Sample Number | | 18609-637 | 18609-642 |
|---|---|---|---|
| Sample Location | | Trip Blank | Equipment Rinsate |
| Date Collected | | 10/17/97 | 10/17/97 |
| | Unit | | |
| trans-1,2-Dichloroethene | µg/L | 5 U | 5 U |
| trans-1,3-Dichloropropene | µg/L | 5 U | 5 U |
| Trichloroethene | µg/L | 5 U | 5 U |
| Vinyl acetate | µg/L | 50 UJ | 50 UJ |
| Vinyl chloride | µg/L | 5 U | 5 U |
| Xylenes (total) | µg/L | 15 U | 15 U |
| **EPA 8270B** | | | |
| 1,2,4-Trichlorobenzene | µg/L | NA | 10 U |
| 1,2-Dichlorobenzene | µg/L | NA | 10 U |
| 1,3-Dichlorobenzene | µg/L | NA | 10 U |
| 1,4-Dichlorobenzene | µg/L | NA | 10 U |
| 2,4,5-Trichlorophenol | µg/L | NA | 10 U |
| 2,4,6-Trichlorophenol | µg/L | NA | 10 U |
| 2,4-Dichlorophenol | µg/L | NA | 10 U |
| 2,4-Dimethylphenol | µg/L | NA | 10 U |
| 2,4-Dinitrophenol | µg/L | NA | 25 U |
| 2,4-Dinitrotoluene | µg/L | NA | 10 U |
| 2,6-Dinitrotoluene | µg/L | NA | 10 U |
| 2-Chloronaphthalene | µg/L | NA | 10 U |
| 2-Chlorophenol | µg/L | NA | 10 U |
| 2-Methyl-4,6-dinitrophenol | µg/L | NA | 25 U |
| 2-Methylnaphthalene | µg/L | NA | 10 U |
| 2-Methylphenol | µg/L | NA | 10 U |
| 2-Nitroaniline | µg/L | NA | 10 U |
| 2-Nitrophenol | µg/L | NA | 10 U |
| 3,3'-Dichlorobenzidine | µg/L | NA | 10 U |
| 3-Methyl-4-chlorophenol | µg/L | NA | 10 U |
| 3-Nitroaniline | µg/L | NA | 10 U |
| 4-Bromophenyl phenyl ether | µg/L | NA | 10 U |
| 4-Chloroaniline | µg/L | NA | 10 U |
| 4-Chlorophenyl phenyl ether | µg/L | NA | 10 U |
| 4-Methylphenol | µg/L | NA | 10 U |

## Table 4 - 3
## Summary of Analytical Results for QC Samples — TAA 772

| OHM Sample Number | | 18609-637 | 18609-642 |
|---|---|---|---|
| Sample Location | | Trip Blank | Equipment Rinsate |
| Date Collected | | 10/17/97 | 10/17/97 |
| | Unit | | |
| 4-Nitroaniline | µg/L | NA | 10 U |
| 4-Nitrophenol | µg/L | NA | 25 UJ |
| Acenaphthene | µg/L | NA | 10 U |
| Acenaphthylene | µg/L | NA | 10 U |
| Anthracene | µg/L | NA | 10 U |
| Benzo[a]anthracene | µg/L | NA | 10 U |
| Benzo[a]pyrene | µg/L | NA | 10 U |
| Benzo[b]fluoranthene | µg/L | NA | 10 U |
| Benzo[ghi]perylene | µg/L | NA | 10 U |
| Benzo[k]fluoranthene | µg/L | NA | 10 U |
| Bis (2-chloroethoxy)methane | µg/L | NA | 10 U |
| Bis (2-chloroethyl)ether | µg/L | NA | 10 U |
| Bis (2-chloroisopropyl)ether | µg/L | NA | 10 U |
| Bis (2-ethylhexyl)phthalate | µg/L | NA | 10 U |
| Butyl benzyl phthalate | µg/L | NA | 10 U |
| Chrysene | µg/L | NA | 10 U |
| Di-n-butyl phthalate | µg/L | NA | 10 U |
| Di-n-octyl phthalate | µg/L | NA | 10 U |
| Dibenz[a,h]anthracene | µg/L | NA | 10 U |
| Dibenzofuran | µg/L | NA | 10 U |
| Diethyl phthalate | µg/L | NA | 10 U |
| Dimethyl phthalate | µg/L | NA | 10 U |
| Fluoranthene | µg/L | NA | 10 U |
| Fluorene | µg/L | NA | 10 U |
| Hexachlorobenzene | µg/L | NA | 10 U |
| Hexachlorobutadiene | µg/L | NA | 10 U |
| Hexachlorocyclopentadiene | µg/L | NA | 10 U |
| Hexachloroethane | µg/L | NA | 10 U |
| Indeno[1,2,3-cd]pyrene | µg/L | NA | 10 U |
| N-Nitrosodi-n-propylamine | µg/L | NA | 10 U |
| N-Nitrosodiphenylamine | µg/L | NA | 10 U |
| Naphthalene | µg/L | NA | 10 U |

## Table 4 - 3
## Summary of Analytical Results for QC Samples — TAA 772

| OHM Sample Number | | 18609-637 | 18609-642 |
|---|---|---|---|
| Sample Location | | Trip Blank | Equipment Rinsate |
| Date Collected | | 10/17/97 | 10/17/97 |
| | Unit | | |
| Nitrobenzene | µg/L | NA | 10 U |
| Pentachlorophenol | µg/L | NA | 20 U |
| Phenanthrene | µg/L | NA | 10 U |
| Phenol | µg/L | NA | 10 U |
| Pyrene | µg/L | NA | 10 U |
| **EPA 6010A** | | | |
| Aluminum | µg/L | NA | 500 U |
| Antimony | µg/L | NA | 500 U |
| Barium | µg/L | NA | 1.7 J |
| Beryllium | µg/L | NA | 10 U |
| Cadmium | µg/L | NA | 5 U |
| Calcium | µg/L | NA | 310 J |
| Chromium | µg/L | NA | 50 U |
| Cobalt | µg/L | NA | 50 U |
| Copper | µg/L | NA | 50 U |
| Iron | µg/L | NA | 29 J |
| Magnesium | µg/L | NA | 83 J |
| Manganese | µg/L | NA | 20 U |
| Molybdenum | µg/L | NA | 100 U |
| Nickel | µg/L | NA | 150 U |
| Potassium | µg/L | NA | 5000 U |
| Silver | µg/L | NA | 50 U |
| Sodium | µg/L | NA | 330 J |
| Thallium | µg/L | NA | 400 U |
| Vanadium | µg/L | NA | 100 U |
| Zinc | µg/L | NA | 20 U |
| **EPA 7060A** | | | |
| Arsenic | µg/L | NA | 5 U |
| **EPA 7421** | | | |
| Lead | µg/L | NA | 5 U |

## Table 4 - 3
## Summary of Analytical Results for QC Samples — TAA 772

| OHM Sample Number | | 18609-637 | 18609-642 |
|---|---|---|---|
| Sample Location | | Trip Blank | Equipment Rinsate |
| Date Collected | | 10/17/97 | 10/17/97 |
| | Unit | | |
| **EPA 7470A** | | | |
| Mercury | µg/L | NA | 0.2 U |
| **EPA 7740** | | | |
| Selenium | µg/L | NA | 5 UJ |
| **EPA 150.1** | | | |
| pH | pH units | NA | 6.9 |

Explanation:
CA LUFT - California Leaking Underground Fuel Tank
EPA - United States Environmental Protection Agency
J - estimated
M - Modified
mg/L - milligrams per liter
NA - not analyzed
OHM - OHM Remediation Services Corp.
TAA - temporary accumulation area
TPH - total petroleum hydrocarbons
U - not detected above or equal to the stated reporting limit
µg/L - micrograms per liter

## Table 4 - 4
## Summary of Analytical Results for Rinse Water Samples — TAA 772

| OHM Sample Number | | 18609-965 | 18609-966 |
|---|---|---|---|
| Sample Location | | Source Blank | TAA772-Rinse |
| Date Collected | | 08/12/98 | 08/12/98 |
| | Unit | | |
| **CA LUFT 8015M** | | | |
| TPH as Diesel | mg/L | .1 U | .1 U |
| TPH as Gasoline | mg/L | .1 U | .1 U |
| TPH as JP-5 | mg/L | NA | NA |
| **EPA 8081** | | | |
| 4,4'-DDD | µg/L | .5 UJ | .5 UJ |
| 4,4'-DDE | µg/L | .58 UJ | .58 UJ |
| 4,4'-DDT | µg/L | .1 UJ | .1 UJ |
| Aldrin | µg/L | .06 UJ | .06 UJ |
| alpha-BHC | µg/L | .03 UJ | .03 UJ |
| alpha-Chlordane | µg/L | .03 UJ | .03 UJ |
| Aroclor-1016 | µg/L | 1 UJ | 1 UJ |
| Aroclor-1221 | µg/L | 2 UJ | 2 UJ |
| Aroclor-1232 | µg/L | 1 UJ | 1 UJ |
| Aroclor-1242 | µg/L | 1 UJ | 1 UJ |
| Aroclor-1248 | µg/L | 1 UJ | 1 UJ |
| Aroclor-1254 | µg/L | 1 UJ | 1 UJ |
| Aroclor-1260 | µg/L | 1 UJ | 1 UJ |
| Beta-BHC | µg/L | .03 UJ | .03 UJ |
| Delta-BHC | µg/L | .03 UJ | .03 UJ |
| Dieldrin | µg/L | .03 UJ | .03 UJ |
| Endosulfan I | µg/L | .03 UJ | .03 UJ |
| Endosulfan II | µg/L | .2 UJ | .1 UJ |
| Endosulfan sulfate | µg/L | .1 UJ | .2 UJ |
| Endrin | µg/L | .1 UJ | .1 UJ |
| Endrin aldehyde | µg/L | .1 UJ | .1 UJ |
| Endrin ketone | µg/L | .1 UJ | .1 UJ |
| gamma-BHC | µg/L | .06 UJ | .06 UJ |
| gamma-Chlordane | µg/L | .03 UJ | .03 UJ |
| Heptachlor | µg/L | .03 UJ | .03 UJ |
| Heptachlor epoxide | µg/L | .03 UJ | .03 UJ |
| Methoxychlor | µg/L | .5 UJ | .5 UJ |
| Toxaphene | µg/L | 5 UJ | 5 UJ |

## Table 4 - 4
## Summary of Analytical Results for Rinse Water Samples — TAA 772

| OHM Sample Number | | 18609-965 | 18609-966 |
|---|---|---|---|
| Sample Location | | Source Blank | TAA772-Rinse |
| Date Collected | | 08/12/98 | 08/12/98 |
| | Unit | | |
| **EPA 8260A** | | | |
| 1,1,1-Trichloroethane | µg/L | 5 U | 5 U |
| 1,1,2,2-Tetrachloroethane | µg/L | 5 U | 5 U |
| 1,1,2-Trichloroethane | µg/L | 5 U | 5 U |
| 1,1-Dichloroethane | µg/L | 5 U | 5 U |
| 1,1-Dichloroethene | µg/L | 5 U | 5 U |
| 1,2-Dichloroethane | µg/L | 5 U | 5 U |
| 1,2-Dichloropropane | µg/L | 5 U | 5 U |
| 2-Butanone (MEK) | µg/L | 50 U | 50 U |
| 2-Chloroethyl vinyl ether | µg/L | 50 U | 50 U |
| 2-Hexanone | µg/L | 50 U | 50 U |
| 4-Methyl-2-pentanone (MIBK) | µg/L | 50 U | 50 U |
| Acetone | µg/L | 50 U | 50 U |
| Benzene | µg/L | 5 U | 5 U |
| Bromodichloromethane | µg/L | 11.3 | 6.72 |
| Bromoform | µg/L | 5 U | 5 U |
| Bromomethane | µg/L | 5 U | 5 U |
| Carbon disulfide | µg/L | 5 U | 5 U |
| Carbon tetrachloride | µg/L | 5 U | 5 U |
| Chlorobenzene | µg/L | 5 U | 5 U |
| Chloroethane | µg/L | 5 U | 5 U |
| Chloroform | µg/L | 14.2 | 7.78 |
| Chloromethane | µg/L | 5 U | 5 U |
| cis-1,2-Dichloroethene | µg/L | 5 U | 5 U |
| cis-1,3-Dichloropropene | µg/L | 5 U | 5 U |
| Dibromochloromethane | µg/L | 6.71 | 4.31 J |
| Ethylbenzene | µg/L | 5 U | 5 U |
| Methyl tert-butyl ether (MTBE) | µg/L | 24.4 | 10 U |
| Methylene chloride | µg/L | 2.27 J | 2.36 J |
| Styrene | µg/L | 5 U | 5 U |
| Tetrachloroethene | µg/L | 5 U | 5 U |
| Toluene | µg/L | 5 U | 5 U |
| trans-1,2-Dichloroethene | µg/L | 5 U | 5 U |

## Table 4 - 4
## Summary of Analytical Results for Rinse Water Samples — TAA 772

| OHM Sample Number | | 18609-965 | 18609-966 |
|---|---|---|---|
| Sample Location | | Source Blank | TAA772-Rinse |
| Date Collected | | 08/12/98 | 08/12/98 |
| | Unit | | |
| trans-1,3-Dichloropropene | µg/L | 5 U | 5 U |
| Trichloroethene | µg/L | 5 U | 5 U |
| Vinyl acetate | µg/L | 50 U | 50 U |
| Vinyl chloride | µg/L | 5 U | 5 U |
| Xylenes (total) | µg/L | 5 U | 5 U |
| **EPA 8270B** | | | |
| 1,2,4-Trichlorobenzene | µg/L | 10 U | 10 U |
| 1,2-Dichlorobenzene | µg/L | 10 U | 10 U |
| 1,3-Dichlorobenzene | µg/L | 10 U | 10 U |
| 1,4-Dichlorobenzene | µg/L | 10 U | 10 U |
| 2,4,5-Trichlorophenol | µg/L | 25 U | 25 U |
| 2,4,6-Trichlorophenol | µg/L | 10 U | 10 U |
| 2,4-Dichlorophenol | µg/L | 10 U | 10 U |
| 2,4-Dimethylphenol | µg/L | 10 U | 10 U |
| 2,4-Dinitrophenol | µg/L | 25 U | 25 U |
| 2,4-Dinitrotoluene | µg/L | 10 U | 10 U |
| 2,6-Dinitrotoluene | µg/L | 10 U | 10 U |
| 2-Chloronaphthalene | µg/L | 10 U | 10 U |
| 2-Chlorophenol | µg/L | 10 U | 10 U |
| 2-Methyl-4,6-dinitrophenol | µg/L | 25 U | 25 U |
| 2-Methylnaphthalene | µg/L | 10 U | 10 U |
| 2-Methylphenol | µg/L | 10 U | 10 U |
| 2-Nitroaniline | µg/L | 25 U | 25 U |
| 2-Nitrophenol | µg/L | 10 U | 10 U |
| 3,3'-Dichlorobenzidine | µg/L | 10 U | 10 U |
| 3-Methyl-4-chlorophenol | µg/L | 10 U | 10 U |
| 3-Nitroaniline | µg/L | 25 U | 25 U |
| 4-Bromophenyl phenyl ether | µg/L | 10 U | 10 U |
| 4-Chloroaniline | µg/L | 10 U | 10 U |
| 4-Chlorophenyl phenyl ether | µg/L | 10 U | 10 U |
| 4-Methylphenol | µg/L | 10 U | 10 U |
| 4-Nitroaniline | µg/L | 25 U | 25 U |
| 4-Nitrophenol | µg/L | 25 U | 25 U |

## Table 4 - 4
## Summary of Analytical Results for Rinse Water Samples — TAA 772

| **OHM Sample Number** | | 18609-965 | 18609-966 |
|---|---|---|---|
| **Sample Location** | | Source Blank | TAA772-Rinse |
| **Date Collected** | | 08/12/98 | 08/12/98 |
| | **Unit** | | |
| Acenaphthene | µg/L | 10 U | 10 U |
| Acenaphthylene | µg/L | 10 U | 10 U |
| Anthracene | µg/L | 10 U | 10 U |
| Benzo[a]anthracene | µg/L | 10 U | 10 U |
| Benzo[a]pyrene | µg/L | 10 U | 10 U |
| Benzo[b]fluoranthene | µg/L | 10 U | 10 U |
| Benzo[ghi]perylene | µg/L | 10 U | 10 U |
| Benzo[k]fluoranthene | µg/L | 10 U | 10 U |
| Bis (2-chloroethoxy)methane | µg/L | 10 U | 10 U |
| Bis (2-chloroethyl)ether | µg/L | 10 U | 10 U |
| Bis (2-chloroisopropyl)ether | µg/L | 10 U | 10 U |
| Bis (2-ethylhexyl)phthalate | µg/L | 10 U | 10 U |
| Butyl benzyl phthalate | µg/L | 10 U | 10 U |
| Chrysene | µg/L | 10 U | 10 U |
| Di-n-butyl phthalate | µg/L | 10 U | 10 U |
| Di-n-octyl phthalate | µg/L | 10 U | 10 U |
| Dibenz[a,h]anthracene | µg/L | 10 U | 10 U |
| Dibenzofuran | µg/L | 10 U | 10 U |
| Diethyl phthalate | µg/L | 10 U | 10 U |
| Dimethyl phthalate | µg/L | 10 U | 10 U |
| Fluoranthene | µg/L | 10 U | 10 U |
| Fluorene | µg/L | 10 U | 10 U |
| Hexachlorobenzene | µg/L | 10 U | 10 U |
| Hexachlorobutadiene | µg/L | 10 U | 10 U |
| Hexachlorocyclopentadiene | µg/L | 10 U | 10 U |
| Hexachloroethane | µg/L | 10 U | 10 U |
| Indeno[1,2,3-cd]pyrene | µg/L | 10 U | 10 U |
| N-Nitrosodi-n-propylamine | µg/L | 10 U | 10 U |
| N-Nitrosodiphenylamine | µg/L | 10 U | 10 U |
| Naphthalene | µg/L | 10 U | 10 U |
| Nitrobenzene | µg/L | 10 U | 10 U |
| Pentachlorophenol | µg/L | 10 U | 10 U |
| Phenanthrene | µg/L | 10 U | 10 U |

## Table 4 - 4
## Summary of Analytical Results for Rinse Water Samples — TAA 772

| OHM Sample Number | | 18609-965 | 18609-966 |
|---|---|---|---|
| Sample Location | | Source Blank | TAA772-Rinse |
| Date Collected | | 08/12/98 | 08/12/98 |
| | Unit | | |
| Phenol | µg/L | 10 U | 10 U |
| Pyrene | µg/L | 10 U | 10 U |
| **EPA 6010A** | | | |
| Aluminum | µg/L | 500 U | 500 U |
| Antimony | µg/L | 500 U | 500 U |
| Arsenic | µg/L | 5 U | 5 U |
| Barium | µg/L | 100 U | 100 U |
| Beryllium | µg/L | 10 U | 10 U |
| Cadmium | µg/L | 5 U | 5 U |
| Calcium | µg/L | 30200 | 30400 |
| Chromium | µg/L | 50 U | 50 U |
| Cobalt | µg/L | 50 U | 50 U |
| Copper | µg/L | 50 U | 50 U |
| Iron | µg/L | 50 U | 50 U |
| Lead | µg/L | 5 U | 5 U |
| Magnesium | µg/L | 7450 | 7030 |
| Manganese | µg/L | 20 U | 20 U |
| Molybdenum | µg/L | 100 U | 100 U |
| Nickel | µg/L | 150 U | 150 U |
| Potassium | µg/L | 5000 U | 5000 U |
| Selenium | µg/L | 5 U | 5 U |
| Silver | µg/L | 50 U | 50 U |
| Sodium | µg/L | 57000 | 56600 |
| Thallium | µg/L | 50 U | 50 U |
| Vanadium | µg/L | 100 U | 100 U |
| Zinc | µg/L | 41.5 | 38.6 |
| **EPA 7470A** | | | |
| Mercury | µg/L | .2 U | .2 U |

## Table 4 - 4
## Summary of Analytical Results for Rinse Water Samples — TAA 772

| **OHM Sample Number** | | 18609-965 | 18609-966 |
|---|---|---|---|
| **Sample Location** | | Source Blank | TAA772-Rinse |
| **Date Collected** | | 08/12/98 | 08/12/98 |
| | **Unit** | | |
| **EPA 9010** | | | |
| Cyanide | mg/L | .01 U | .01 U |
| **EPA 150.1** | | | |
| pH | pH units | 7.90 | 6.61 |

Explanation:

CA LUFT - California Leaking Underground Fuel Tank
EPA - United States Environmental Protection Agency
J - estimated
M - Modified
mg/L - milligrams per liter
NA - not analyzed
OHM - OHM Remediation Services Corp.
TAA - temporary accumulation area
TPH - total petroleum hydrocarbons
U - not detected above or equal to the stated reporting limit
µg/L - micrograms per liter

# Table 5-1
## Residential Risk Screening Worksheet for Soil - TAA 772

| Detected Chemical | Maximum TAA 772 Soil Concentration (mg/kg) | MCAS El Toro Background Concentration[A] (mg/kg) | CANCER | | | NON-CANCER | | |
|---|---|---|---|---|---|---|---|---|
| | | | Residential PRG[B] (mg/kg) | TAA 772 Maximum Ratio[C] | MCAS El Toro Background Ratio[D] | Residential PRG[E] (mg/kg) | TAA 772 Maximum Ratio[F] | MCAS El Toro Background Ratio[F] |
| METALS | | | | | | | | |
| Aluminum | 10,000 | 14,800 | NE | NE | NE | 7.5E+04 | NE | NE |
| Antimony | 22 | 3.1 | NE | NE | NE | 3.0E+01 | 7.33E-01 | 1.02E-01 |
| Arsenic | 2.6 | 6.86 | 3.9E-01 | 6.67E+00 | 6.67E+00 | 2.1E+01 | NE | NE |
| Barium | 130 | 173 | NE | NE | NE | 5.3E+03 | NE | NE |
| Beryllium | 0.62 | 0.669 | NE | NE | NE | 1.5E+02 | NE | NE |
| Chromium | 11 | 26.9 | 2.1E+02 | 5.24E-02 | 5.24E-02 | NE | NE | NE |
| Cobalt | 7 | 6.98 | NE | NE | NE | 3.3E+03 | 2.12E-03 | 2.12E-03 |
| Copper | 40 | 10.5 | NE | NE | NE | 2.8E+03 | 1.43E-02 | 3.75E-03 |
| Lead | 3.3 | 15.1 | NE | NE | NE | 4.0E+02 | NE | NE |
| Manganese | 270 | 291 | NE | NE | NE | 3.1E+03 | NE | NE |
| Nickel | 12 | 15.3 | NE | NE | NE | 1.5E+03 | NE | NE |
| Thallium | 2.3 | 0.42 | NE | NE | NE | 5.2E+00 | 4.42E-01 | 8.08E-02 |
| Vanadium | 34 | 71.8 | NE | NE | NE | 5.2E+02 | NE | NE |
| Zinc | 67 | 77.9 | NE | NE | NE | 2.2E+04 | NE | NE |
| Subtotal sum of ratios | | | | 6.72E+00 | 6.72E+00 | | 1.19E+00 | 1.89E-01 |
| **MCAS EL TORO BACKGROUND RISK RATIOS** | | | **CANCER RISK** | | **6.72E-06** | **NON-CANCER HAZARD INDEX** | | **1.89E-01** |
| **TAA 772 SUMMED RISK** | | | **CANCER RISK** | **6.72E-06** | | **NON-CANCER HAZARD INDEX** | **1.19E+00** | |
| **TAA 772 RISK LESS BACKGROUND RISK (NET RISK)** | | | **NET CANCER RISK** | **$<1x10^{-6}$** | | | | |

[A] MCAS El Toro Background upper threshold limit concentrations from Final Technical Memorandum Background and Reference Levels, Bechtel National, Inc. 1996b.

[B] Residential soil PRG for cancer from the EPA Region 9, October 1, 1999 list.

[C] The Ratio is determined by dividing the Concentration by the respective PRG.

[D] Where the background concentration exceeds the maximum concentration the background ratio was defaulted to the maximum ratio.

[E] Residential soil PRG for non-cancer from the EPA Region 9, October 1, 1999 list.

[F] The Ratio is determined by dividing the Concentration by the respective PRG. No ratios were calculated for chemicals detected below background levels.

mg/kg - Milligrams per kilogram.

NE - Not established/No entry.

PRG - Preliminary remediation goal.

# Table 5-2
# Industrial Risk Screening Worksheet for Soil - TAA 772

| Detected Chemical | Maximum TAA 772 Soil Concentration (mg/kg) | MCAS El Toro Background Concentration[A] (mg/kg) | CANCER | | | NON-CANCER | | |
|---|---|---|---|---|---|---|---|---|
| | | | Industrial PRG[B] (mg/kg) | TAA 772 Maximum Ratio[C] | MCAS El Toro Background Ratio[D] | Industrial PRG[E] (mg/kg) | TAA 772 Maximum Ratio[F] | MCAS El Toro Background Ratio[F] |
| **METALS** | | | | | | | | |
| Aluminum | 10,000 | 14,800 | NE | NE | NE | 1.0E+05 | NE | NE |
| Antimony | 22 | 3.1 | NE | NE | NE | 8.2E+02 | 2.68E-02 | 3.73E-03 |
| Arsenic | 2.6 | 6.86 | 2.7E+00 | 9.63E-01 | 9.63E-01 | 4.8E+02 | NE | NE |
| Barium | 130 | 173 | NE | NE | NE | 1.0E+05 | NE | NE |
| Beryllium | 0.62 | 0.669 | NE | NE | NE | 3.4E+03 | NE | NE |
| Chromium | 11 | 26.9 | 4.5E+02 | 2.44E-02 | 2.44E-02 | NE | NE | NE |
| Cobalt | 7 | 6.98 | NE | NE | NE | 2.9E+04 | 2.41E-04 | 2.41E-04 |
| Copper | 40 | 10.5 | NE | NE | NE | 7.0E+04 | 5.71E-04 | 1.50E-04 |
| Lead | 3.3 | 15.1 | NE | NE | NE | 1.0E+03 | NE | NE |
| Manganese | 270 | 291 | NE | NE | NE | 4.5E+04 | NE | NE |
| Nickel | 12 | 15.3 | NE | NE | NE | 3.7E+04 | NE | NE |
| Thallium | 2.3 | 0.42 | NE | NE | NE | 1.3E+02 | 1.77E-02 | 3.23E-03 |
| Vanadium | 34 | 71.8 | NE | NE | NE | 1.3E+04 | NE | NE |
| Zinc | 67 | 77.9 | NE | NE | NE | 1.0E+05 | NE | NE |
| Subtotal sum of ratios | | | | 9.63E-01 | 9.63E-01 | | 4.53E-02 | 7.35E-03 |
| **MCAS EL TORO BACKGROUND RISK RATIOS** | | | **CANCER RISK** | | **9.63E-07** | **NON-CANCER HAZARD INDEX** | | **7.35E-03** |
| **TAA 772 RISK RATIOS** | | | **CANCER RISK** | **9.63E-07** | | **NON-CANCER HAZARD INDEX** | **4.53E-02** | |
| **TAA 772 RISK LESS BACKGROUND RISK (NET RISK)** | | | **NET CANCER RISK** | **$<1x10^{-6}$** | | | | |

[A] MCAS El Toro Background upper threshold limit concentrations from Final Technical Memorandum Background and Reference Levels, Bechtel National, Inc. 1996b.

[B] Industrial soil PRG for cancer from the EPA Region 9, October 1, 1999 list

[C] The Ratio is determined by dividing the Concentration by the respective PRG.

[D] Where the background concentration exceeds the maximum concentration the background ratio was defaulted to the maximum ratio.

[E] Industrial soil PRG for non-cancer from the EPA Region 9, October 1, 1999 list.

[F] The Ratio is determined by dividing the Concentration by the respective PRG. No ratios were calculated for chemicals detected below background levels.

mg/kg - Milligrams per kilogram.

NE - Not established/No entry.

PRG - Preliminary remediation goal.

# *Appendix A*
# *JEG RFA Background Information*

# MARINE CORPS AIR STATION EL TORO
# EL TORO, CALIFORNIA
## INSTALLATION RESTORATION PROGRAM
## FINAL RESOURCE CONSERVATION AND RECOVERY ACT (RCRA) FACILITY ASSESSMENT REPORT


**PREPARED BY:**
Southwest Division, Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, California 92132-5190

**THROUGH:**
CONTRACT #N68711-89-D-9296
CTO #193
DOCUMENT CONTROL NO:
CLE-C01-01F193-S2-0001

**WITH:**
Jacobs Engineering Group, Inc.
3655 Nobel Drive, Suite 200
San Diego, California 92122

In association with:
International Technology Corporation
CH2M HILL


M. W. Arends 7/16/93

Mike Arends, P.E.
CLEAN Project Manager
CH2M HILL, Inc.

Date

Raoul Portillo 15 July 1993

Raoul Portillo
CLEAN Technical Reviewer
Jacobs Engineering Group Inc.

Date

1002073B.SCO\93\MA

TABLE 4-1
COMPREHENSIVE LIST OF SWMUs AND AREAS OF CONCERN
IDENTIFIED DURING THE PRELIMINARY REVIEW/VISUAL SITE INSPECTION
MCAS EL TORO RFA

| SWMU | SMWU TYPE | SOURCE (1) | LOCATION/BUILDING | COMMENTS | DATE | SIZE | MATERIAL | CONTENTS |
|---|---|---|---|---|---|---|---|---|
| 211 | Oil/Water Separator | f | 763 | Active | 1982 | 100 gal | Steel | |
| 212 | Underground Storage Tank | f | 763 | Active | 1982 | 185 gal | Steel | Waste Oil |
| 213 | Vehicle Wash Rack | a | 764 | | | | | |
| 214 | Underground Storage Tank | f | 764 | Active | 1982 | 185 gal | Steel | |
| 215 | Oil/Water Separator | f | 764 | Active | 1982 | 100 gal | Steel | Waste Oil |
| 216 | Vehicle Wash Rack | a | 765 | | | | | |
| 217 | Underground Storage Tank | f | 765 | Active | 1982 | 185 gal | Steel | |
| 218 | Oil/Water Separator | f | 765 | Active | 1982 | 100 gal | Steel | Waste Oil |
| 219 | Vehicle Wash Rack | a | 766 | | | | | |
| 220 | Oil/Water Separator | f | 766 | Active | 1982 | 100 gal | Steel | |
| 221 | Underground Storage Tank | f | 766 | Active | 1982 | 185 gal | Steel | Waste Oil |
| 222 | Hazardous Waste Storage Area | d | 769 | Former permitted Haz Waste collection facility | | | | |
| 223 | Hazardous Waste Storage Area | d | 770 | Former permitted Haz Waste collection facility | | | | |
| 224 | Hazardous Waste Storage Area | d | 771 | Former permitted Haz Waste collection facility | | | | |
| 225 | Hazardous Waste Storage Area | d | 772 | Former permitted Haz Waste collection facility | | | | |
| 226 | Hazardous Waste Storage Area | d | 778 | Former permitted Haz Waste collection facility | | | | |
| 227 | Hazardous Waste Storage Area | d | 779 | Former permitted Haz Waste collection facility | | | | |
| 228 | Underground Storage Tank | f | 779 | Active | 1988 | 1,000 gal | Fiberglass-Coated Steel | Fuel Slop |
| 229 | Hazardous Waste Storage Area | Active | 800 | | | | | |
| 230 | Underground Storage Tank | f | 800 | Active | 1984 | 1,000 gal | Fiberglass | Waste Oil |
| 231 | Underground Storage Tank | f | 800 | Active | 1984 | 1,000 gal | Fiberglass | Waste Oil |
| 232 | Underground Storage Tank | Active | 800 | Active | 1984 | 1,500 gal | Concrete | |
| 233 | Oil/Water Separator | f | 817 | | | | | |
| 234 | Hazardous Waste Storage Area | Active | 856 | | | | | |
| 235 | Drum Storage Area | c | 1519 | Possible Duplicate of SWMU/AOC 27 | | 300 sq ft | | |
| 236 | Drum Storage Area | b | 1663 | RI/FS Site | | | | |
| 237 | Drum Storage Area (2) | b | 1700 | | | | | |
| 238 | Drum Storage Area (2) | b | 1727 | | | | | |
| 239 | Drum Storage Area (2) | a | 1798 | | | | | |
| 240 | Drum Storage Area (2) | k | 155 | | | | | |

**Table 6-15**
**Recommendations for SWMUs/AOCs**
**MCAS El Toro RFA**

| SWMU No. | SWMU/AOC Type | Recommendation (FA/NFA) | Description of Further Action | Rationale for Further Action |
|---|---|---|---|---|
| 224 | Hazardous Waste Storage Area | NFA | -- | -- |
| 225 | Hazardous Waste Storage Area | NFA | -- | -- |
| 226 | Hazardous Waste Storage Area | NFA | -- | -- |
| 227 | Hazardous Waste Storage Area | NFA | -- | -- |
| 229 | Hazardous Waste Storage Area | NFA | -- | -- |
| 231 | Underground Storage Tank | NFA | -- | -- |
| 232 | Oil/Water Separator | NFA | -- | -- |
| 233 | Oil/Water Separator | NFA | -- | -- |
| 234 | Hazardous Waste Storage Area | NFA | -- | -- |
| 241 | Drum Storage Area | NFA | -- | -- |
| 242 | Hazardous Waste Storage Area | NFA | -- | -- |
| 243 | Wash Rack | NFA | -- | -- |
| 244 | PCB Spill Area | NFA | -- | -- |
| 248 | Oil/Water Separator | NFA | -- | -- |
| 249 | Underground Storage Tank | NFA | -- | -- |
| 250 | Underground Storage Tank | NFA | -- | -- |
| 252 | Hazardous Waste Storage Area | NFA | -- | -- |
| 253 | Vehicle Wash Rack | NFA | -- | -- |
| 255 | Hazardous Waste Storage Area | NFA | -- | -- |
| 256 | Hazardous Waste Storage Area | NFA | -- | -- |
| 257 | Wash Water Runoff Site | NFA | -- | -- |
| 258 | Wash Water Runoff Site | NFA | -- | -- |
| 260 | Aboveground Storage Tank | FA | Repair cracks in pavement | Prevent future migration of petroleum hydrocarbons |
| 261 | Drum Storage Area | NFA | -- | -- |
| 262 | Fuel Storage Area | NFA | -- | -- |
| 263 | Underground Storage Tank | NFA | -- | -- |
| 264 | Equipment Storage Area | NFA | -- | -- |
| 265 | Metal Plating Sewer Lines | NFA | -- | -- |
| 269 | Fuel Storage Locker | NFA | -- | -- |
| 270 | Wash Rack | NFA | -- | -- |

# Evaluation Form
# SWMU/Area of Concern
# Number 225

Name: Hazardous Waste Storage Area 772

Location: South of DRMO Storage Yard #3

Size: Approximately 144 sq ft

Date of Site Visit: 02 May 1991

Period of Operation

Currently inactive

# Evaluation Form
# SWMU/Area of Concern
# Number 225

## Unit Characteristics

This HWSA is one of the six DHS-permitted HWSAs at MCAS El Toro. These six HWSAs (SWMU/AOC Numbers 222 through 227) are not planned for future use. Historically, these six HWSAs have had drums stored outside of the storage area. HWSA 772 is located approximately 100 ft south of DRMO Storage Yard #3. The HWSA consists of a concrete pad and berm, an aluminum roof, and a chain-link fence on all sides. An access ramp is located on the northern side of the HWSA. At the time of the visit, no drums were stored in the HWSA. The concrete pad is covered with approximately 2 to 3 in. of stagnant, green liquid. Due to the presence of the liquid, the condition of the concrete pad was not discernable. No significant cracks or stains were observed on the concrete berms. The HWSA is bordered on all sides by unpaved, sparsely vegetated soil. An apparently abandoned 500-gallon diesel fuel tank is located approximately 10 ft west of the HWSA. No evidence of release from the tank (i.e., soil stains) was observed.

## Waste Characteristics

Unknown

## Possible Migration Pathways

Soil

## Evidence of Release

None observed

## Exposure Potential

On-Station personnel

## Recommendations

Although there was no evidence of a release during the site visit and hazardous waste was not currently stored in the area, the past and present HWSAs at MCAS El Toro are recommended for a sampling visit.

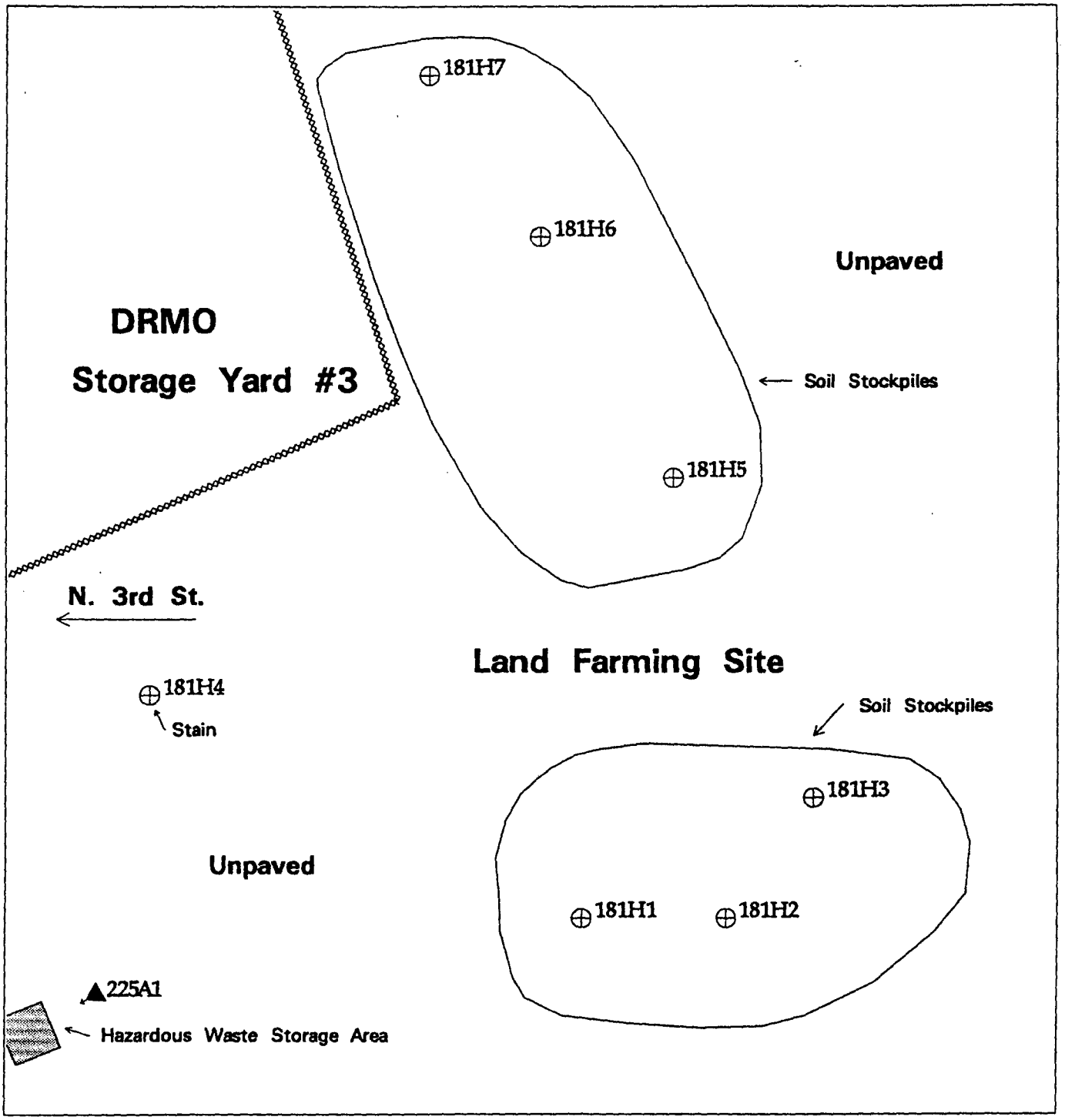



Figure 56 Sample Location Map

Boring Location and Number:

- 123H4 5′ Deep Boring
- 123B4 25′ Deep Boring
- 123A4 60′ Long, Angle Boring

Features:

- Building
- Concrete
- Fence
- Railroad

Scale

0 20 40 80 Feet

SWMU/AOC Number and Type:

181 - Landfarming Area

225 - Hazardous Waste Storage Area

MCAS El Toro
RCRA Facility Assessment

## MCAS EL TORO RCRA FACILITY ASSESSMENT -- SAMPLING VISIT RESULTS

| SWMU/AOC NUMBER | SWMU/AOC TYPE (FIGURE) | BORING NUMBER | SAMPLE DEPTH (FEET) | ANALYTICAL TEST RESULTS | | | | | | | RECOMMENDATIONS | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | TPH (mg/kg) | TFH (mg/kg) | | VOCs (ug/kg) | SVOCs (ug/kg) | PESTICIDES/PCBs (ug/kg) | METALS (mg/kg) | Action | Rationale |
| | | | | | Gasoline | Diesel | | | | | | |
| 225 | Hazardous Waste Storage Area (56) | A1 | 10 | ND | ND | ND | Methylene Chloride-6 BJ *<br>Acetone-8 BJ *<br>Toluene-1 J | Diethylphthalate-38 BJ * | ND | NAB | NFA | TPH/TFH < 1000 ppm<br>VOCs < CRDL<br>SVOCs < CRDL<br>Pest/PCB < CRDL<br>Metals < BGT<br><br>CRDL - Contract Required Detection Limit<br>BGT - Background Threshold Value |
| | | | 10 (Duplicate) | 176 | ND | 60 Z | Methylene Chloride-13 B *<br>Acetone-30 B *<br>Toluene-1 J | Diethylphthalate-22 BJ *<br>Di-n-butylphthalate-22 J | ND | NAB | | |
| | | | 20 | ND | ND | ND | Methylene Chloride-7 BJ *<br>Acetone-6 BJ * | Diethylphthalate-44 BJ * | ND | NAB | | |
| | | | 30 | ND | ND | ND | Methylene Chloride-9 BJ * | Diethylphthalate-21 BJ *<br>Di-n-butylphthalate-22 BJ *<br>Bis(2-Ethylhexyl)phthalate-47 J | ND | NAB | | |
| | | | 40 | ND | ND | ND | Methylene Chloride-7 BJ * | ND | ND | NAB | | |
| | | | 50 | ND | ND | ND | Methylene Chloride-7 BJ * | Diethylphthalate-29 BJ | ND | NAB | | |
| | | | 60 | ND | ND | ND | Methylene Chloride-7 BJ *<br>Acetone-9 BJ * | Diethylphthalate-76 BJ *<br>Bis(2-Ethylhexyl)phthalate-54 J | ND | NAB | | |

CH2M HILL

| PROJECT NUMBER | BORING NUMBER |
|---|---|
| LA070022.S0.10 | 225A-1 SHEET 1 OF 2 |

# SOIL BORING LOG

PROJECT NAVY CLEAN RCRA FACILITY ASSESSMENT LOCATION MCAS-EL TORO

ELEVATION _____ DRILLING CONTRACTOR BEYLIK DRILLING, INC., LA HABRA, CALIFORNIA

DRILLING METHOD AND EQUIPMENT HSA, 3-1/4" ID, 6-1/2" OD, GUS PECH BRAT-22

WATER LEVELS _____ START 10/19/92 FINISH 10/19/92 LOGGER K. HUCKRIEDE

| DEPTH BELOW SURFACE (FT) | SAMPLE INTERVAL | SAMPLE TYPE AND NUMBER | SAMPLE RECOVERY (FT) | STANDARD PENETRATION TEST RESULTS 6" -6" -6" (N) | SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY | COMMENTS: DEPTH OF CASING, DRILLING RATE DRILLING FLUID LOSS TESTS AND INSTRUMENTATION |
|---|---|---|---|---|---|---|
| | | | | | | Start drilling at 09:15. |
| 5.0 | | | | | ELASTIC SILT WITH SAND (MH), brown, moist. | |
| 10.0 | 10.0–12.0 | 1-MC | 1.5 | 30-10-17-37 | POORLY GRADED SAND (SP), light brown, dry, dense, fine grained. | Headspace reading 2 ppm on OVA. |
| | 12.0–14.0 | 1A-MC | 1.4 | 33-16-40-53 | SILT WITH SAND (ML), brown, moist, hard, fine to medium sand. | |
| 15.0 | | | | | | |
| 20.0 | 20.0–22.0 | 2-MC | 1.5 | 30-36-41-111 | POORLY GRADED SAND WITH SILT (SP-SM), brown, very dense, fine to medium grains, occasional nodules of gray clay. | Headspace reading 1 ppm on OVA. |
| 25.0 | | | | | | |
| 30.0 | 30.0–32.0 | 3-MC | 1.5 | 41-43-34-40 | POORLY GRADED SAND (SP), brown, moist, dense, fine grains, occasional thin layers of gray clay. | Headspace reading 0.5 ppm on OVA. |

CH2M HILL

| PROJECT NUMBER | BORING NUMBER |
|---|---|
| LA070022.S0.10 | 225A-1 SHEET 2 OF 2 |

# SOIL BORING LOG

PROJECT NAVY CLEAN RCRA FACILITY ASSESSMENT LOCATION MCAS-EL TORO

ELEVATION _____ DRILLING CONTRACTOR BEYLIK DRILLING, INC., LA HABRA, CALIFORNIA

DRILLING METHOD AND EQUIPMENT HSA, 3-1/4" ID, 6-1/2" OD, GUS PECH BRAT-22

WATER LEVELS _____ START 10/19/92 FINISH 10/19/92 LOGGER K. HUCKRIEDE

| DEPTH BELOW SURFACE (FT) | SAMPLE INTERVAL | SAMPLE TYPE AND NUMBER | SAMPLE RECOVERY (FT) | STANDARD PENETRATION TEST RESULTS 6" -6" -6" (N) | SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY | COMMENTS: DEPTH OF CASING, DRILLING RATE DRILLING FLUID LOSS TESTS AND INSTRUMENTATION |
|---|---|---|---|---|---|---|
| 40.0 | 40.0–42.0 | 4-MC | 1.6 | 34-32-39-47 | POORLY GRADED SAND (SP), brown, moist, very dense, fine grains, trace silt. | Headspace reading 0.2 ppm on OVA. |
| 45.0 | | | | | | |
| 50.0 | 50.0–52.0 | 5-MC | 1.5 | 47-91-90-101 | POORLY GRADED SAND WITH SILT (SP-SM), brown, moist, very dense, fine to coarse grains. | Headspace reading 1.5 ppm on OVA. |
| 55.0 | | | | | | |
| 60.0 | 60.0–62.0 | 6-MC | | 32-60-106-120 | POORLY GRADED SAND (SP), brown, dry to moist, very dense, fine grains, quartz particles up to 1 mm in diameter. | Headspace reading on OVA similar to background. |
| | | | | | Total Depth at 62.0 Feet. | |
| 65.0 | | | | | | |

# *Appendix B*
# *BNI VSI Evaluation Report*

Southwest Division
Naval Facilities Engineering Command
Contracts Department
1220 Pacific Highway, Room 135
San Diego, CA 92132-5187

Contract No. N68711-92-D-4670

# COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY

# CLEAN II

# FINAL ADDENDUM TO THE RCRA FACILITY ASSESSMENT MCAS EL TORO, CALIFORNIA (VOLUME 6 OF THE FINAL RFA REPORT)

## CTO-0065/0170

**May 1996**

Prepared by:

BECHTEL NATIONAL, INC.
401 West A Street, Suite 1000
San Diego, CA 92101

Signature: _____ Date: 31 May 1996
Jacques Lord, CTO Leader

# ACCUMULATION AREA EVALUATION CHECKLIST

(CIRCLE AS APPROPRIATE AND FILL IN COMPLETELY)

JOB 22214 CTO-0065
NAVY CLEAN II MCAS EL TORO RFA CONFIRMATION ACTIVITIES

**GENERAL DESCRIPTION:**

SWMU #: **225** Accumulation Area (AA) #: **772**
Location (bldg): **HWSA/Bldg. 772**
Site Contact: **Leta Suarez** Ext: **2772**
Permission for Access? ~~Y~~ N If yes, explain: **unlocked fence around berm.**
Type of Wastes Observed: **None**

**TYPE:** (CIRCLE AS APPROPRIATE)

~~Locker~~ ~~Cabinet~~ Pad Concrete/~~Soil/Asphalt~~ floor
Berm Fence Fence Type: **Cyclone** ~~Indoor~~
Pallets ~~Drum(s)~~ ~~No. of Drums:~~ Outdoor

**CONDITION:**

~~Stain(s)~~ ~~Odor(s)~~ ~~Crack(s)~~
Placards/Labels: ~~Y~~ N If Yes, list:
Observations: **Clean concrete pad. Roof over pad. Vacant.**
Status: **No change as of 11-10-95.**

**DIMENSIONS:** (ESTIMATED SIZE OR AREA IN FT)

AA/SWMU: **15x10 ft.**
"Stain(s)": **Minor oily stain.**
Any Restrictions To Access?: **Fence, roof and poles.**

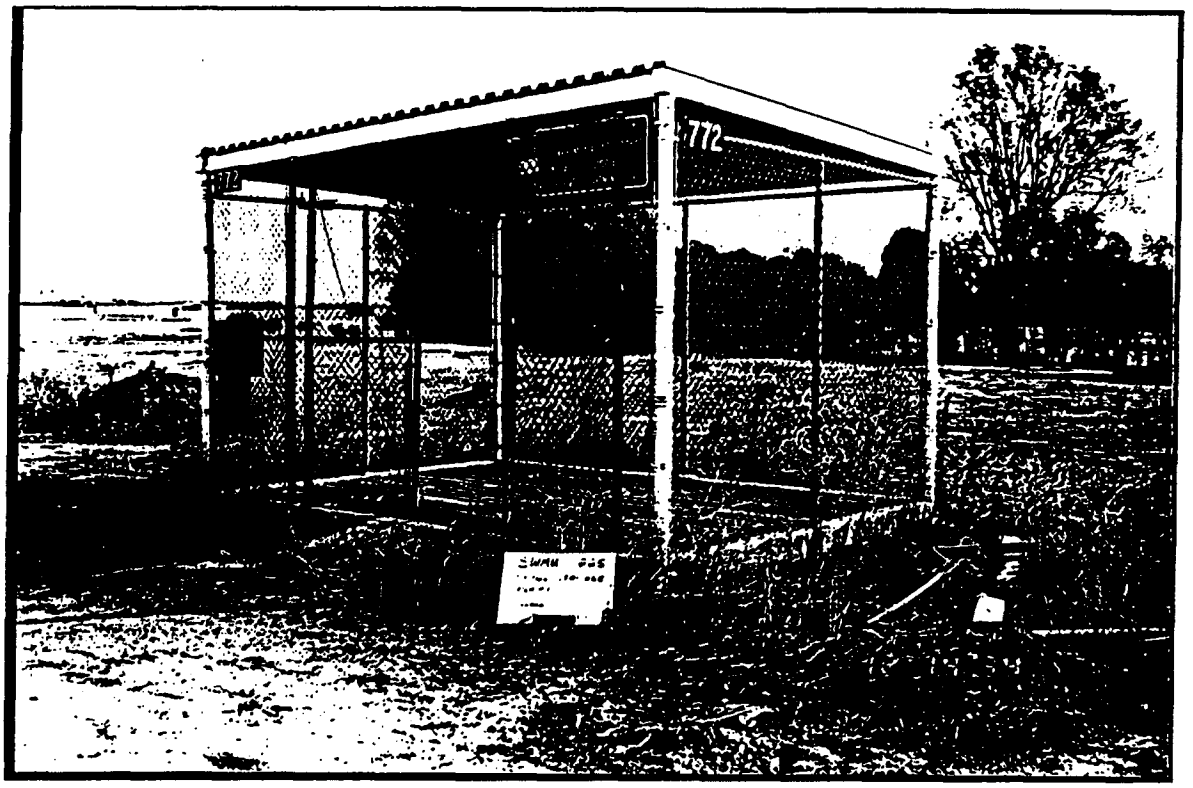
**EVALUATION OF REMOVAL/DECONTAMINATION STRATEGY** (CIRCLE AS APPROPRIATE)

| | | |
|---|---|---|
| Yes | No | Potential for release evident based on this surveillance |
| Yes | No | Potential for simple removal |
| Yes | No | Potential for decontamination activities prior to removal |
| Yes | No | Potential for sampling (describe: ) |
| Yes | No | Potential for removal after additional assessment activities |

**SKETCH:** (MAKE A SKETCH or ATTACH PHOTO(S) OF RELEVANT ACCESS, OBJECTS, WORK SPACE, ETC., AS APPROPRIATE, ON REVERSE OF THIS FORM)

**DATE/TIME OF SURVEILLANCE: 12-6-94/9:00**
**UPDATED: 11-10-95/13:26**
**SURVEILLANCE PERFORMED BY: Larry Bauman**

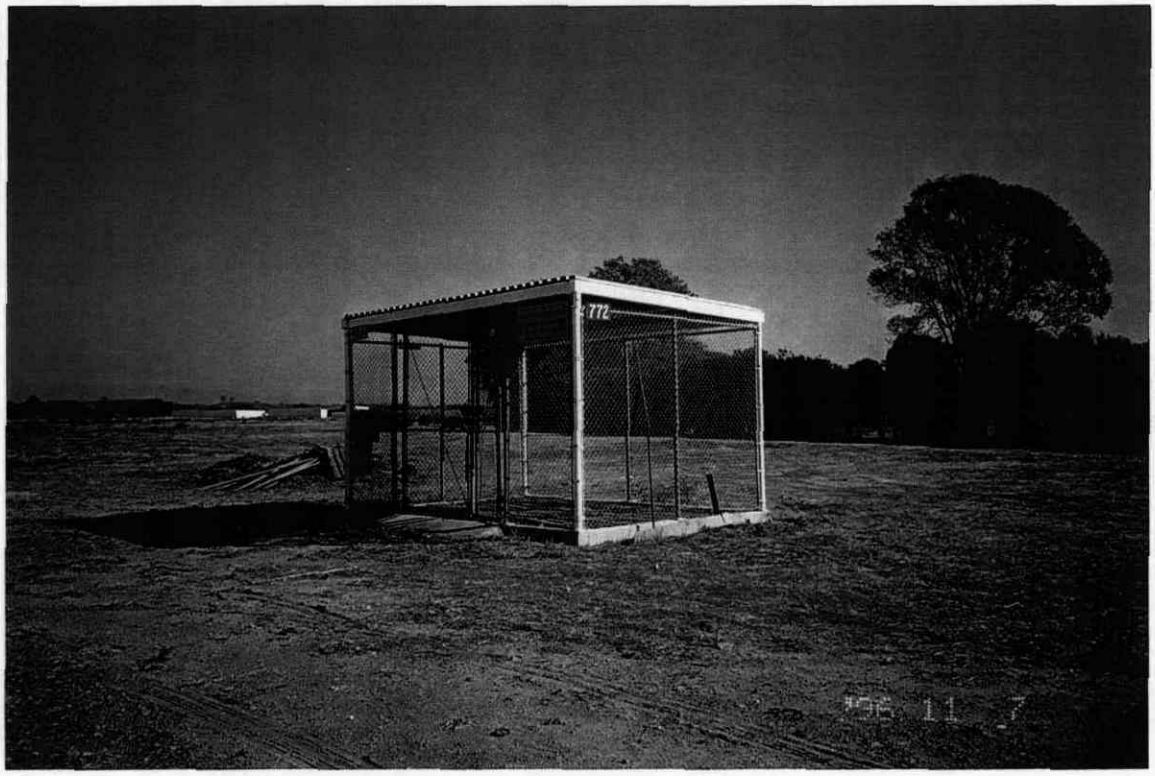
# PHOTO LOG




**SWMU #: 225**

**PHOTO DATE: 12-14-94**

# *Appendix C*
# *Site Photographs*




1. Location of TAA 772 site.

# *Appendix D*
# *Site Assessment Log*

# SITE ASSESSMENT LOG

**MCAS EL TORO**

***TEMPORARY ACCUMULATION AREA & RFA SITE***

**18609, D.O. 70**

TAA SITE: 772 RFA SITE: N/A SWMU NO. 225

**Field Observations by:** D. Rawal **Date:** October 13, 97

**TAA area:** (Paved) or Unpaved TAA 772 one of the former DMS Permitted facility Concrete Paved with berm & Roof. No Sump.

**Paved:** (Concrete) or Asphalt, Condition of the Concrete/Asphalt: Minor Cracks, Stains, etc.
Good, Dust & other debris on the Pad due to no use.

**Unpaved**: Open on the Ground or Inside the Building N/A

Is there any Drums or any types of Waste Stored: Yes/(No) If Yes, Describe:
No waste drums on TAA. TAA 772 is inactive from approximately 1995. No Sign of any waste or Spills or Stains observed on the Pad

**Fenced:** (Yes)/No, **Sump:** Yes /(No), **Concrete Berm:** (Yes)/No, ___ inch, **Roof:** (Yes)/No

Describe other Structural details: Good Concrete Pad with berm No Cracks or Stains. Spill Observed on the Pad

TAA Decontamination and/or ~~Demolition Pos~~sible: (Yes)/No

Site Setup Constrains: Equipment Operation, movement of Excavator or Backhoe None

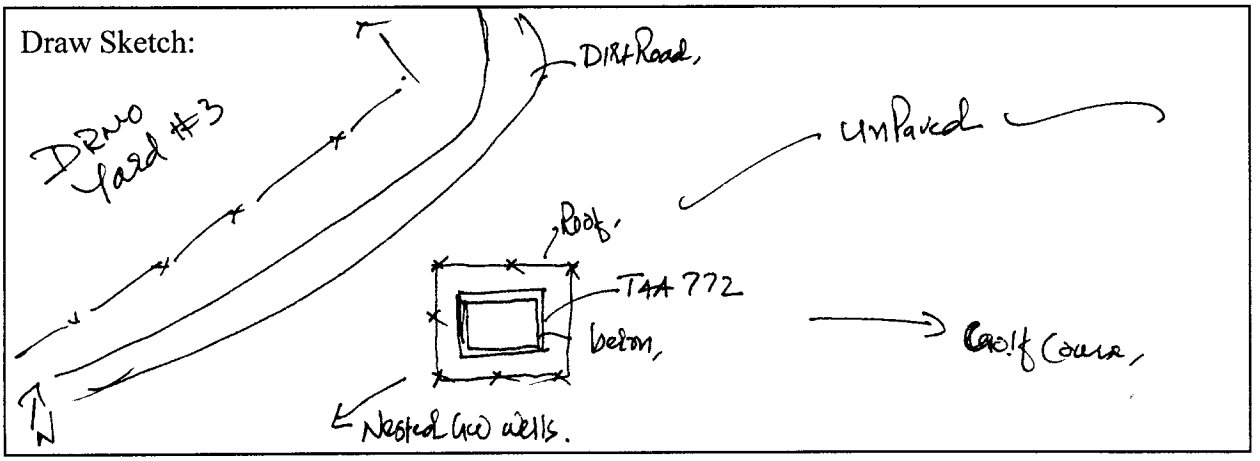
Nearest Building or Structure Distance: Former DRMO Yard #3 Appx. 100 feet.

Any Underground Piping/Lines, or Transformer Observed: None

Overhead Utility Lines/Poles: None

Photograph Roll No. 18A Please attach all the Photographs to this sheet.

Draw Sketch:

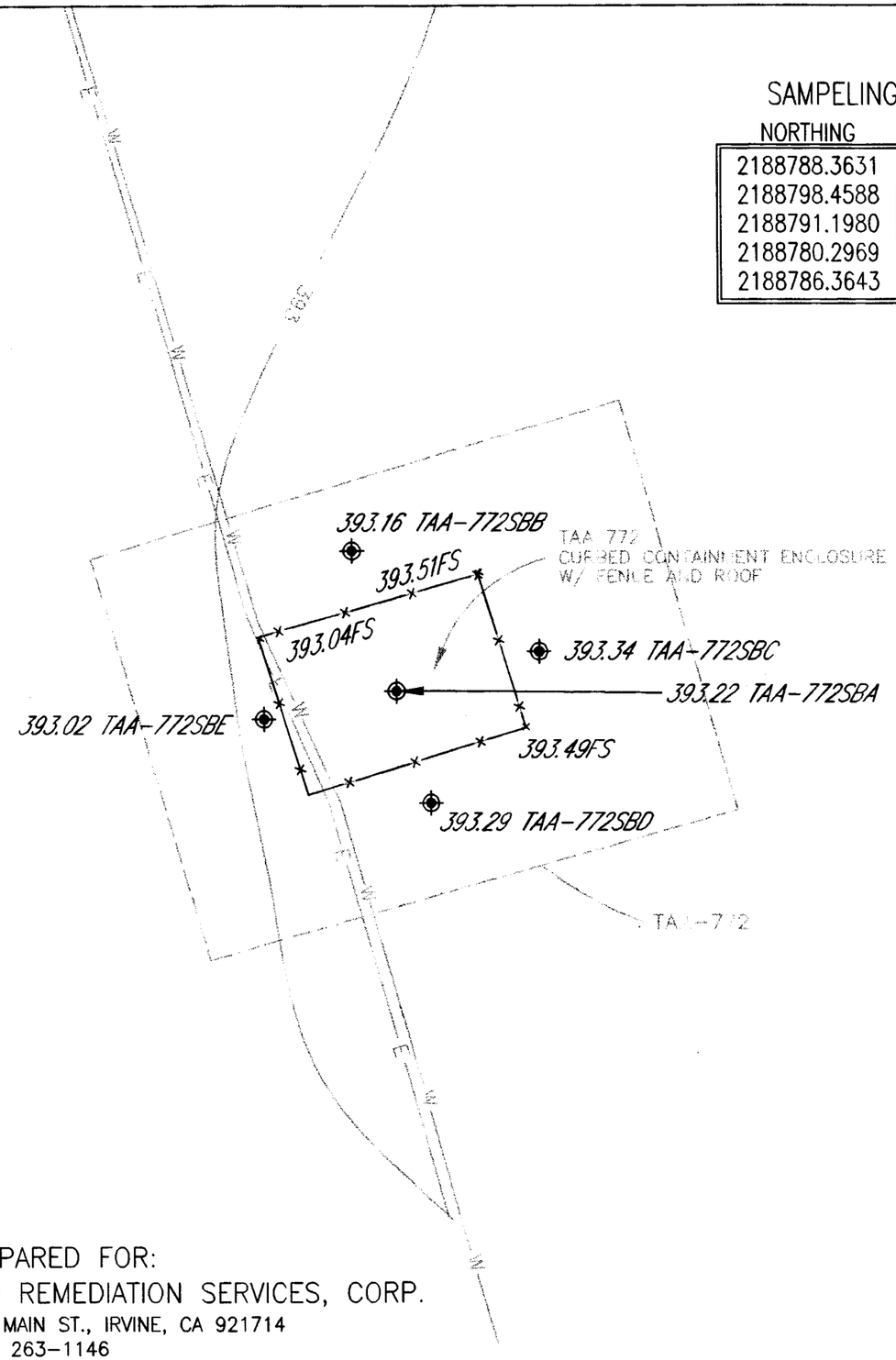


# *Appendix E*
# *Land Survey Data*

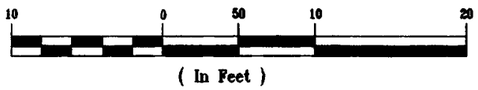
# MCAS, EL TORO
# TAA-772/D.O. 70

SAMPELING LOCATIONS COORDINATES LISTING

| NORTHING | EASTING | ELEV. | SAMPLE # |
|---|---|---|---|
| 2188788.3631 | 6116110.3619 | 393.2 | TAA-772-SBA |
| 2188798.4588 | 6116107.1929 | 393.2 | TAA-772-SBB |
| 2188791.1980 | 6116120.7174 | 393.3 | TAA-772-SBC |
| 2188780.2969 | 6116112.8558 | 393.3 | TAA-772-SBD |
| 2188786.3643 | 6116100.7483 | 393.0 | TAA-772-SBE |



Graphic Scale




1 inch = 10 ft.

LEGEND

SAMPLE LOCATION

CHAINLINK FENCE

FS FINISH SURFACE


**CAL VADA SURVEYING, INC.**

108 Business Center Dr. Corona, Ca 91720
1 800 CALVADA PHONE: (909) 280-9960 FAX: (909) 280-9746
WEB SITE http://www.calvada.com


JOB NO. 97102-55

PREPARED FOR:
OHM REMEDIATION SERVICES, CORP.
2031 MAIN ST., IRVINE, CA 921714
(714) 263-1146

# *Appendix F*
# *Laboratory Analytical Results for TAA Effluent Treated Water*

COMPLETED

OHM Remediation Services Corp
Subsidiary of OHM Corporation
U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526

# CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY
213552

FORM 0019 REV 2/97

| | | | | | |
|---|---|---|---|---|---|
| OHM's LAB COORDINATOR: Dwayne Ishida | LAB COORDINATOR'S PHONE: (714) 263-1146 | LAB COORDINATOR'S FAX: (714) 263-1147 | LABORATORY SERVICE ID: 9802777 | LABORATORY CONTACT: Rad Wang | MAIL REPORT (COMPANY NAME): OHM Remediation |
| PROJECT NAME: TAA Rinse Water | PROJECT LOCATION: EL TORO MCAS | PROJECT NUMBER: 18609 | LABORATORY PHONE: | LABORATORY FAX: | RECIPIENT NAME: Mary Schneider |
| PROJECT CONTACT: D. Ishida | PROJECT PHONE NUMBER: 263-1146 | PROJECT FAX: 263-1147 | LABORATORY ADDRESS: | | ADDRESS: 3021 2031 Main st. |
| PROJECT ADDRESS: EL Toro, MCAS | CITY, STATE AND ZIPCODE: EL TORO, CA. | CLIENT: SWDIV | CITY, STATE, AND ZIPCODE: Chino, CA. | | CITY, STATE, AND ZIPCODE: Irvine, CA 92714 |
| PROJECT MANAGER: Bill Sedlak | PROJECT MANAGER'S PHONE: 263-1146 | PROJECT MANAGER'S FAX: 263-1147 | | | |

APCL

| Item | Sample Identifier | Matrix | Date | Time | Preserved | # of Cont | QC Level | T.A.T. | Analyses: TPH-Purgeable | TPH-Extractable | 8240 - VOC | 8270 - SVOC | 6010 - Cyanide | 9045 - Ph | 1010/7000 - Metals | 7051 - Pest/PCBs | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18609-895 | W | 5/6/98 | 0900 | 4°C iced | 10 | C | 5day | X | X | X | X | X | X | X | X | |
| 2 | 18609-896 | W | 5/7/98 | 0830 | HCL | 2 | C | 5day | X | | X | | | | | | |
| 3 | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | |

NB 5/7/98

SAMPLES COLLECTED BY: NB
COURIER AND AIR BILL NUMBER:
COOLER TEMPERATURE UPON RECEIPT:
RELINQUISHED BY: Martha Brannick
RECEIVED BY: [signature]
DATE: 5/7/98
TIME: 1470
SAMPLE'S CONDITION UPON RECEIPT:

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

Project Information Section
For Project Personnel Only
Do Not Submit to Laboratory

| Sample Point Location | Sample Type: G | C | F | Q |
|---|---|---|---|---|
| 1. TAA Rinse Water | X | | | |
| 2 Trip Blank | X | | | X |

Comments

Sample Type: G - Grab, C - Composite, F - Field Samp
QC - Quality Control Sample

Applied P & Ch Laboratory

# Organic Analysis Results for Method M8015V

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Collection Date: | 05/07/98 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |
| | | Lab Sample ID: | 98-2777-1 | Received Date: | 05/07/98 |
| Sample ID: | 18609-895 | Sample Matrix | Water | Moisture %: | - |
| Sample Type: | Field Sample | Prep. Method: | 5030 | Instrument ID: | GC. N |
| Anal. Method: | M8015V | Prep. Date: | 05/08/98 | Anal. Date: | 05/08/98 |
| Batch No: | 98G2191 | Prep. No: | - | Anal. Time: | 17:00 |
| Data File Name: | 2777.001 | Sample Amount: | 5 mL | Dilution Factor: | 1 |
| Methanol Vol. | - | | | | |
| Test Level: | Low | Sparge Size: | 5 mL | Heated Purge: (Y/N) N | |

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 1 | GASOLINE | 8006-61-9 | mg/L | 0.05 | <0.05 | U |

| Surrogates | | Control Limit, % | Surro. Rec.% |
|---|---|---|---|
| 1 4-BROMO-FLUOROBENZENE (BFB) | 460-00-4 | 71-134 | 92 |
| # of out-of-control | | | 0 |

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

72256

Applied P & Ch Laboratory

# Organic Analysis Results for Method M8015E

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Collection Date: | 05/07/98 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |
| | | Lab Sample ID: | 98-2777-1 | Received Date: | 05/07/98 |
| Sample ID: | 18609-895 | Sample Matrix | Water | Moisture %: | - |
| Sample Type: | Field Sample | Prep. Method: | 3510 | Instrument ID: | GC: H |
| Anal. Method: | M8015E | Prep. Date: | 05/08/98 | Anal. Date: | 05/09/98 |
| Batch No: | 98G2255 | Prep. No: | 1 of 1 | Anal. Time: | 04:30 |
| Data File Name: | 2777.001 | Sample Amount: | 1000 mL | Dilution Factor: | 1 |
| Extract Vol. | 1.0 mL | | | | |

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 1 | TPH AS DIESEL | 68334-30-5 | mg/L | 0.5 | 0.4 | J |
| 2 | TPH AS MOTOR OIL | TBD-0002 | mg/L | 0.5 | <0.5 | U |

| Surrogates | | | Control Limit, % | Surro. Rec.% |
|---|---|---|---|---|
| 1 | OCTACOSANE, $C_{28}$ | 630-02-4 | 50-149 | 67 |
| # of out-of-control | | | | 0 |

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

72298

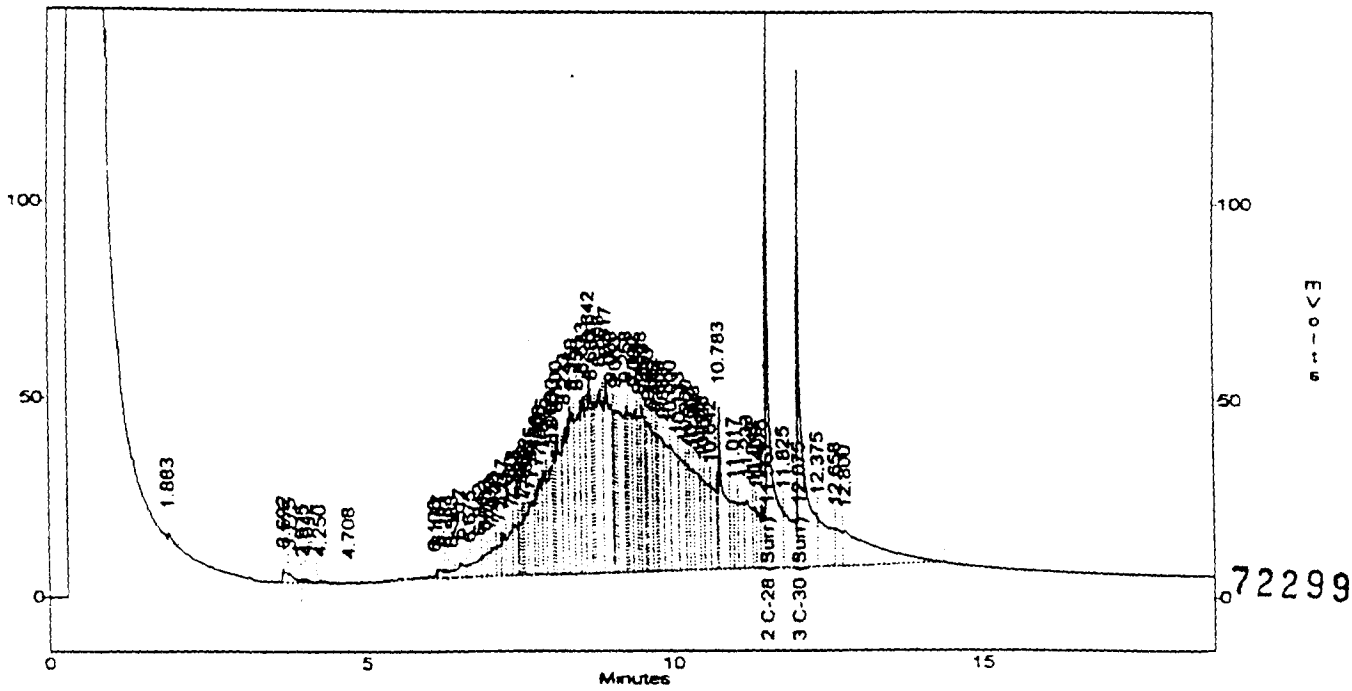
Applied P & Ch Lab
Total Extractable Petroleum Hydrocarbon Analysis by GC-FID
Instrument ID: GC-H, Column: DB-1 (0.32mm x 15m x 0.25 um), 1ul

File : c:\data\9805\dsl2h\98g2227\2777.001
Method : c:\ezchrom\methods\dsl2-032.h00
Sample ID : 2771-1 f=0.001
Vial : 19
Volume : 1
Acquired : May 09, 1998 04:30:09
Printed : May 11, 1998 15:29:28
User : System

Channel B Results

| Name | Time | Area | Conc (ppm) |
|---|---|---|---|
| 2 C-28 (Surr) | 11.57 | 568707 | 33.572 |
| 3 C-30 (Surr) | 12.07 | 559380 | 34.213 |
| 1 DIESEL | | 6128528 | 406.124 |
| 4 MOTOR OIL | | 0 | 0.000 |

c:\data\9805\dsl2h\98g2227\2777.001 -- Channel B




72299

Applied P & Ch Laboratory

# Organic Analysis Results for Method 8260

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Collection Date: | 05/07/98 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |
| | | Lab Sample ID: | 98-2777-1 | Received Date: | 05/07/98 |
| Sample ID: | 18609-895 | Sample Matrix | Water | Moisture %: | - |
| Sample Type: | Field Sample | Prep. Method: | 5030 | Instrument ID: | GC/MS: G |
| Anal. Method: | 8260 | Prep. Date: | 05/10/98 | Anal. Date: | 05/10/98 |
| Batch No: | 98G2263 | Prep. No: | - | Anal. Time: | 02:27 |
| Data File Name: | 2777-01 | Sample Amount: | 25 mL | Dilution Factor: | 1 |
| Methanol Vol. | - | | | | |
| Test Level: | Low | Sparge Size: | 25 mL | Heated Purge: (Y/N) N | |

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 1 | BENZENE | 71-43-2 | µg/L | 5 | < 5 | U |
| 2 | BROMOBENZENE | 108-86-1 | µg/L | 5 | < 5 | U |
| 3 | BROMOCHLOROMETHANE | 74-97-5 | µg/L | 5 | < 5 | U |
| 4 | BROMODICHLOROMETHANE | 75-27-4 | µg/L | 5 | < 5 | U |
| 5 | BROMOFORM | 75-25-2 | µg/L | 5 | < 5 | U |
| 6 | BROMOMETHANE | 74-83-9 | µg/L | 5 | < 5 | U |
| 7 | N-BUTYLBENZENE | 104-51-8 | µg/L | 5 | < 5 | U |
| 8 | SEC-BUTYLBENZENE | 135-98-8 | µg/L | 5 | < 5 | U |
| 9 | TERT-BUTYLBENZENE | 98-06-6 | µg/L | 5 | < 5 | U |
| 10 | CARBON TETRACHLORIDE | 56-23-5 | µg/L | 5 | < 5 | U |
| 11 | CHLOROBENZENE | 108-90-7 | µg/L | 5 | < 5 | U |
| 12 | DIBROMOCHLOROMETHANE | 124-48-1 | µg/L | 5 | < 5 | U |
| 13 | CHLOROETHANE | 75-00-3 | µg/L | 5 | < 5 | U |
| 14 | CHLOROFORM | 67-66-3 | µg/L | 5 | < 5 | U |
| 15 | CHLOROMETHANE | 74-87-3 | µg/L | 5 | < 5 | U |
| 16 | 2-CHLOROTOLUENE | 95-49-8 | µg/L | 5 | < 5 | U |
| 17 | 4-CHLOROTOLUENE | 106-43-4 | µg/L | 5 | < 5 | U |
| 18 | 1,2-DIBROMO-3-CHLOROPROPANE (DB | 96-12-8 | µg/L | 5 | < 5 | U |
| 19 | 1,2-DIBROMOETHANE (EDB) | 106-93-4 | µg/L | 5 | < 5 | U |
| 20 | DIBROMOMETHANE | 74-95-3 | µg/L | 5 | < 5 | U |
| 21 | 1,2-DICHLOROBENZENE | 95-50-1 | µg/L | 5 | < 5 | U |
| 22 | 1,3-DICHLOROBENZENE | 541-73-1 | µg/L | 5 | < 5 | U |
| 23 | 1,4-DICHLOROBENZENE | 106-46-7 | µg/L | 5 | < 5 | U |
| 24 | DICHLORODIFLUOROMETHANE | 75-71-8 | µg/L | 5 | < 5 | U |
| 25 | 1,1-DICHLOROETHANE | 75-34-3 | µg/L | 5 | < 5 | U |
| 26 | 1,2-DICHLOROETHANE | 107-06-2 | µg/L | 5 | < 5 | U |
| 27 | 1,1-DICHLOROETHENE | 75-35-4 | µg/L | 5 | < 5 | U |
| 28 | CIS-1,2-DICHLOROETHENE | 156-59-2 | µg/L | 5 | < 5 | U |
| 29 | TRANS-1,2-DICHLOROETHENE | 156-60-5 | µg/L | 5 | < 5 | U |
| 30 | 1,2-DICHLOROPROPANE | 78-87-5 | µg/L | 5 | < 5 | U |
| 31 | 1,3-DICHLOROPROPANE | 142-28-9 | µg/L | 5 | < 5 | U |
| 32 | 2,2-DICHLOROPROPANE | 594-20-7 | µg/L | 5 | < 5 | U |
| 33 | 1,1-DICHLOROPROPENE | 563-58-6 | µg/L | 5 | < 5 | U |
| 34 | CIS-1,3-DICHLOROPROPENE | 10061-01-5 | µg/L | 5 | < 5 | U |
| 35 | TRANS-1,3-DICHLOROPROPENE | 10061-02-6 | µg/L | 5 | < 5 | U |
| 36 | ETHYLBENZENE | 100-41-4 | µg/L | 5 | < 5 | U |
| 37 | HEXACHLOROBUTADIENE | 87-68-3 | µg/L | 5 | < 5 | U |
| 38 | ISOPROPYLBENZENE (CUMENE) | 98-82-8 | µg/L | 5 | < 5 | U |
| 39 | P-ISOPROPYLTOLUENE | 99-87-6 | µg/L | 5 | < 5 | U |

72112

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 40 | METHYLENE CHLORIDE | 75-09-2 | µg/L | 5 | < 5 | U |
| 41 | NAPHTHALENE | 91-20-3 | µg/L | 5 | < 5 | U |
| 42 | N-PROPYLBENZENE | 103-65-1 | µg/L | 5 | < 5 | U |
| 43 | STYRENE | 100-42-5 | µg/L | 5 | < 5 | U |
| 44 | 1,1,1,2-TETRACHLOROETHANE | 630-20-6 | µg/L | 5 | < 5 | U |
| 45 | 1,1,2,2-TETRACHLOROETHANE | 79-34-5 | µg/L | 5 | < 5 | U |
| 46 | TETRACHLOROETHENE | 127-18-4 | µg/L | 5 | < 5 | U |
| 47 | TOLUENE | 108-88-3 | µg/L | 5 | < 5 | U |
| 48 | 1,2,3-TRICHLOROBENZENE | 87-61-6 | µg/L | 5 | < 5 | U |
| 49 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | µg/L | 5 | < 5 | U |
| 50 | 1,1,1-TRICHLOROETHANE | 71-55-6 | µg/L | 5 | < 5 | U |
| 51 | 1,1,2-TRICHLOROETHANE | 79-00-5 | µg/L | 5 | < 5 | U |
| 52 | TRICHLOROETHENE | 79-01-6 | µg/L | 5 | < 5 | U |
| 53 | TRICHLOROFLUOROMETHANE | 75-69-4 | µg/L | 5 | < 5 | U |
| 54 | 1,2,3-TRICHLOROPROPANE | 96-18-4 | µg/L | 5 | < 5 | U |
| 55 | 1,2,4-TRIMETHYLBENZENE | 95-63-6 | µg/L | 5 | < 5 | U |
| 56 | 1,3,5-TRIMETHYLBENZENE | 108-67-8 | µg/L | 5 | < 5 | U |
| 57 | VINYL CHLORIDE | 75-01-4 | µg/L | 5 | < 5 | U |
| 58 | O-XYLENE | 95-47-6 | µg/L | 5 | < 5 | U |
| 59 | M/P-XYLENE | 108-38-3 | µg/L | 5 | < 5 | U |
| 60 | XYLENES (TOTAL) | 1330-20-7 | µg/L | 5 | < 5 | U |

| Surrogates | | | Control Limit, % | Surro. Rec.% |
|---|---|---|---|---|
| 1 | 4-BROMO-FLUOROBENZENE (BFB) | 460-00-4 | 86-114 | 103 |
| 2 | DIBROMOFLUOROMETHANE | 1868-53-7 | 86-117 | 101 |
| 3 | 1,2-DICHLOROETHANE-D4 | 17060-07-0 | 80-119 | 101 |
| 4 | TOLUENE-D8 | 2037-26-5 | 88-109 | 105 |
| # of out-of-control | | | | 0 |

| Internal Standard | | | Control Limit, % | IS Rec.% |
|---|---|---|---|---|
| 1 | CHLOROBENZENE-D5 | 3114-55-4 | 50-200 | 87 |
| 2 | 1,4-DICHLOROBENZENE-D4 | 3855-82-1 | 50-200 | 92 |
| 3 | FLUOROBENZENE | 462-06-6 | 50-200 | 95 |
| # of out-of-control | | | | 0 |

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

72113

Applied P & Ch Laboratory

# Organic Analysis Results for Method 8270

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Collection Date: | 05/07/98 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |
| | | Lab Sample ID: | 98-2777-1 | Received Date: | 05/07/98 |
| Sample ID: | 18609-895 | Sample Matrix | Water | Moisture %: | - |
| Sample Type: | Field Sample | Prep. Method: | 3510 | Instrument ID: | GC/MS: D |
| Anal. Method: | 8270 | Prep. Date: | 05/11/98 | Anal. Date: | 05/11/98 |
| Batch No: | 98G2274 | Prep. No: | 1 of 1 | Anal. Time: | 22:52 |
| Data File Name: | 2777-01 | Sample Amount: | 1000 mL | Dilution Factor: | 1 |
| Extract Vol. | 1.0 mL | | | | |

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 1 | ACENAPHTHENE | 83-32-9 | µg/L | 10 | <10 | U |
| 2 | ACENAPHTHYLENE | 208-96-8 | µg/L | 10 | <10 | U |
| 3 | ACETOPHENONE | 98-86-2 | µg/L | 10 | <10 | U |
| 4 | 4-AMINOBIPHENYL | 92-67-1 | µg/L | 10 | <10 | U |
| 5 | ANILINE | 62-53-3 | µg/L | 10 | <10 | U |
| 6 | ANTHRACENE | 120-12-7 | µg/L | 10 | <10 | U |
| 7 | BENZO[A]ANTHRACENE | 56-55-3 | µg/L | 10 | <10 | U |
| 8 | BENZIDINE | 92-87-5 | µg/L | 20 | <20 | U |
| 9 | BENZO[A]PYRENE | 50-32-8 | µg/L | 10 | <10 | U |
| 10 | BENZO[B]FLUORANTHENE | 205-99-2 | µg/L | 10 | <10 | U |
| 11 | BENZO[G,H,I]PERYLENE | 191-24-2 | µg/L | 10 | <10 | U |
| 12 | BENZO[K]FLUORANTHENE | 207-08-9 | µg/L | 10 | <10 | U |
| 13 | BENZOIC ACID | 65-85-0 | µg/L | 50 | <50 | U |
| 14 | BENZYL ALCOHOL | 100-51-6 | µg/L | 20 | <20 | U |
| 15 | BIS(2-CHLOROETHOXY)METHANE | 111-91-1 | µg/L | 10 | <10 | U |
| 16 | BIS(2-CHLOROETHYL)ETHER | 111-44-4 | µg/L | 10 | <10 | U |
| 17 | BIS(2-CHLOROISOPROPYL)ETHER | 108-60-1 | µg/L | 10 | <10 | U |
| 18 | BIS(2-ETHYLHEXYL)PHTHALATE | 117-81-7 | µg/L | 10 | 4 | J |
| 19 | 4-BROMOPHENYL PHENYL ETHER | 101-55-3 | µg/L | 10 | <10 | U |
| 20 | BUTYL BENZYL PHTHALATE | 85-68-7 | µg/L | 10 | <10 | U |
| 21 | 3-METHYL-4-CHLOROPHENOL | 59-50-7 | µg/L | 20 | <20 | U |
| 22 | 4-CHLOROANILINE | 106-47-8 | µg/L | 20 | <20 | U |
| 23 | 1-CHLORONAPHTHALENE | 90-13-1 | µg/L | 10 | <10 | U |
| 24 | 2-CHLORONAPHTHALENE | 91-58-7 | µg/L | 10 | <10 | U |
| 25 | 2-CHLOROPHENOL | 95-57-8 | µg/L | 10 | <10 | U |
| 26 | 4-CHLOROPHENYL PHENYL ETHER | 7005-72-3 | µg/L | 10 | <10 | U |
| 27 | CHRYSENE | 218-01-9 | µg/L | 10 | <10 | U |
| 28 | DI-N-BUTYLPHTHALATE | 84-74-2 | µg/L | 10 | <10 | U |
| 29 | DI-N-OCTYLPHTHALATE | 117-84-0 | µg/L | 10 | <10 | U |
| 30 | DIBENZ[A,H]ANTHRACENE | 53-70-3 | µg/L | 10 | <10 | U |
| 31 | DIBENZ(A,J)ACRIDINE | 224-42-0 | µg/L | 10 | <10 | U |
| 32 | DIBENZOFURAN | 132-64-9 | µg/L | 10 | <10 | U |
| 33 | 1,2-DICHLOROBENZENE | 95-50-1 | µg/L | 10 | <10 | U |
| 34 | 1,3-DICHLOROBENZENE | 541-73-1 | µg/L | 10 | <10 | U |
| 35 | 1,4-DICHLOROBENZENE | 106-46-7 | µg/L | 10 | <10 | U |
| 36 | 3,3'-DICHLOROBENZIDINE | 91-94-1 | µg/L | 10 | <10 | U |
| 37 | 2,4-DICHLOROPHENOL | 120-83-2 | µg/L | 10 | <10 | U |
| 38 | 2,6-DICHLOROPHENOL | 87-65-0 | µg/L | 10 | <10 | U |
| 39 | DIETHYL PHTHALATE | 84-66-2 | µg/L | 10 | <10 | U |
| 40 | DIMETHYL PHTHALATE | 131-11-3 | µg/L | 10 | <10 | U |

72152

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 41 | P-DIMETHYLAMINOAZOBENZENE | 60-11-7 | µg/L | 10 | < 10 | U |
| 42 | 7,12-DIMETHYLBENZ(A)ANTHRACENE | 57-97-6 | µg/L | 10 | < 10 | U |
| 43 | 2,4-DIMETHYLPHENOL | 105-67-9 | µg/L | 10 | < 10 | U |
| 44 | Å-DIMETHYLPHENYLAMINE | 122-09-8 | µg/L | 50 | < 50 | U |
| 45 | 2-METHYL-4,6-DINITROPHENOL | 534-52-1 | µg/L | 50 | < 50 | U |
| 46 | 2,4-DINITROPHENOL | 51-28-5 | µg/L | 50 | < 50 | U |
| 47 | 2,4-DINITROTOLUENE | 121-14-2 | µg/L | 10 | < 10 | U |
| 48 | 2,6-DINITROTOLUENE | 606-20-2 | µg/L | 10 | < 10 | U |
| 49 | DIPHENYLAMINE | 122-39-4 | µg/L | 10 | < 10 | U |
| 50 | 1,2-DIPHENYLHYDRAZINE | 122-66-7 | µg/L | 10 | < 10 | U |
| 51 | ETHYL METHANESULFONATE | 62-50-0 | µg/L | 10 | < 10 | U |
| 52 | FLUORANTHENE | 206-44-0 | µg/L | 10 | < 10 | U |
| 53 | FLUORENE | 86-73-7 | µg/L | 10 | < 10 | U |
| 54 | HEXACHLOROBENZENE | 118-74-1 | µg/L | 10 | < 10 | U |
| 55 | HEXACHLOROBUTADIENE | 87-68-3 | µg/L | 10 | < 10 | U |
| 56 | HEXACHLOROCYCLOPENTADIENE | 77-47-4 | µg/L | 10 | < 10 | U |
| 57 | HEXACHLOROETHANE | 67-72-1 | µg/L | 10 | < 10 | U |
| 58 | INDENO(1,2,3-CD)PYRENE | 193-39-5 | µg/L | 10 | < 10 | U |
| 59 | ISOPHORONE | 78-59-1 | µg/L | 10 | < 10 | U |
| 60 | METHYL METHANESULFONATE | 66-27-3 | µg/L | 10 | < 10 | U |
| 61 | 3-METHYLCHOLANTHRENE | 56-49-5 | µg/L | 10 | < 10 | U |
| 62 | 2-METHYLNAPHTHALENE | 91-57-6 | µg/L | 10 | < 10 | U |
| 63 | 4-METHYLPHENOL | 106-44-5 | µg/L | 10 | < 10 | U |
| 64 | 2-METHYLPHENOL | 95-48-7 | µg/L | 10 | < 10 | U |
| 65 | NAPHTHALENE | 91-20-3 | µg/L | 10 | < 10 | U |
| 66 | 1-NAPHTHYLAMINE | 134-32-7 | µg/L | 10 | < 10 | U |
| 67 | 2-NAPHTHYLAMINE | 91-59-8 | µg/L | 10 | < 10 | U |
| 68 | 2-NITROANILINE | 88-74-4 | µg/L | 50 | < 50 | U |
| 69 | 3-NITROANILINE | 99-09-2 | µg/L | 50 | < 50 | U |
| 70 | 4-NITROANILINE | 100-01-6 | µg/L | 50 | < 50 | U |
| 71 | NITROBENZENE | 98-95-3 | µg/L | 10 | < 10 | U |
| 72 | 2-NITROPHENOL | 88-75-5 | µg/L | 10 | < 10 | U |
| 73 | 4-NITROPHENOL | 100-02-7 | µg/L | 50 | < 50 | U |
| 74 | N-NITROSODI-N-PROPYLAMINE | 621-64-7 | µg/L | 10 | < 10 | U |
| 75 | N-NITROSO-DI-N-BUTYLAMINE | 924-16-3 | µg/L | 10 | < 10 | U |
| 76 | N-NITROSODIMETHYLAMINE | 62-75-9 | µg/L | 10 | < 10 | U |
| 77 | N-NITROSODIPHENYLAMINE | 86-30-6 | µg/L | 10 | < 10 | U |
| 78 | N-NITROSOPIPERIDINE | 100-75-4 | µg/L | 10 | < 10 | U |
| 79 | PENTACHLOROBENZENE | 608-93-5 | µg/L | 50 | < 50 | U |
| 80 | PENTACHLOROPHENOL | 87-86-5 | µg/L | 50 | < 50 | U |
| 81 | PHENACETIN | 62-44-2 | µg/L | 10 | < 10 | U |
| 82 | PHENANTHRENE | 85-01-8 | µg/L | 10 | < 10 | U |
| 83 | PHENOL | 108-95-2 | µg/L | 10 | < 10 | U |
| 84 | 2-PICOLINE | 109-06-8 | µg/L | 20 | < 20 | U |
| 85 | PRONAMIDE | 23950-58-5 | µg/L | 10 | < 10 | U |
| 86 | PYRENE | 129-00-0 | µg/L | 10 | < 10 | U |
| 87 | 1,2,4,5-TETRACHLOROBENZENE | 95-94-3 | µg/L | 10 | < 10 | U |
| 88 | 2,3,4,6-TETRACHLOROEPHENOL | 58-90-2 | µg/L | 10 | < 10 | U |
| 89 | 1,2,4-TRICHLOROBENZENE | 120-82-1 | µg/L | 10 | < 10 | U |
| 90 | 2,4,5-TRICHLOROPHENOL | 95-95-4 | µg/L | 10 | < 10 | U |

72153

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 91 | 2,4,6-TRICHLOROPHENOL | 88-06-2 | µg/L | 10 | <10 | U |

| Surrogates | | | Control Limit, % | Surro. Rec.% |
|---|---|---|---|---|
| 1 | 2-FLUOROBIPHENYL | 321-60-8 | 43-115 | 53 |
| 2 | 2-FLUOROPHENOL | 367-12-4 | 21- 99 | 38 |
| 3 | NITROBENZENE-D5 | 4165-60-0 | 35-113 | 56 |
| 4 | PHENOL-D5 | 4165-62-2 | 10- 93 | 30 |
| 5 | TERPHENYL-D14 | 1718-51-0 | 33-140 | 72 |
| 6 | 2,4,6-TRIBROMOPHENOL | 118-79-6 | 10-122 | 55 |
| # of out-of-control | | | | 0 |

| Internal Standard | | | Control Limit, % | IS Rec.% |
|---|---|---|---|---|
| 1 | ACENAPHTHENE-D10 | 15067-26-2 | 50-200 | 68 |
| 2 | CHRYSENE-D12 | 1719-03-5 | 50-200 | 57 |
| 3 | 1,4-DICHLOROBENZENE-D4 | 3855-82-1 | 50-200 | 69 |
| 4 | NAPHTHALENE-D8 | 1146-65-2 | 50-200 | 73 |
| 5 | PERYLENE-D12 | 1520-96-3 | 50-200 | 52 |
| 6 | PHENANTHRENE-D10 | 1517-22-2 | 50-200 | 58 |
| # of out-of-control | | | | 0 |

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

72154

Applied P & Ch Laboratory

# Wet Analysis Results for Method 335.2

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Anal. Method | 335.2 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |

Component Name: CYANIDE
CAS No: 5952-50-0

| Lab ID | Sample ID | Matrix | Coll. Date | Rcv Date | Anal. Date | Batch | Unit | RL | Result | Q |
|---|---|---|---|---|---|---|---|---|---|---|
| 98-2777-1 | 18609-895 | Water | 05/07/98 | 05/07/98 | 05/11/98 | 98W2915 | mg/L | 0.05 | <0.05 | U |
| 98W2915-MB-01 | 98W2915-MB-01 | Water | 05/11/98 | 05/11/98 | 05/11/98 | 98W2915 | mg/L | 0.05 | <0.05 | U |

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

72392

Applied P & Ch Laboratory

# Wet Analysis Results for Method 9040

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Anal. Method | 9040 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |

Component Name: PH
CAS No: 9999-90

| Lab ID | Sample ID | Matrix | Coll. Date | Rcv Date | Anal. Date | Batch | Unit | RL | Result | Q |
|---|---|---|---|---|---|---|---|---|---|---|
| 98-2777-1 | 18609-895 | Water | 05/07/98 | 05/07/98 | 05/08/98 | 98W2869 | pH unit | 0.01 | 8.15 | |
| 98W2869-MB-01 | 98W2869-MB-01 | Water | 05/08/98 | 05/08/98 | 05/08/98 | 98W2869 | pH unit | 0.01 | 6.56 | |

Note: Q - Qualifier.
Qualifier: U - Not Detected or less than MDL
B - Less than RL (PQL, EQL or CRDL), but greater than MDL.

72393

Applied P & Ch Laboratory

# Metal Analysis Results

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Collection Date: | 05/07/98 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |
| | | Lab Sample ID: | 98-2777-1 | Received Date: | 05/07/98 |
| Sample ID: | 18609-895 | Sample Matrix | Water | Moisture %: | - |
| Sample Type: | Field Sample | | | | |

| Element Name | CAS No | Unit | RL | Result | C | M | Q | Batch | D-Date | A-Date | DF | Method |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ANTIMONY | 7440-36-0 | µg/L | 10 | <1.9 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| ARSENIC | 7440-38-2 | µg/L | 5 | <1.1 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| BARIUM | 7440-39-3 | µg/L | 10 | 35.2 | | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| BERYLLIUM | 7440-41-7 | µg/L | 2 | <0.1 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| CADMIUM | 7440-43-9 | µg/L | 2 | 0.38 | B | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| CHROMIUM | 7440-47-3 | µg/L | 5 | 0.70 | B | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| COBALT | 7440-48-4 | µg/L | 5 | <0.3 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| COPPER | 7440-50-8 | µg/L | 10 | 13.8 | | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| LEAD | 7439-92-1 | µg/L | 5 | <0.7 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| MERCURY | 7439-97-6 | µg/L | 0.5 | <0.13 | U | CV | | 98M1453D | 05/11/98 | 05/11/98 | 1 | 7470 |
| MOLYBDENUM | 7439-98-7 | µg/L | 5 | 9.3 | | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| NICKEL | 7440-02-0 | µg/L | 5 | 2.9 | B | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| SELENIUM | 7782-49-2 | µg/L | 10 | <1.5 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| SILVER | 7440-22-4 | µg/L | 10 | <1.1 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| THALLIUM | 7440-28-0 | µg/L | 10 | 2.2 | B | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| VANADIUM | 7440-62-2 | µg/L | 10 | <0.91 | U | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |
| ZINC | 7440-66-6 | µg/L | 5 | 30.4 | | P | | 98M1447M | 05/08/98 | 05/08/98 | 1 | 6010 |

Not Detected is shown as IDL moisture-corrected if applicable

Note: RL: PQL (EQL) or CRDL D-Date: Digestion Date; A-Date: Analysis Date; DF: Dilution Factor

C Qualifier: U - Not Detected or less than IDL B - Less than RL (PQL, EQL or CRDL), but greater than IDL.

Q Qualifier: N - Spike recovery out of control * - Duplicate analysis out of control

W - Post digestion spike for GFAA out of control E - Serial dilution difference out of control

M Qualifier: P - ICP A - FLAA F - GFAA CV - Cold Vapor

72345

Applied P & Ch Laboratory

# Organic Analysis Results for Method 8080

| | | | | | |
|---|---|---|---|---|---|
| Client Name: | OHM Remediation Services (Irvine) | Project No: | 18609 | Collection Date: | 05/07/98 |
| Project ID: | TAA Rinse Water | Service ID: | 982777 | Collected by: | M.B. |
| | | Lab Sample ID: | 98-2777-1 | Received Date: | 05/07/98 |
| Sample ID: | 18609-895 | Sample Matrix | Water | Moisture %: | – |
| Sample Type: | Field Sample | Prep. Method: | 3510 | Instrument ID: | GC: R |
| Anal. Method: | 8080 | Prep. Date: | 05/08/98 | Anal. Date: | 05/09/98 |
| Batch No: | 98G2249 | Prep. No: | 1 of 1 | Anal. Time: | 06:35 |
| Data File Name: | 2777.001 | Sample Amount: | 1000 mL | Dilution Factor: | 1 |
| Extract Vol. | 1.0 mL | | | | |

| # | Component Name | CAS No | Unit | RL | Result | Qualifier |
|---|---|---|---|---|---|---|
| 1 | ALDRIN | 309-00-2 | µg/L | 0.05 | <0.05 | U |
| 2 | BETA-BHC | 319-85-7 | µg/L | 0.05 | <0.05 | U |
| 3 | ALPHA-BHC | 319-84-6 | µg/L | 0.05 | <0.05 | U |
| 4 | DELTA-BHC | 319-86-8 | µg/L | 0.05 | <0.05 | U |
| 5 | GAMMA-BHC | 58-89-9 | µg/L | 0.05 | <0.05 | U |
| 6 | 4,4'-DDD | 72-54-8 | µg/L | 0.1 | <0.1 | U |
| 7 | 4,4'-DDE | 72-55-9 | µg/L | 0.1 | <0.1 | U |
| 8 | 4,4'-DDT | 50-29-3 | µg/L | 0.1 | <0.1 | U |
| 9 | DIELDRIN | 60-57-1 | µg/L | 0.1 | <0.1 | U |
| 10 | ENDOSULFAN I | 959-98-8 | µg/L | 0.05 | <0.05 | U |
| 11 | ENDOSULFAN II | 33213-65-9 | µg/L | 0.1 | <0.1 | U |
| 12 | ENDOSULFAN SULFATE | 1031-07-8 | µg/L | 0.5 | <0.5 | U |
| 13 | ENDRIN | 72-20-8 | µg/L | 0.1 | <0.1 | U |
| 14 | ENDRIN ALDEHYDE | 7421-93-4 | µg/L | 0.1 | <0.1 | U |
| 15 | ENDRIN KETONE | 53494-70-5 | µg/L | 0.1 | <0.1 | U |
| 16 | HEPTACHLOR | 76-44-8 | µg/L | 0.05 | <0.05 | U |
| 17 | HEPTACHLOR EPOXIDE | 1024-57-3 | µg/L | 0.05 | <0.05 | U |
| 18 | METHOXYCHLOR | 72-43-5 | µg/L | 2 | <2 | U |
| 19 | CHLORDANE | 57-74-9 | µg/L | 2 | <2 | U |
| 20 | TOXAPHENE | 8001-35-2 | µg/L | 5 | <5 | U |
| 21 | AROCLOR-1016 | 12674-11-2 | µg/L | 2 | <2 | U |
| 22 | AROCLOR-1221 | 11104-28-2 | µg/L | 5 | <5 | U |
| 23 | AROCLOR-1232 | 11141-16-5 | µg/L | 2 | <2 | U |
| 24 | AROCLOR-1242 | 53469-21-9 | µg/L | 2 | <2 | U |
| 25 | AROCLOR-1248 | 12672-29-6 | µg/L | 2 | <2 | U |
| 26 | AROCLOR-1254 | 11097-69-1 | µg/L | 1 | <1 | U |
| 27 | AROCLOR-1260 | 11096-82-5 | µg/L | 1 | <1 | U |

| Surrogates | | | Control Limit, % | Surro. Rec.% |
|---|---|---|---|---|
| 1 | DECACHLOROBIPHENYL (DCB) | 2051-24-3 | 30-145 | 78 |
| 2 | 2,4,5,6-TETRACHLORO-M-XYLENE | 877-09-8 | 34-144 | 76 |
| # of out-of-control | | | | 0 |

| Internal Standard | | | Control Limit, % | IS Rec.% |
|---|---|---|---|---|
| 1 | DIBUTYLCHLORENDATE (DBC) | 1770-80-5 | 50-200 | 79 |
| # of out-of-control | | | | 0 |

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.

Qualifier: U - Not Detected or less than MDL
J - Less than RL (PQL, EQL or CRDL), but greater than MDL, or an estimated result (e.g. for TIC)
E - Exceed calibration range
B - A positive value was found in the method blank
D - Diluted

72195

# *Appendix G*
# *Laboratory Analytical Reports*

**OHM Remediation Services Corp**
*Subsidiary of OHM Corporation*
*U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526*

# CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY

212060

FORM 0019 REV. 2-97

| OHM's LAB COORDINATOR | LAB COORDINATOR'S PHONE | LAB COORDINATOR'S FAX | LABORATORY SERVICE ID | LABORATORY CONTACT | MAIL REPORT (COMPANY NAME) |
|---|---|---|---|---|---|
| DWAYNE ISHIDA | (714) 263-1146 | (714) 475-5433 | 9710409 | | |

| PROJECT NAME | PROJECT LOCATION | PROJECT NUMBER | LABORATORY PHONE | LABORATORY FAX | RECIPIENT NAME |
|---|---|---|---|---|---|
| TAA 772 | MCAS EL TORO | 18609 | | | |

| PROJECT CONTACT | PROJECT PHONE NUMBER | PROJECT FAX | LABORATORY ADDRESS | ADDRESS |
|---|---|---|---|---|
| DWAYNE ISHIDA | 263-1146 | 475-5433 | | |

| PROJECT ADDRESS | CITY, STATE AND ZIPCODE | CLIENT | CITY, STATE AND ZIPCODE | CITY, STATE AND ZIPCODE |
|---|---|---|---|---|
| MCAS EL TORO | EL TORO, CA | SWDIV | GLENDALE, CA | |

| PROJECT MANAGER | PROJECT MANAGER'S PHONE | PROJECT MANAGER'S FAX |
|---|---|---|
| BILL SEDLAK | 263-1146 | 263-1147 |

| Item | Sample Identifier | Matrix | Date | Time | Preserved | # of Cont. | QC Level | T.A.T. | Analyses: TPH Extractable | TPH Volatile | 8170 | 8260 | Metals | Cyanide | pH | 8081 | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18609-659 | S | 10/17/97 | 1232 | Ice | 1 | C | 5d | X | X | X | X | X | X | X | X | VOC |
| 2 | 18609-660 | | | 1238 | | | | | | | | X | | | | | |
| 3 | 18609-661 | | | 1251 | | | | | X | X | X | X | X | X | X | X | |
| 4 | 18609-662 | | | 1302 | | | | | | | | X | | | | | |
| 5 | 18609-663 | | | 1317 | | | | | X | X | X | X | X | X | X | X | |
| 6 | 18609-664 | | | 1330 | | | | | | | | X | | | | | |
| 7 | 18609-665 | | | 1338 | | | | | X | X | X | X | X | X | X | X | |
| 8 | 18609-666 | | | 1347 | | | | | | | | X | | | | | |
| 9 | 18609-667 | | | 1400 | | | | | X | X | X | X | X | X | X | X | |
| 10 | 18609-668 | | | 1410 | | | | | | | | X | | | | | |

SAMPLES COLLECTED BY: D. ISHIDA

COURIER AND AIR BILL NUMBER:

COOLER TEMPERATURE UPON RECEIPT:

| RELINQUISHED BY | RECEIVED BY | DATE | TIME | SAMPLE'S CONDITION UPON RECEIPT |
|---|---|---|---|---|
| [signature] | | 10/17/97 | | |

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

**Project Information Section**
**For Project Personnel Only**
**Do Not Submit to Laboratory**

| Sample Point Location | Sample Type: G | C | F | QC |
|---|---|---|---|---|
| (1) TAA 772 - SBB @ 1.5 | | | X | |
| (2) - SBB @ 3.0 | | | | |
| (3) - SBA @ 1.5 | | | | |
| (4) - SBA @ 3.0 | | | | |
| (5) - SBE @ 1.5 | | | | |
| (6) - SBE @ 3.0 | | | | |
| (7) - SBD @ 1.5 | | | | |
| (8) - SBD @ 3.0 | | | | |
| (9) - SBC @ 1.5 | | | | |
| (10) - SBC @ 3.0 | | | | |

Comments

TB on COC 212061
18609-637

Sample Type: G - Grab, C - Composite, F - Field Sample, QC - Quality Control Sample

**OHM Remediation Services Corp**
*Subsidiary of OHM Corporation*
*U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526*

# CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY
211958
FORM 0019 REV. 2-97

| | | | | | |
|---|---|---|---|---|---|
| LAB COORDINATOR: Wayne Ishida | LAB COORDINATOR'S PHONE: (714) 263-1146 | LAB COORDINATOR'S FAX: ~~263~~ (714) 475-5433 | LABORATORY SERVICE ID: 984049 | LABORATORY CONTACT: Cecilia Chavez | MAIL REPORT (COMPANY NAME): OHM |
| PROJECT NAME: A 772 | PROJECT LOCATION: MCAS El Toro | PROJECT NUMBER: 18609 | LABORATORY PHONE: (310) ~~616~~ 618-8889 | LABORATORY FAX: | RECIPIENT NAME: Mary Schneider |
| PROJECT CONTACT: Wayne Ishida | PROJECT PHONE NUMBER: (714) 451-1667 | PROJECT FAX: 451-1672 | LABORATORY ADDRESS: 620 Maple Ave | | ADDRESS: 2031 Main St |
| PROJECT ADDRESS: AS El Toro | CITY, STATE AND ZIPCODE: Santa Ana, CA | CLIENT: SWDIV | CITY, STATE AND ZIPCODE: Torrance, CA 90503 | | CITY, STATE AND ZIPCODE: Irvine, CA 92614 |
| PROJECT MANAGER: J Sedlak | PROJECT MANAGER'S PHONE: 263-1146 | PROJECT MANAGER'S FAX: 263-1147 | | | |

| Sample Identifier | Matrix | Date | Time | Preserved | # of Cont. | QC Level | T.A.T. | TPH-purg | TPH-ext | 8260 | 8270 | 8081 pest/PCB | Cyanide | PH | metals | TCL | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 18609-964 | W | 8/12/98 | 0730 | HCl/4° | 2 | III | 5d | | | | | | | | | | EMAX HOLD |
| 18609-965 | W | 8/12/98 | 0945 | various | 11 | III | 5d | X | X | X | X | X | X | X | X | | |
| 18609-966 | W | 8/12/98 | 1430 | various | 11 | IV | 5d | X | X | X | X | X | X | X | X | | |

8/12/98

SAMPLES COLLECTED BY: D. Ishida
COURIER AND AIR BILL NUMBER: EMAX
COOLER TEMPERATURE UPON RECEIPT:

| RELINQUISHED BY | RECEIVED BY | DATE | TIME | SAMPLE'S CONDITION UPON RECEIPT |
|---|---|---|---|---|
| | | 8/12/98 | 1525 | |

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

**Project Information Section**
**For Project Personnel Only**
**Do Not Submit to Laboratory**

| Sample Point Location | Sample Type G | C | F | QC |
|---|---|---|---|---|
| (1) trip blank | | | | X |
| (2) source water (8/12/98) | | | | X |
| (3) decon water | X | | | |

Comments
Source water collected from water buffalo "Contractors Equipment"

Sample Type: G - Grab, C - Composite, F - Field Sample, QC - Quality Control Sample

COMPLETED

**OHM Remediation Services Corp**
*Subsidiary of OHM Corporation*
*U.S. Route 224 East • Findlay, Ohio 45840 • (419) 423-3526*

# CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY

212061

FORM 0019 REV. 2-97

| | | | | | |
|---|---|---|---|---|---|
| OHM's LAB COORDINATOR: DWAYNE ISHIDA | LAB COORDINATOR'S PHONE: (714) 263-1146 | LAB COORDINATOR'S FAX: (714) 475-5433 | LABORATORY SERVICE ID: 9710359 | LABORATORY CONTACT | MAIL REPORT (COMPANY NAME) |
| PROJECT NAME: TAA 77 | PROJECT LOCATION: MCAS EL TORO | PROJECT NUMBER: 18609 | LABORATORY PHONE | LABORATORY FAX | RECIPIENT NAME |
| PROJECT CONTACT: DWAYNE ISHIDA | PROJECT PHONE NUMBER: 263-1146 | PROJECT FAX: 475-5433 | LABORATORY ADDRESS | | ADDRESS |
| PROJECT ADDRESS: MCAS EL TORO | CITY, STATE AND ZIPCODE: EL TORO, CA | CLIENT: SWDIV | CITY, STATE AND ZIPCODE: GLENDALE CA | | CITY, STATE AND ZIPCODE |
| PROJECT MANAGER: BILL SEDLAK | PROJECT MANAGER'S PHONE: 263-1146 | PROJECT MANAGER'S FAX: 263-1147 | | | |

| Item | Sample Identifier | Matrix | Date | Time | Preserved | # of Cont. | QC Level | T.A.T. | TPH-purgeable | TPH-extractable | 8270 | 8260 | Metals | Cyanide | pH | 9081 | VOC | Comments |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | 18609-637 | W | 10/17/97 | 0730 | HCl | 2 | C | 5d | X | | | X | | | | | | |
| 2 | 18609-638 | S | ↓ | 0810 | ice | 1 | C | 5d | X | X | X | X | X | X | X | X | | |
| 3 | 18609-639 | ↓ | ↓ | 0820 | ↓ | 1 | ↓ | ↓ | | | | X | | | | | | |
| 4 | 18609-640 | ↓ | ↓ | 0825 | ↓ | 1 | ↓ | ↓ | X | X | X | X | X | X | X | X | | |
| 5 | 18609-641 | ↓ | ↓ | 0830 | ↓ | 1 | ↓ | ↓ | | | | X | | | | | | |
| 6 | 18609-642 | W | ↓ | 0845 | various | 8 | C | 5d | X | X | X | X | X | X | X | X | | Cyanide container = 1L unpreserved. |
| 7 | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | |

Cancel 10/17/97

10/17/97

SAMPLES COLLECTED BY: D. ISHIDA

COURIER AND AIR BILL NUMBER

COOLER TEMPERATURE UPON RECEIPT

| RELINQUISHED BY | RECEIVED BY | DATE | TIME | SAMPLE'S CONDITION UPON RECEIPT |
|---|---|---|---|---|
| | | 10/17/97 | | |
| | | | 4:00 | |

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Yellow - Project Data Manager

**Project Information Section**
**For Project Personnel Only**
**Do Not Submit to Laboratory**

| Sample Point Location | Sample Type G | C | F | Q |
|---|---|---|---|---|
| 1 TRIP BLANK | | | | X |
| 2 TAA77-SBE @ 1.5 | | | X | |
| 3 SBE @ 3.0 | | | X | |
| 4 SBF @ 1.5 | | | X | |
| 5 SBF @ 3.0 | | | X | |
| 6 RINSATE | | | | X |

Comments

Sample Type: G - Grab, C - Composite, F - Field Sample
QC - Quality Control Sample

SAMPLE NO: 9710409*9

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.6% moisture) | | | | | | | |
| Mod 8015 - Gas | | | | | | | |
| TPH (Gasoline Range) | 8015M | | 10.23.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| a,a,a-Trifluorotoluene Rep. | 8015M | | 10.23.97 | 1 | Percent | 110 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.6% moisture) | | | | | | | |
| JP-5 | | | | | | | |
| TPH (Diesel Range) | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| JP-5 | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| Naphthalene Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 81 | |
| o-Terphenyl Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 101 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

(Following results reported on the basis of 9.6% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,2-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,2-Dichloropropane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 2-Chloroethylvinylether | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| 2-Hexanone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Acetone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Bromodichloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Bromomethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Benzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Bromoform | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chlorobenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Carbon Tetrachloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloroform | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Carbon Disulfide | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Dibromochloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Ethylbenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Methyl ethyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Methyl isobutyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |

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Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

(Following results reported on the basis of 9.6% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| tyrene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| richloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Toluene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Tetrachloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Vinyl acetate | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Total Xylene Isomers | 8260A | | 10.26.97 | 1 | ug/kg | 17 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.26.97 | 1 | Percent | 86 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.26.97 | 1 | Percent | 100 | |
| Toluene-d8 Reported | 8260A | | 10.26.97 | 1 | Percent | 96 | |
| Dibromofluoromethane Rep. | 8260A | | 10.26.97 | 1 | Percent | 94 | |

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| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

(Following results reported on the basis of 9.6% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 1,2-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 1,3-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 1,4-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4,5-Trichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4,6-Trichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4-Dichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4-Dimethylphenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4-Dinitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| 2,4-Dinitrotoluene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,6-Dinitrotoluene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Chloronaphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Chlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Methyl-4,6-dinitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| 2-Methylnaphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Methylphenol (o-Cresol) | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Nitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 3,3'-Dichlorobenzidine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 3-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Bromophenylphenylether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Chloro-3-methylphenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Chloroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Chlorophenylphenylether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |

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(Following results reported on the basis of 9.6% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 4-Methylphenol (p-Cresol) | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Nitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| Acenaphthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Acenaphthylene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(a)anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(a)pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(b)fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(g,h,i)perylene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(k)fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Butylbenzylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Chrysene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Di-n-octylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dibenzo(a,h)anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dibenzofuran | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dibutylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 210 | J |
| Diethylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dimethylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Fluorene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Hexachlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Hexachlorobutadiene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Hexachlorocyclopentadiene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |

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| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

(Following results reported on the basis of 9.6% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Hexachloroethane | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Indeno(1,2,3-c,d)pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| N-Nitrosodiphenylamine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| N-Nitrosodi-n-propylamine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Nitrobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Naphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Phenanthrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Phenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Pentachlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 730 | U |
| Pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroethoxy)methane | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroethyl)ether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroisopropyl)ether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-ethylhexyl)phthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 99 | |
| 2-Fluorophenol Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 80 | |
| 2,4,6-Tribromophenol Rep. | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 94 | |
| Nitrobenzene-d5 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 97 | |
| Phenol-d5 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 89 | |
| Terphenyl-d14 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 85 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.6% moisture) | | | | | | | |
| Compounds by SIM | | | | | | | |
| Benzo(a)pyrene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Dibenzo(a,h)anthracene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| N-Nitrosodi-n-propylamine | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Bis(2-chloroethyl)ether | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 58 | |
| Terphenyl-d14 Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 53 | |

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(Following results reported on the basis of 9.6% moisture)

Pesticides

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 107 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 82 | |

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| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

(Following results reported on the basis of 9.6% moisture)

Pesticides Confirmation

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 96 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 74 | |

SAMPLE NO: 9710409*9

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.6% moisture) | | | | | | | |
| Polychlorinated Biphenyls | | | | | | | |
| Aroclor 1016 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1221 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1232 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1242 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1248 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1254 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1260 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 107 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 82 | |

# ANALYTICAL REPORT

000086

SAMPLE NO: 9710409*9

Received: 10.20.97

Mailed:

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

(Following results reported on the basis of 9.6% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Total Cyanide | 9010A | 10.24.97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| pH | 9045 | | 10.24.97 | 1 | Units | 6.7 | |
| -Moisture/TNFR | D2216 | | 10.23.97 | 1 | Percent | 9.6 | |
| Aluminum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 10000 | |
| Antimony | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 22 | |
| Arsenic | 7060A | 10/23/97 | 10.27.97 | 1 | mg/kg | 1.7 | |
| Barium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 120 | |
| Beryllium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.61 | |
| Cadmium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| Calcium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5300 | |
| Chromium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 11 | |
| Cobalt | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 6.5 | |
| Copper | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 40 | |
| Iron | 6010A | 10/23/97 | 10.24.97 | 5 | mg/kg | 17000 | |
| Lead | 7421 | 10/23/97 | 10.24.97 | 1 | mg/kg | 3.0 | |
| Magnesium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5500 | |
| Manganese | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 270 | |
| Mercury | 7471A | 10.22.97 | 10.23.97 | 1 | mg/kg | 0.088 | U |
| Molybdenum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.2 | U |
| Nickel | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 12 | |
| Potassium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 3200 | |
| Selenium | 7740 | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| Silver | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 1.1 | U |
| Sodium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 180 | |

VOC Analytical Laboratories, Inc.
801 Western Avenue, Glendale, CA 91201 - **Phone:** (818) 247-5737 - **Fax:** (818) 247-9797

SAMPLE NO: 9710409*9

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*9 | 18609-659 | 10.17.97 |

(Following results reported on the basis of 9.6% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Thallium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.5 | U |
| Vanadium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 34 | |
| Zinc | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 67 | |
| Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |
| Furnace Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |

SAMPLE NO: 9710409*22

Received: 10.20.97

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Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*22 | 18609-660 | 10.17.97 |

(Following results reported on the basis of 5.4% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| 1,1-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| 1,1-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| 1,2-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| 1,2-Dichloropropane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| 2-Chloroethylvinylether | 8260A | | 10.25.97 | 1 | ug/kg | 53 | U |
| 2-Hexanone | 8260A | | 10.25.97 | 1 | ug/kg | 53 | U |
| Acetone | 8260A | | 10.25.97 | 1 | ug/kg | 53 | U |
| Bromodichloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Bromomethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Benzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Bromoform | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Chlorobenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Carbon Tetrachloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Chloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Chloroform | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Chloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Carbon Disulfide | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Dibromochloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Ethylbenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Methyl ethyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 53 | U |
| Methyl isobutyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 53 | U |

SAMPLE NO: 9710409*22

Received: 10.20.97

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P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*22 | 18609-660 | 10.17.97 |

(Following results reported on the basis of 5.4% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Styrene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Trichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Toluene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Tetrachloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Vinyl acetate | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Total Xylene Isomers | 8260A | | 10.25.97 | 1 | ug/kg | 16 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.3 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.25.97 | 1 | Percent | 90 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.25.97 | 1 | Percent | 101 | |
| Toluene-d8 Reported | 8260A | | 10.25.97 | 1 | Percent | 96 | |
| Dibromofluoromethane Rep. | 8260A | | 10.25.97 | 1 | Percent | 97 | |

SAMPLE NO: 9710409*10

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 13.0% moisture) | | | | | | | |
| Mod 8015 - Gas | | | | | | | |
| TPH (Gasoline Range) | 8015M | | 10.24.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| a,a-Trifluorotoluene Rep. | 8015M | | 10.24.97 | 1 | Percent | 110 | |

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 13.0% moisture) | | | | | | | |
| JP-5 | | | | | | | |
| TPH (Diesel Range) | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| JP-5 | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| Naphthalene Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 85 | |
| o-Terphenyl Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 103 | |

SAMPLE NO: 9710409*10

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| 1,2-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| 1,1-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| 1,1-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| 1,2-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| 1,2-Dichloropropane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| 2-Chloroethylvinylether | 8260A | | 10.26.97 | 1 | ug/kg | 57 | U |
| 2-Hexanone | 8260A | | 10.26.97 | 1 | ug/kg | 57 | U |
| Acetone | 8260A | | 10.26.97 | 1 | ug/kg | 57 | U |
| Bromodichloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Bromomethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Benzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Bromoform | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Chlorobenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Carbon Tetrachloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Chloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Chloroform | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Chloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Carbon Disulfide | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Dibromochloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Ethylbenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Methyl ethyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 57 | U |
| Methyl isobutyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 57 | U |

SAMPLE NO: 9710409*10

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2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Styrene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Trichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Toluene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Tetrachloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Vinyl acetate | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Total Xylene Isomers | 8260A | | 10.26.97 | 1 | ug/kg | 17 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.7 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.26.97 | 1 | Percent | 84 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.26.97 | 1 | Percent | 100 | |
| Toluene-d8 Reported | 8260A | | 10.26.97 | 1 | Percent | 97 | |
| Dibromofluoromethane Rep. | 8260A | | 10.26.97 | 1 | Percent | 91 | |

SAMPLE NO: 9710409*10

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 1,2-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| ,3-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 1,4-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2,4,5-Trichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2,4,6-Trichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2,4-Dichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2,4-Dimethylphenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2,4-Dinitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 950 | U |
| 2,4-Dinitrotoluene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2,6-Dinitrotoluene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2-Chloronaphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2-Chlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2-Methyl-4,6-dinitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 950 | U |
| 2-Methylnaphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2-Methylphenol (o-Cresol) | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 2-Nitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 3,3'-Dichlorobenzidine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 3-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 4-Bromophenylphenylether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 4-Chloro-3-methylphenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 4-Chloroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 4-Chlorophenylphenylether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |

SAMPLE NO: 9710409*10

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 4-Methylphenol (p-Cresol) | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 4-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| 4-Nitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 950 | U |
| Acenaphthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Acenaphthylene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Benzo(a)anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Benzo(a)pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Benzo(b)fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Benzo(g,h,i)perylene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Benzo(k)fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Butylbenzylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Chrysene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Di-n-octylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Dibenzo(a,h)anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Dibenzofuran | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Dibutylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 220 | J |
| Diethylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Dimethylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Fluorene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Hexachlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Hexachlorobutadiene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Hexachlorocyclopentadiene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |

SAMPLE NO: 9710409*10

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Hexachloroethane | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Indeno(1,2,3-c,d)pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| N-Nitrosodiphenylamine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| N-Nitrosodi-n-propylamine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Nitrobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Naphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Phenanthrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Phenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Pentachlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 760 | U |
| Pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Bis(2-chloroethoxy)methane | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Bis(2-chloroethyl)ether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Bis(2-chloroisopropyl)ether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Bis(2-ethylhexyl)phthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 380 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 88 | |
| 2-Fluorophenol Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 72 | |
| 2,4,6-Tribromophenol Rep. | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 85 | |
| Nitrobenzene-d5 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 85 | |
| Phenol-d5 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 83 | |
| Terphenyl-d14 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 80 | |

SAMPLE NO: 9710409*10

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Compounds by SIM

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Dibenzo(a,h)anthracene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| N-Nitrosodi-n-propylamine | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Bis(2-chloroethyl)ether | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 49 | |
| Terphenyl-d14 Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 49 | |

SAMPLE NO: 9710409*10

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Pesticides

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.8 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.8 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 99 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 71 | |

SAMPLE NO: 9710409*10

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Pesticides Confirmation

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.8 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.8 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.3 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 130 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 62 | |

SAMPLE NO: 9710409*10

Received: 10.20.97

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Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

Polychlorinated Biphenyls

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Aroclor 1221 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| roclor 1232 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Aroclor 1242 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Aroclor 1248 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Aroclor 1254 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Aroclor 1260 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 38 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 99 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 71 | |

# ANALYTICAL REPORT

000099

SAMPLE NO: 9710409*10

Received: 10.20.97

Mailed:

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Total Cyanide | 9010A | 10.24.97 | 10.24.97 | 1 | mg/kg | 0.57 | U |
| pH | 9045 | | 10.24.97 | 1 | Units | 7.1 | |
| -Moisture/TNFR | D2216 | | 10.23.97 | 1 | Percent | 13 | |
| Aluminum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 6200 | |
| Antimony | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.7 | U |
| Arsenic | 7060A | 10/23/97 | 10.27.97 | 1 | mg/kg | 2.6 | |
| Barium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 110 | |
| Beryllium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.51 | |
| Cadmium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.57 | U |
| Calcium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5100 | |
| Chromium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 7.2 | |
| Cobalt | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 6.4 | |
| Copper | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 15 | |
| Iron | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 9700 | |
| Lead | 7421 | 10/23/97 | 10.24.97 | 1 | mg/kg | 3.3 | |
| Magnesium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 4000 | |
| Manganese | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 230 | |
| Mercury | 7471A | 10.22.97 | 10.23.97 | 1 | mg/kg | 0.092 | U |
| Molybdenum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.3 | U |
| Nickel | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 10.0 | |
| Potassium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2300 | |
| Selenium | 7740 | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.57 | U |
| Silver | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 1.1 | U |
| Sodium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 110 | |

SAMPLE NO: 9710409*10

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*10 | 18609-661 | 10.17.97 |

(Following results reported on the basis of 13.0% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Thallium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.7 | U |
| Vanadium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 24 | |
| Z | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 48 | |
| Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |
| Furnace Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |

SAMPLE NO: 9710409*23

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*23 | 18609-662 | 10.17.97 |

(Following results reported on the basis of 7.7% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloropropane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 2-Chloroethylvinylether | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| 2-Hexanone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Acetone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Bromodichloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Bromomethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Benzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Bromoform | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chlorobenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Carbon Tetrachloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloroform | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Carbon Disulfide | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Dibromochloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Ethylbenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Methyl ethyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Methyl isobutyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |

SAMPLE NO: 9710409*23

Received: 10.20.97

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2031 Main Street
Irvine, CA 92614

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Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*23 | 18609-662 | 10.17.97 |

(Following results reported on the basis of 7.7% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Styrene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Trichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Toluene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Tetrachloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Vinyl acetate | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Total Xylene Isomers | 8260A | | 10.25.97 | 1 | ug/kg | 16 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.25.97 | 1 | Percent | 92 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.25.97 | 1 | Percent | 100 | |
| Toluene-d8 Reported | 8260A | | 10.25.97 | 1 | Percent | 97 | |
| Dibromofluoromethane Rep. | 8260A | | 10.25.97 | 1 | Percent | 97 | |

SAMPLE NO: 9710409*11

Received: 10.20.97

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.3% moisture) | | | | | | | |
| Mod 8015 - Gas | | | | | | | |
| TPH (Gasoline Range) | 8015M | | 10.23.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| a,a,a-Trifluorotoluene Rep. | 8015M | | 10.23.97 | 1 | Percent | 106 | |

SAMPLE NO: 9710409*11

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.3% moisture) | | | | | | | |
| JP-5 | | | | | | | |
| TPH (Diesel Range) | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| JP-5 | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| urrogates ** | | | | | | | |
| Naphthalene Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 86 | |
| o-Terphenyl Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 103 | |

SAMPLE NO: 9710409*11

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,2-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,2-Dichloropropane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 2-Chloroethylvinylether | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| 2-Hexanone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Acetone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Bromodichloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Bromomethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Benzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Bromoform | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chlorobenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Carbon Tetrachloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloroform | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Carbon Disulfide | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Dibromochloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Ethylbenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Methyl ethyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Methyl isobutyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |

SAMPLE NO: 9710409*11

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| tyrene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| richloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Toluene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Tetrachloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Vinyl acetate | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Total Xylene Isomers | 8260A | | 10.26.97 | 1 | ug/kg | 17 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.26.97 | 1 | Percent | 94 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.26.97 | 1 | Percent | 100 | |
| Toluene-d8 Reported | 8260A | | 10.26.97 | 1 | Percent | 95 | |
| Dibromofluoromethane Rep. | 8260A | | 10.26.97 | 1 | Percent | 97 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 1,2-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 1,3-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 1,4-Dichlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2,4,5-Trichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2,4,6-Trichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2,4-Dichlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2,4-Dimethylphenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2,4-Dinitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| 2,4-Dinitrotoluene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2,6-Dinitrotoluene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2-Chloronaphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2-Chlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2-Methyl-4,6-dinitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| 2-Methylnaphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2-Methylphenol (o-Cresol) | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 2-Nitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 3,3'-Dichlorobenzidine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 3-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 4-Bromophenylphenylether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 4-Chloro-3-methylphenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 4-Chloroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 4-Chlorophenylphenylether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 4-Methylphenol (p-Cresol) | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 4-Nitroaniline | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| 4-Nitrophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| Acenaphthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Acenaphthylene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Benzo(a)anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Benzo(a)pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Benzo(b)fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Benzo(g,h,i)perylene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Benzo(k)fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Butylbenzylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Chrysene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Di-n-octylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Dibenzo(a,h)anthracene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Dibenzofuran | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Dibutylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 170 | J |
| Diethylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Dimethylphthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Fluoranthene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Fluorene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Hexachlorobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Hexachlorobutadiene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Hexachlorocyclopentadiene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |

SAMPLE NO: 9710409*11

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Hexachloroethane | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Indeno(1,2,3-c,d)pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| N-Nitrosodiphenylamine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| N-Nitrosodi-n-propylamine | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Nitrobenzene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Naphthalene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Phenanthrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Phenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Pentachlorophenol | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 730 | U |
| Pyrene | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Bis(2-chloroethoxy)methane | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Bis(2-chloroethyl)ether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Bis(2-chloroisopropyl)ether | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Bis(2-ethylhexyl)phthalate | 8270B | 10.21.97 | 10.26.97 | 1 | ug/kg | 360 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 99 | |
| 2-Fluorophenol Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 78 | |
| 2,4,6-Tribromophenol Rep. | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 95 | |
| Nitrobenzene-d5 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 97 | |
| Phenol-d5 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 89 | |
| Terphenyl-d14 Reported | 8270B | 10.21.97 | 10.26.97 | 1 | Percent | 89 | |

SAMPLE NO: 9710409*11

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | | | | | | DATE SAMPLED |
|---|---|---|---|---|---|---|---|
| 9710409*11 | 18609-663 | | | | | | 10.17.97 |
| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
| (Following results reported on the basis of 9.3% moisture) | | | | | | | |
| Compounds by SIM | | | | | | | |
| Benzo(a)pyrene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Dibenzo(a,h)anthracene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| N-Nitrosodi-n-propylamine | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Bis(2-chloroethyl)ether | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 55 | |
| Terphenyl-d14 Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 57 | |

SAMPLE NO: 9710409*11

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

Pesticides

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 98 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 74 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE — DATE SAMPLED

9710409*11 18609-663 — 10.17.97

(Following results reported on the basis of 9.3% moisture)

Pesticides Confirmation

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.77 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 91 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 67 | |

SAMPLE NO: 9710409*11

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

Polychlorinated Biphenyls

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Aroclor 1221 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Aroclor 1232 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Aroclor 1242 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Aroclor 1248 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Aroclor 1254 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Aroclor 1260 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 36 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 98 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 74 | |

# ANALYTICAL REPORT

000112

SAMPLE NO: 9710409*11

Received: 10.20.97

Mailed:

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Total Cyanide | 9010A | 10.24.97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| pH | 9045 | | 10.24.97 | 1 | Units | 7.0 | |
| -Moisture/TNFR | D2216 | | 10.23.97 | 1 | Percent | 9.3 | |
| Aluminum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 6100 | |
| Antimony | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.5 | U |
| Arsenic | 7060A | 10/23/97 | 10.27.97 | 1 | mg/kg | 1.4 | |
| Barium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 98 | |
| Beryllium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.52 | |
| Cadmium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| Calcium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5100 | |
| Chromium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 7.7 | |
| Cobalt | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 6.3 | |
| Copper | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 8.2 | |
| Iron | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 9400 | |
| Lead | 7421 | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.8 | |
| Magnesium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 4000 | |
| Manganese | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 230 | |
| Mercury | 7471A | 10.22.97 | 10.23.97 | 1 | mg/kg | 0.088 | U |
| Molybdenum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.2 | U |
| Nickel | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 11 | |
| Potassium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2100 | |
| Selenium | 7740 | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| Silver | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 1.1 | U |
| Sodium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 140 | |

SAMPLE NO: 9710409*11

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*11 | 18609-663 | 10.17.97 |

(Following results reported on the basis of 9.3% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Thallium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.3 | J |
| Vanadium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 23 | |
| Zinc | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 30 | |
| Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |
| Furnace Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |

SAMPLE NO: 9710409*24

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*24 | 18609-664 | 10.17.97 |

(Following results reported on the basis of 8.1% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Trichloroethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloroethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloropropane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| 2-Chloroethylvinylether | 8260A | | 10.24.97 | 1 | ug/kg | 54 | U |
| 2-Hexanone | 8260A | | 10.24.97 | 1 | ug/kg | 54 | U |
| Acetone | 8260A | | 10.24.97 | 1 | ug/kg | 54 | U |
| Bromodichloromethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Bromomethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Benzene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Bromoform | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Chlorobenzene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Carbon Tetrachloride | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Chloroethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Chloroform | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Chloromethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Carbon Disulfide | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Dibromochloromethane | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Ethylbenzene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Methyl ethyl ketone | 8260A | | 10.24.97 | 1 | ug/kg | 54 | U |
| Methyl isobutyl ketone | 8260A | | 10.24.97 | 1 | ug/kg | 54 | U |

SAMPLE NO: 9710409*24

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*24 | 18609-664 | 10.17.97 |

(Following results reported on the basis of 8.1% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.24.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Styrene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Trichloroethene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Toluene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Tetrachloroethene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Vinyl acetate | 8260A | | 10.24.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Total Xylene Isomers | 8260A | | 10.24.97 | 1 | ug/kg | 16 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.24.97 | 1 | ug/kg | 5.4 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.24.97 | 1 | Percent | 95 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.24.97 | 1 | Percent | 100 | |
| Toluene-d8 Reported | 8260A | | 10.24.97 | 1 | Percent | 93 | |
| Dibromofluoromethane Rep. | 8260A | | 10.24.97 | 1 | Percent | 106 | |

SAMPLE NO: 9710409*12

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Mod 8015 - Gas

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| TPH (Gasoline Range) | 8015M | | 10.23.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| ,a,a-Trifluorotoluene Rep. | 8015M | | 10.23.97 | 1 | Percent | 110 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 10.0% moisture) | | | | | | | |
| JP-5 | | | | | | | |
| TPH (Diesel Range) | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| JP-5 | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| Naphthalene Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 93 | |
| o-Terphenyl Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 113 | |

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| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| 1,1-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| 1,1-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| 1,2-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| 1,2-Dichloropropane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| 2-Chloroethylvinylether | 8260A | | 10.26.97 | 1 | ug/kg | 56 | U |
| 2-Hexanone | 8260A | | 10.26.97 | 1 | ug/kg | 56 | U |
| Acetone | 8260A | | 10.26.97 | 1 | ug/kg | 56 | U |
| Bromodichloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Bromomethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Benzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Bromoform | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Chlorobenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Carbon Tetrachloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Chloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Chloroform | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Chloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Carbon Disulfide | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Dibromochloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Ethylbenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Methyl ethyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 56 | U |
| Methyl isobutyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 56 | U |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Styrene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Trichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Toluene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Tetrachloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Vinyl acetate | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Total Xylene Isomers | 8260A | | 10.26.97 | 1 | ug/kg | 17 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.6 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.26.97 | 1 | Percent | 91 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.26.97 | 1 | Percent | 101 | |
| Toluene-d8 Reported | 8260A | | 10.26.97 | 1 | Percent | 94 | |
| Dibromofluoromethane Rep. | 8260A | | 10.26.97 | 1 | Percent | 101 | |

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| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 1,2-Dichlorobenzene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 1,3-Dichlorobenzene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Dichlorobenzene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4,5-Trichlorophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4,6-Trichlorophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4-Dichlorophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4-Dimethylphenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,4-Dinitrophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| 2,4-Dinitrotoluene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2,6-Dinitrotoluene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Chloronaphthalene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Chlorophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Methyl-4,6-dinitrophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| 2-Methylnaphthalene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Methylphenol (o-Cresol) | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Nitroaniline | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 2-Nitrophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 3,3'-Dichlorobenzidine | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 3-Nitroaniline | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Bromophenylphenylether | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Chloro-3-methylphenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Chloroaniline | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Chlorophenylphenylether | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |

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|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 4-Methylphenol (p-Cresol) | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Nitroaniline | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| 4-Nitrophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 920 | U |
| Acenaphthene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Acenaphthylene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Anthracene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(a)anthracene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(a)pyrene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(b)fluoranthene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(g,h,i)perylene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Benzo(k)fluoranthene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Butylbenzylphthalate | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Chrysene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Di-n-octylphthalate | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dibenzo(a,h)anthracene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dibenzofuran | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dibutylphthalate | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 160 | J |
| Diethylphthalate | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Dimethylphthalate | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Fluoranthene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Fluorene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Hexachlorobenzene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Hexachlorobutadiene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Hexachlorocyclopentadiene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Hexachloroethane | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Indeno(1,2,3-c,d)pyrene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| '-Nitrosodiphenylamine | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| N-Nitrosodi-n-propylamine | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Nitrobenzene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Naphthalene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Phenanthrene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Phenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Pentachlorophenol | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 730 | U |
| Pyrene | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroethoxy)methane | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroethyl)ether | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroisopropyl)ether | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Bis(2-ethylhexyl)phthalate | 8270B | 10.26.97 | 10.26.97 | 1 | ug/kg | 370 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270B | 10.26.97 | 10.26.97 | 1 | Percent | 87 | |
| 2-Fluorophenol Reported | 8270B | 10.26.97 | 10.26.97 | 1 | Percent | 71 | |
| 2,4,6-Tribromophenol Rep. | 8270B | 10.26.97 | 10.26.97 | 1 | Percent | 86 | |
| Nitrobenzene-d5 Reported | 8270B | 10.26.97 | 10.26.97 | 1 | Percent | 86 | |
| Phenol-d5 Reported | 8270B | 10.26.97 | 10.26.97 | 1 | Percent | 81 | |
| Terphenyl-d14 Reported | 8270B | 10.26.97 | 10.26.97 | 1 | Percent | 76 | |

SAMPLE NO: 9710409*12

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Compounds by SIM

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Benzo(a)pyrene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Dibenzo(a,h)anthracene | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| N-Nitrosodi-n-propylamine | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Bis(2-chloroethyl)ether | 8270.S | 10.21.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 45 | |
| Terphenyl-d14 Reported | 8270.S | 10.21.97 | 10.25.97 | 1 | Percent | 47 | |

SAMPLE NO: 9710409*12

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Pesticides

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 104 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 76 | |

SAMPLE NO: 9710409*12

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Pesticides Confirmation

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 94 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 68 | |

SAMPLE NO: 9710409*12

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

Polychlorinated Biphenyls

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1221 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1232 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1242 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1248 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1254 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1260 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 104 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 76 | |

# ANALYTICAL REPORT

000125

SAMPLE NO: 9710409*12

Received: 10.20.97

Mailed:

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Total Cyanide | 9010A | 10.24.97 | 10.24.97 | 1 | mg/kg | 0.56 | U |
| pH | 9045 | | 10.24.97 | 1 | Units | 6.8 | |
| -Moisture/TNFR | D2216 | | 10.23.97 | 1 | Percent | 10 | |
| Aluminum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 8800 | |
| Antimony | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.6 | U |
| Arsenic | 7060A | 10/23/97 | 10.27.97 | 1 | mg/kg | 2.4 | |
| Barium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 120 | |
| Beryllium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.59 | |
| Cadmium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.56 | U |
| Calcium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5000 | |
| Chromium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 10.0 | |
| Cobalt | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 7.0 | |
| Copper | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 9.1 | |
| Iron | 6010A | 10/23/97 | 10.24.97 | 5 | mg/kg | 14000 | |
| Lead | 7421 | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.3 | |
| Magnesium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 4900 | |
| Manganese | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 260 | |
| Mercury | 7471A | 10.22.97 | 10.23.97 | 1 | mg/kg | 0.089 | U |
| Molybdenum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.2 | U |
| Nickel | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 11 | |
| Potassium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 3000 | |
| Selenium | 7740 | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.56 | U |
| Silver | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 1.1 | U |
| Sodium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 140 | |

SAMPLE NO: 9710409*12

Received: 10.20.97

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Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710409*12 | 18609-665 | 10.17.97 |

(Following results reported on the basis of 10.0% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Thallium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.6 | U |
| Vanadium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 30 | |
| Zinc | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 40 | |
| estion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |
| Furnace Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |

SAMPLE NO: 9710409*25

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*25 | 18609-666 | 10.17.97 |

(Following results reported on the basis of 7.5% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloropropane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 2-Chloroethylvinylether | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| 2-Hexanone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Acetone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Bromodichloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Bromomethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Benzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Bromoform | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chlorobenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Carbon Tetrachloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloroform | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Carbon Disulfide | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Dibromochloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Ethylbenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Methyl ethyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Methyl isobutyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |

SAMPLE NO: 9710409*25

Received: 10.20.97

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OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*25 | 18609-666 | 10.17.97 |

(Following results reported on the basis of 7.5% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Styrene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Trichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Toluene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Tetrachloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Vinyl acetate | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Total Xylene Isomers | 8260A | | 10.25.97 | 1 | ug/kg | 16 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.25.97 | 1 | Percent | 86 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.25.97 | 1 | Percent | 99 | |
| Toluene-d8 Reported | 8260A | | 10.25.97 | 1 | Percent | 96 | |
| Dibromofluoromethane Rep. | 8260A | | 10.25.97 | 1 | Percent | 97 | |

SAMPLE NO: 9710409*13

Received: 10.20.97

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OHM Remediation Services Corp.
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Irvine, CA 92614

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Mod 8015 - Gas

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| TPH (Gasoline Range) | 8015M | | 10.23.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| a,a,a-Trifluorotoluene Rep. | 8015M | | 10.23.97 | 1 | Percent | 116 | |

SAMPLE NO: 9710409*13

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Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.8% moisture) | | | | | | | |
| JP-5 | | | | | | | |
| TPH (Diesel Range) | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| JP-5 | 8015M | 10.22.97 | 10.24.97 | 1 | mg/kg | 11 | U |
| Surrogates ** | | | | | | | |
| Naphthalene Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 82 | |
| o-Terphenyl Reported | 8015M | 10.22.97 | 10.24.97 | 1 | Percent | 101 | |

SAMPLE NO: 9710409*13

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,1-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,2-Dichloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 1,2-Dichloropropane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| 2-Chloroethylvinylether | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| 2-Hexanone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Acetone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Bromodichloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Bromomethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Benzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Bromoform | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chlorobenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Carbon Tetrachloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloroethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloroform | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Chloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Carbon Disulfide | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Dibromochloromethane | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Ethylbenzene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Methyl ethyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |
| Methyl isobutyl ketone | 8260A | | 10.26.97 | 1 | ug/kg | 55 | U |

SAMPLE NO: 9710409*13

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Styrene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Trichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Toluene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Tetrachloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Vinyl acetate | 8260A | | 10.26.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Total Xylene Isomers | 8260A | | 10.26.97 | 1 | ug/kg | 17 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.26.97 | 1 | ug/kg | 5.5 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.26.97 | 1 | Percent | 90 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.26.97 | 1 | Percent | 101 | |
| Toluene-d8 Reported | 8260A | | 10.26.97 | 1 | Percent | 94 | |
| Dibromofluoromethane Rep. | 8260A | | 10.26.97 | 1 | Percent | 107 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,2,4-Trichlorobenzene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 1,2-Dichlorobenzene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 1,3-Dichlorobenzene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 1,4-Dichlorobenzene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2,4,5-Trichlorophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2,4,6-Trichlorophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2,4-Dichlorophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2,4-Dimethylphenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2,4-Dinitrophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 920 | U |
| 2,4-Dinitrotoluene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2,6-Dinitrotoluene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2-Chloronaphthalene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2-Chlorophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2-Methyl-4,6-dinitrophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 920 | U |
| 2-Methylnaphthalene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2-Methylphenol (o-Cresol) | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2-Nitroaniline | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 2-Nitrophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 3,3'-Dichlorobenzidine | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 3-Nitroaniline | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 4-Bromophenylphenylether | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 4-Chloro-3-methylphenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 4-Chloroaniline | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 4-Chlorophenylphenylether | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 4-Methylphenol (p-Cresol) | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 4-Nitroaniline | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| 4-Nitrophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 920 | U |
| Acenaphthene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Acenaphthylene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Anthracene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Benzo(a)anthracene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Benzo(a)pyrene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Benzo(b)fluoranthene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Benzo(g,h,i)perylene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Benzo(k)fluoranthene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Butylbenzylphthalate | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Chrysene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Di-n-octylphthalate | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Dibenzo(a,h)anthracene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Dibenzofuran | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Dibutylphthalate | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Diethylphthalate | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Dimethylphthalate | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Fluoranthene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Fluorene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Hexachlorobenzene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Hexachlorobutadiene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Hexachlorocyclopentadiene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |

SAMPLE NO: 9710409*13

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P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Semi-volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Hexachloroethane | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Indeno(1,2,3-c,d)pyrene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| N-Nitrosodiphenylamine | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| N-Nitrosodi-n-propylamine | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Nitrobenzene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Naphthalene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Phenanthrene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Phenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Pentachlorophenol | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 730 | U |
| Pyrene | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroethoxy)methane | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroethyl)ether | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Bis(2-chloroisopropyl)ether | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Bis(2-ethylhexyl)phthalate | 8270B | 10.21.97 | 10.28.97 | 1 | ug/kg | 370 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270B | 10.21.97 | 10.28.97 | 1 | Percent | 99 | |
| 2-Fluorophenol Reported | 8270B | 10.21.97 | 10.28.97 | 1 | Percent | 94 | |
| 2,4,6-Tribromophenol Rep. | 8270B | 10.21.97 | 10.28.97 | 1 | Percent | 111 | |
| Nitrobenzene-d5 Reported | 8270B | 10.21.97 | 10.28.97 | 1 | Percent | 99 | |
| Phenol-d5 Reported | 8270B | 10.21.97 | 10.28.97 | 1 | Percent | 104 | |
| Terphenyl-d14 Reported | 8270B | 10.21.97 | 10.28.97 | 1 | Percent | 97 | |

SAMPLE NO: 9710409*13

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P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| (Following results reported on the basis of 9.8% moisture) | | | | | | | |
| Compounds by SIM | | | | | | | |
| Benzo(a)pyrene | 8270.S | 10.21.97 | 10.28.97 | 1 | ug/kg | 37 | U |
| Dibenzo(a,h)anthracene | 8270.S | 10.21.97 | 10.28.97 | 1 | ug/kg | 37 | U |
| N-Nitrosodi-n-propylamine | 8270.S | 10.21.97 | 10.28.97 | 1 | ug/kg | 37 | U |
| Bis(2-chloroethyl)ether | 8270.S | 10.21.97 | 10.28.97 | 1 | ug/kg | 37 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270.S | 10.21.97 | 10.28.97 | 1 | Percent | 51 | |
| Terphenyl-d14 Reported | 8270.S | 10.21.97 | 10.28.97 | 1 | Percent | 53 | |

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



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|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Pesticides

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 112 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 83 | |

SAMPLE NO: 9710409*13

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DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Pesticides Confirmation

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Dieldrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Heptachlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 0.78 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 2.2 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 173 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 73 | |

SAMPLE NO: 9710409*13

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Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

Polychlorinated Biphenyls

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Aroclor 1016 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1221 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1232 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1242 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1248 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1254 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Aroclor 1260 | 8081 | 10.22.97 | 10.25.97 | 1 | ug/kg | 37 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 112 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.25.97 | 1 | Percent | 83 | |

# ANALYTICAL REPORT

000138

SAMPLE NO: 9710409*13

Received: 10.20.97

Mailed:

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Total Cyanide | 9010A | 10.24.97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| pH | 9045 | | 10.24.97 | 1 | Units | 6.9 | |
| -Moisture/TNFR | D2216 | | 10.23.97 | 1 | Percent | 9.8 | |
| Aluminum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 8100 | |
| Antimony | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.5 | U |
| Arsenic | 7060A | 10/23/97 | 10.27.97 | 1 | mg/kg | 2.5 | |
| Barium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 130 | |
| Beryllium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.62 | |
| Cadmium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| Calcium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5400 | |
| Chromium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 8.9 | |
| Cobalt | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 6.8 | |
| Copper | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 8.6 | |
| Iron | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 12000 | |
| Lead | 7421 | 10/23/97 | 10.24.97 | 1 | mg/kg | 3.2 | |
| Magnesium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5000 | |
| Manganese | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 250 | |
| Mercury | 7471A | 10.22.97 | 10.23.97 | 1 | mg/kg | 0.089 | U |
| Molybdenum | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2.2 | U |
| Nickel | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 11.0 | |
| Potassium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 2800 | |
| Selenium | 7740 | 10/23/97 | 10.24.97 | 1 | mg/kg | 0.55 | U |
| Silver | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 1.1 | U |
| Sodium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 170 | |

VOC Analytical Laboratories, Inc.
801 Western Avenue, Glendale, CA 91201 - **Phone:** (818) 247-5737 - **Fax:** (818) 247-9797

SAMPLE NO: 9710409*13

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*13 | 18609-667 | 10.17.97 |

(Following results reported on the basis of 9.8% moisture)

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Thallium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 5.5 | U |
| Vanadium | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 29 | |
| Zinc | 6010A | 10/23/97 | 10.24.97 | 1 | mg/kg | 38 | |
| Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |
| Furnace Digestion | 3050 | 10/23/97 | 10.23.97 | 1 | Date | 10/23/97 | |

SAMPLE NO: 9710409*26

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*26 | 18609-668 | 10.17.97 |

(Following results reported on the basis of 7.7% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| 1,1,1-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Trichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,1-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 1,2-Dichloropropane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| 2-Chloroethylvinylether | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| 2-Hexanone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Acetone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Bromodichloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Bromomethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Benzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Bromoform | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chlorobenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Carbon Tetrachloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloroethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloroform | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Chloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Carbon Disulfide | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Dibromochloromethane | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Ethylbenzene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Methyl ethyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |
| Methyl isobutyl ketone | 8260A | | 10.25.97 | 1 | ug/kg | 54 | U |

SAMPLE NO: 9710409*26

Received: 10.20.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609/EL.TORO

DRY WEIGHT REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, NON-AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710409*26 | 18609-668 | 10.17.97 |

(Following results reported on the basis of 7.7% moisture)

Volatiles

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Methyl-tert-butylether | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Methylene chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Styrene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Trichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Toluene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Tetrachloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Vinyl acetate | 8260A | | 10.25.97 | 1 | ug/kg | 11 | U |
| Vinyl chloride | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Total Xylene Isomers | 8260A | | 10.25.97 | 1 | ug/kg | 16 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.25.97 | 1 | ug/kg | 5.4 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.25.97 | 1 | Percent | 79 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.25.97 | 1 | Percent | 101 | |
| Toluene-d8 Reported | 8260A | | 10.25.97 | 1 | Percent | 97 | |
| Dibromofluoromethane Rep. | 8260A | | 10.25.97 | 1 | Percent | 94 | |

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | DaTime Collcted: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | DaTime Received: | 08/12/98 |
| Batch No. | : 98H049 | DaTime Extrctd : | 08/13/98 06:01 |
| Sample ID | : 18609-965 | DaTime Analyzd : | 08/13/98 06:01 |
| Lab Cnt NO.: | H049-02 | Dilutn Factor : | 1 |
| Lab File ID: | RHV215 | Matrix : | WATER |
| Ext Btch ID: | VOH1301B | % Moisture : | NA |
| Calib. Ref.: | RHV205 | Instrument ID : | T-001 |

| PARAMETERS | RESULTS (ug/L) | PRL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 5 | 1.13 |
| 1,1,2,2-Tetrachloroethane | ND | 5 | .488 |
| 1,1,2-Trichloroethane | ND | 5 | .515 |
| 1,1-Dichloroethane | ND | 5 | 1.21 |
| 1,1-Dichloroethene | ND | 5 | 1.96 |
| 1,2-Dichloroethane | ND | 5 | .583 |
| 1,2-Dichloropropane | ND | 5 | .533 |
| 2-Butanone | ND | 50 | 7.87 |
| 2-Chloroethylvinylether | ND | 50 | .828 |
| 2-Hexanone | ND | 50 | 1.01 |
| 4-Methyl-2-Pentanone | ND | 50 | 1.02 |
| Acetone | ND | 50 | 10.3 |
| Benzene | ND | 5 | .849 |
| Bromodichloromethane | 11.3 | 5 | .334 |
| Bromoform | ND | 5 | .293 |
| Bromomethane | ND | 5 | 1.53 |
| Carbon Disulfide | ND | 5 | 1.31 |
| Carbon Tetrachloride | ND | 5 | 1.28 |
| Chlorobenzene | ND | 5 | .684 |
| Chloroethane | ND | 5 | 2.9 |
| Chloroform | 14.2 | 5 | .854 |
| Chloromethane | ND | 5 | 1.69 |
| cis-1,2-Dichloroethene | ND | 5 | .973 |
| cis-1,3-Dichloropropene | ND | 5 | .474 |
| Dibromochloromethane | 6.71 | 5 | .292 |
| Ethylbenzene | ND | 5 | .72 |
| Methyl tert-butyl ether (MTBE) | 24.4 | 10 | .955 |
| Methylene Chloride | 2.27J | 5 | 1.76 |
| Styrene | ND | 5 | .583 |
| Tetrachloroethene | ND | 5 | 1.22 |
| Toluene | ND | 5 | .922 |
| trans-1,2-Dichloroethene | ND | 5 | 1.52 |
| trans-1,3-Dichloropropene | ND | 5 | .449 |
| Trichloroethene | ND | 5 | .9 |
| Vinyl Acetate | ND | 50 | 6.17 |
| Vinyl Chloride | ND | 5 | 1.68 |
| Xylenes | ND | 5 | 2.41 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| 1,2-Dichloroethane-d4 | 96 | 62-139 |
| Toluene-d8 | 98 | 75-125 |
| Bromofluorobenzene | 100 | 75-125 |

PRL: Project Reporting Limit
* : Out side of QC Limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
: Found in the associated blank
D : Value from dilution analysis

2004

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | DaTime Collcted: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | DaTime Received: | 08/12/98 |
| Batch No. | : 98H049 | DaTime Extrctd : | 08/13/98 06:[illegible] |
| Sample ID | : 18609-966 | DaTime Analyzd : | 08/13/98 06:28 |
| Lab Cnt NO.: | H049-03 | Dilutn Factor : | 1 |
| Lab File ID: | RHV216 | Matrix : | WATER |
| Ext Btch ID: | VOH1301B | % Moisture : | NA |
| Calib. Ref.: | RHV205 | Instrument ID : | T-001 |

| PARAMETERS | RESULTS (ug/L) | PRL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 5 | 1.13 |
| 1,1,2,2-Tetrachloroethane | ND | 5 | .488 |
| 1,1,2-Trichloroethane | ND | 5 | .515 |
| 1,1-Dichloroethane | ND | 5 | 1.21 |
| 1,1-Dichloroethene | ND | 5 | 1.96 |
| 1,2-Dichloroethane | ND | 5 | .583 |
| 1,2-Dichloropropane | ND | 5 | .533 |
| 2-Butanone | ND | 50 | 7.87 |
| 2-Chloroethylvinylether | ND | 50 | .828 |
| 2-Hexanone | ND | 50 | 1.01 |
| 4-Methyl-2-Pentanone | ND | 50 | 1.02 |
| Acetone | ND | 50 | 10.3 |
| Benzene | ND | 5 | .849 |
| Bromodichloromethane | 6.72 | 5 | .334 |
| Bromoform | ND | 5 | .293 |
| Bromomethane | ND | 5 | 1.53 |
| Carbon Disulfide | ND | 5 | 1.31 |
| Carbon Tetrachloride | ND | 5 | 1.28 |
| Chlorobenzene | ND | 5 | .6[illegible] |
| Chloroethane | ND | 5 | 2[illegible] |
| Chloroform | 7.78 | 5 | .854 |
| Chloromethane | ND | 5 | 1.69 |
| cis-1,2-Dichloroethene | ND | 5 | .973 |
| cis-1,3-Dichloropropene | ND | 5 | .474 |
| Dibromochloromethane | 4.31J | 5 | .292 |
| Ethylbenzene | ND | 5 | .72 |
| Methyl tert-butyl ether (MTBE) | ND | 10 | .955 |
| Methylene Chloride | 2.36J | 5 | 1.76 |
| Styrene | ND | 5 | .583 |
| Tetrachloroethene | ND | 5 | 1.22 |
| Toluene | ND | 5 | .922 |
| trans-1,2-Dichloroethene | ND | 5 | 1.52 |
| trans-1,3-Dichloropropene | ND | 5 | .449 |
| Trichloroethene | ND | 5 | .9 |
| Vinyl Acetate | ND | 50 | 6.17 |
| Vinyl Chloride | ND | 5 | 1.68 |
| Xylenes | ND | 5 | 2.41 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| 1,2-Dichloroethane-d4 | 89 | 62-139 |
| Toluene-d8 | 95 | 75-125 |
| Bromofluorobenzene | 97 | 75-125 |

PRL: Project Reporting Limit
* : Out side of QC Limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

METHOD 3520B/8270B
SEMIVOLATILE ORGANICS BY GC/MS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/12/98 18:30 |
| Sa[illegible] ID: | 18609-965 | Date Analyzed: | 08/16/98 06:47 |
| La[illegible]mp ID: | H049-02 | Dilution Factor: | 1 |
| Lab[illegible]le ID: | RHS124 | Matrix | : WATER |
| Ext Btch ID: | SVH013W | % Moisture | : NA |
| Calib. Ref.: | RHS118 | Instrument ID | : T-004 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| 1,2,4-TRICHLOROBENZENE | ND | 10 | .86 |
| 1,2-DICHLOROBENZENE | ND | 10 | .51 |
| 1,3-DICHLOROBENZENE | ND | 10 | .8 |
| 1,4-DICHLOROBENZENE | ND | 10 | 1.12 |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | ND | 10 | 4.82 |
| 2,4,5-TRICHLOROPHENOL | ND | 25 | 2.73 |
| 2,4,6-TRICHLOROPHENOL | ND | 10 | 2.64 |
| 2,4-DICHLOROPHENOL | ND | 10 | 2.43 |
| 2,4-DIMETHYLPHENOL | ND | 10 | 1.4 |
| 2,4-DINITROPHENOL | ND | 25 | 4.92 |
| 2,4-DINITROTOLUENE | ND | 10 | 2.47 |
| 2,6-DINITROTOLUENE | ND | 10 | 1.67 |
| 2-CHLORONAPHTHALENE | ND | 10 | .87 |
| 2-CHLOROPHENOL | ND | 10 | 2.23 |
| 2-METHYLNAPHTHALENE | ND | 10 | 1.03 |
| 2-METHYLPHENOL | ND | 10 | 1.53 |
| 2-NITROANILINE | ND | 25 | 3.11 |
| 2-NITROPHENOL | ND | 10 | 2.99 |
| 3,3'-DICHLOROBENZIDINE | ND | 10 | 4.38 |
| 3-NITROANILINE | ND | 25 | 1.62 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 25 | 3.17 |
| 4-BROMOPHENYL-PHENYLETHER | ND | 10 | .56 |
| 4-CHLORO-3-METHYLPHENOL | ND | 10 | 3.09 |
| 4-CHLOROANILINE | ND | 10 | 2.92 |
| 4-CHLOROPHENYL-PHENYLETHER | ND | 10 | 1.99 |
| 4-METHYLPHENOL (2) | ND | 10 | 2.15 |
| 4-NITROANILINE | ND | 25 | 3.58 |
| 4-NITROPHENOL | ND | 25 | 6.03 |
| ACENAPHTHENE | ND | 10 | 1.04 |
| ACENAPHTHYLENE | ND | 10 | .77 |
| ANTHRACENE | ND | 10 | 1.05 |
| BE[illegible](A)ANTHRACENE | ND | 10 | 1.04 |
| BE[illegible]A)PYRENE | ND | 10 | 1.27 |
| BE[illegible]B)FLUORANTHENE | ND | 10 | 3.14 |
| BENZO(G,H,I)PERYLENE | ND | 10 | .52 |
| BENZO(K)FLUORANTHENE | ND | 10 | 3.69 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 10 | 2.14 |
| BIS(2-CHLOROETHYL)ETHER | ND | 10 | 2.61 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 10 | 1.46 |
| BUTYLBENZYLPHTHALATE | ND | 10 | 1.68 |
| CHRYSENE | ND | 10 | 1.46 |
| DI-N-BUTYLPHTHALATE | ND | 10 | 2.3 |
| DI-N-OCTYLPHTHALATE | ND | 10 | .89 |
| DIBENZO(A,H)ANTHRACENE | ND | 10 | 1.36 |
| DIBENZOFURAN | ND | 10 | .92 |
| DIETHYLPHTHALATE | ND | 10 | .98 |
| DIMETHYLPHTHALATE | ND | 10 | 1.07 |
| FLUORANTHENE | ND | 10 | 1.17 |
| FLUORENE | ND | 10 | 2.36 |
| HEXACHLOROBENZENE | ND | 10 | 1.23 |
| HEXACHLOROBUTADIENE | ND | 10 | .84 |
| HEXACHLOROCYCLOPENTADIENE | ND | 10 | 8.88 |
| HEXACHLOROETHANE | ND | 10 | 1.95 |
| INDENO(1,2,3-CD)PYRENE | ND | 10 | 1.17 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 10 | 1.34 |
| N-NITROSODIPHENYLAMINE (1) | ND | 10 | 1.59 |
| NAPHTHALENE | ND | 10 | 1.3 |
| NITROBENZENE | ND | 10 | 1.39 |
| PENTACHLOROPHENOL | ND | 10 | 2.94 |
| PHENANTHRENE | ND | 10 | .66 |
| PHENOL | ND | 10 | 2.43 |
| PYRENE | ND | 10 | .39 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| 2-FLUOROPHENOL | 67 | 25-125 |
| PHENOL-D5 | 73 | 25-125 |
| NITROBENZENE-D5 | 75 | 32-125 |
| 2-FLUOROBIPHENYL | 87 | 43-125 |
| 2,4,6-TRIBROMOPHENOL | 63 | 25-134 |
| TERPHENYL-D14 | 86 | 42-126 |

PRL - Project Reporting Limit
(1) Cannot be separated from Diphenylamine
(2) Cannot be separated from 3-Methylphenol

METHOD 3520B/8270B
SEMIVOLATILE ORGANICS BY GC/MS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/12/98 18:30 |
| Sample ID: | 18609-966 | Date Analyzed: | 08/16/98 07:39 |
| Lab Samp ID: | H049-03 | Dilution Factor: | 1 |
| Lab File ID: | RHS125 | Matrix | : WATER |
| Ext Btch ID: | SVH013W | % Moisture | : NA |
| Calib. Ref.: | RHS118 | Instrument ID | : T-004 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| 1,2,4-TRICHLOROBENZENE | ND | 10 | .86 |
| 1,2-DICHLOROBENZENE | ND | 10 | .51 |
| 1,3-DICHLOROBENZENE | ND | 10 | .8 |
| 1,4-DICHLOROBENZENE | ND | 10 | 1.12 |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | ND | 10 | 4.82 |
| 2,4,5-TRICHLOROPHENOL | ND | 25 | 2.73 |
| 2,4,6-TRICHLOROPHENOL | ND | 10 | 2.64 |
| 2,4-DICHLOROPHENOL | ND | 10 | 2.43 |
| 2,4-DIMETHYLPHENOL | ND | 10 | 1.4 |
| 2,4-DINITROPHENOL | ND | 25 | 4.92 |
| 2,4-DINITROTOLUENE | ND | 10 | 2.47 |
| 2,6-DINITROTOLUENE | ND | 10 | 1.67 |
| 2-CHLORONAPHTHALENE | ND | 10 | .87 |
| 2-CHLOROPHENOL | ND | 10 | 2.23 |
| 2-METHYLNAPHTHALENE | ND | 10 | 1.03 |
| 2-METHYLPHENOL | ND | 10 | 1.53 |
| 2-NITROANILINE | ND | 25 | 3.11 |
| 2-NITROPHENOL | ND | 10 | 2.99 |
| 3,3'-DICHLOROBENZIDINE | ND | 10 | 4.38 |
| 3-NITROANILINE | ND | 25 | 1.62 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 25 | 3.17 |
| 4-BROMOPHENYL-PHENYLETHER | ND | 10 | .56 |
| 4-CHLORO-3-METHYLPHENOL | ND | 10 | 3.09 |
| 4-CHLOROANILINE | ND | 10 | 2.92 |
| 4-CHLOROPHENYL-PHENYLETHER | ND | 10 | 1.99 |
| 4-METHYLPHENOL (2) | ND | 10 | 2.15 |
| 4-NITROANILINE | ND | 25 | 3.58 |
| 4-NITROPHENOL | ND | 25 | 6.03 |
| ACENAPHTHENE | ND | 10 | 1.04 |
| ACENAPHTHYLENE | ND | 10 | .77 |
| ANTHRACENE | ND | 10 | 1.05 |
| BENZO(A)ANTHRACENE | ND | 10 | 1.04 |
| BENZO(A)PYRENE | ND | 10 | 1.27 |
| BENZO(B)FLUORANTHENE | ND | 10 | 3.14 |
| BENZO(G,H,I)PERYLENE | ND | 10 | .52 |
| BENZO(K)FLUORANTHENE | ND | 10 | 3.69 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 10 | 2.14 |
| BIS(2-CHLOROETHYL)ETHER | ND | 10 | 2.61 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 10 | 1.46 |
| BUTYLBENZYLPHTHALATE | ND | 10 | 1.68 |
| CHRYSENE | ND | 10 | 1.46 |
| DI-N-BUTYLPHTHALATE | ND | 10 | 2.3 |
| DI-N-OCTYLPHTHALATE | ND | 10 | .89 |
| DIBENZO(A,H)ANTHRACENE | ND | 10 | 1.36 |
| DIBENZOFURAN | ND | 10 | .92 |
| DIETHYLPHTHALATE | ND | 10 | .98 |
| DIMETHYLPHTHALATE | ND | 10 | 1.07 |
| FLUORANTHENE | ND | 10 | 1.17 |
| FLUORENE | ND | 10 | 2.36 |
| HEXACHLOROBENZENE | ND | 10 | 1.23 |
| HEXACHLOROBUTADIENE | ND | 10 | .84 |
| HEXACHLOROCYCLOPENTADIENE | ND | 10 | 8.88 |
| HEXACHLOROETHANE | ND | 10 | 1.95 |
| INDENO(1,2,3-CD)PYRENE | ND | 10 | 1.17 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 10 | 1.34 |
| N-NITROSODIPHENYLAMINE (1) | ND | 10 | 1.59 |
| NAPHTHALENE | ND | 10 | 1.3 |
| NITROBENZENE | ND | 10 | 1.39 |
| PENTACHLOROPHENOL | ND | 10 | 2.94 |
| PHENANTHRENE | ND | 10 | .66 |
| PHENOL | ND | 10 | 2.43 |
| PYRENE | ND | 10 | .39 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| 2-FLUOROPHENOL | 65 | 25-125 |
| PHENOL-D5 | 71 | 25-125 |
| NITROBENZENE-D5 | 76 | 32-125 |
| 2-FLUOROBIPHENYL | 83 | 43-125 |
| 2,4,6-TRIBROMOPHENOL | 61 | 25-134 |
| TERPHENYL-D14 | 81 | 42-126 |

PRL : Project Reporting Limit
(1) : Cannot be separated from Diphenylamine
(2) : Cannot be separated from 3-Methylphenol

METHOD 5030A/M

TOTAL PETROLEUM HYDROCARBONS BY PURGE & TRAP

Client : OHM REMEDIATION SERVICES
Project : MCAS EL TORO/18609/D.O. 70
Batch No. : 98H049
Matrix : WATER

Date Collected : 08/12/98
DaTime Received: 08/12/98
Instrument ID : GCT039

| SAMPLE ID | CONTROL NO | RESULTS (mg/L) | SURR (%) | DLF | MOIST | RL (mg/L) | MDL (mg/L) | Analysis DATETIME | Extraction DATETIME | LFID | CAL REF | PREP BATCH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MBLK1W | VAH0839B | ND | 91 | 1 | NA | .1 | .018 | 08/12/9814:09 | 08/12/9814:09 | EH12-4 | EH12-2 | VAH0839 |
| LCS1W | VAH0839L | 1.13 | 98 | 1 | NA | .1 | .018 | 08/12/9814:43 | 08/12/9814:43 | EH12-5 | EH12-2 | VAH0839 |
| LCD1W | VAH0839C | 1.18 | 98 | 1 | NA | .1 | .018 | 08/12/9815:17 | 08/12/9815:17 | EH12-6 | EH12-2 | VAH0839 |
| 18609-965 | H049-02 | ND | 88 | 1 | NA | .1 | .018 | 08/13/9803:44 | 08/13/9803:44 | EH12-28 | EH12-17 | VAH0839 |
| 18609-966 | H049-03 | ND | 88 | 1 | NA | .1 | .018 | 08/13/9804:19 | 08/13/9804:19 | EH12-29 | EH12-17 | VAH0839 |

RL : Reporting Limit

METHOD M8015

TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : OHM REMEDIATION SERVICES
Project : MCAS EL TORO/18609/D.O. 70
Batch No. : 98H049
Matrix : WATER

Date Collected : 08/12/98
DaTime Received: 08/12/98
Instrument ID : GCT015

| SAMPLE ID | CONTROL NO | RESULTS (mg/L) | RANGE H-C | SURR1 (%) | SURR2 (%) | DLF | MOIST | RL (mg/L) | MDL (mg/L) | Analysis DATETIME | Extraction DATETIME | LFID | CAL REF | PREP BATCH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| MBLK1W | DSH022WB | ND | N.A. | 86 | 117 | 1 | NA | .1 | 0.04 | 08/14/9812:42 | 08/13/9818:30 | NH10-152 | NH10-148 | DSH022W |
| LCS1W | DSH022WL | 4.5 | C10-C24 | 84 | 112 | 1 | NA | .1 | 0.04 | 08/15/9805:36 | 08/13/9818:30 | NH10-182 | NH10-179 | DSH022W |
| LCD1W | DSH022WC | 4.64 | C10-C24 | 83 | 112 | 1 | NA | .1 | 0.04 | 08/15/9806:09 | 08/13/9818:30 | NH10-183 | NH10-179 | DSH022W |
| 18609-965 | H049-02 | ND | N.A. | 75 | 112 | 1 | NA | .1 | 0.04 | 08/15/9803:23 | 08/13/9818:30 | NH10-178 | NH10-169 | DSH022W |
| 18609-966 | H049-03 | ND | N.A. | 88 | 130 | 1 | NA | .1 | 0.04 | 08/15/9804:30 | 08/13/9818:30 | NH10-180 | NH10-179 | DSH022W |

QC LIMIT : (SOIL) 60-140 55-150
QC LIMIT : (WATER) 65-135 60-145
SURR1 : Bromobenzene
SURR2 : Hexacosane
RL : Reporting Limit
H-C RANGE: C7-C18 = JP-5
C6-C12 = Gas
C10-C24 = Diesel
C18-C34 = Motor Oil
E : Value exceed the upper level of the initial calibration
D : Value from dilution

5904

METHOD 3520B/8081
PESTICIDES/PCBS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/14/98 17:00 |
| Sample ID: | 18609-965 | Date Analyzed: | 08/15/98 18:45 |
| Lab Samp ID: | H049-02 | Dilution Factor: | 1 |
| Lab File ID: | SH15015A | Matrix : | WATER |
| Ext Btch ID: | CPH021W | % Moisture : | NA |
| Calib. Ref.: | SH15003A | Instrument ID : | GCT008 |

| PARAMETERS | RESULTS (ug/L) | | PQL (ug/L) | MDL (ug/L) | |
|---|---|---|---|---|---|
| ALPHA-BHC | (ND) | ND | .03 | .015 | .02 |
| BETA-BHC | (ND) | ND | .03 | .013 | .021 |
| DELTA-BHC | (ND) | ND | .03 | .018 | .025 |
| GAMMA-BHC (LINDANE) | (ND) | ND | .03 | .015 | .032 |
| ALPHA-CHLORDANE | (ND) | ND | .03 | .013 | .012 |
| GAMMA-CHLORDANE | (ND) | ND | .03 | .012 | .011 |
| 4,4'-DDD | (ND) | ND | .5 | .02 | .047 |
| 4,4'-DDE | (ND) | ND | .58 | .022 | .02 |
| 4,4'-DDT | (ND) | ND | .1 | .025 | .027 |
| ALDRIN | (ND) | ND | .03 | .031 | .018 |
| DIELDRIN | (ND) | ND | .03 | .022 | .021 |
| ENDOSULFAN I | (ND) | ND | .03 | .011 | .012 |
| ENDOSULFAN II | (ND) | ND | .1 | .016 | .117 |
| ENDOSULFAN SULFATE | (ND) | ND | .1 | .033 | .02 |
| ENDRIN | (ND) | ND | .1 | .021 | .025 |
| ENDRIN ALDEHYDE | (ND) | ND | .1 | .018 | .023 |
| ENDRIN KETONE | (ND) | ND | .1 | .024 | .024 |
| HEPTACHLOR | (ND) | ND | .03 | .019 | .02 |
| HEPTACHLOR EPOXIDE | (ND) | ND | .03 | .012 | .013 |
| METHOXYCHLOR | (ND) | ND | .5 | .12 | .117 |
| TOXAPHENE | (ND) | ND | .5 | .588 | .572 |
| PCB-1016 | (ND) | ND | 1 | .834 | .603 |
| PCB-1221 | (ND) | ND | 2 | 1.12 | .831 |
| PCB-1232 | (ND) | ND | 1 | .388 | .574 |
| PCB-1242 | (ND) | ND | 1 | .465 | .249 |
| PCB-1248 | (ND) | ND | 1 | .432 | .354 |
| PCB-1254 | (ND) | ND | 1 | .299 | .495 |
| PCB-1260 | (ND) | ND | 1 | .387 | .342 |

| SURROGATE PARAMETERS | % RECOVERY | | QC LIMIT |
|---|---|---|---|
| DECACHLOROBIPHENYL | 128 | (126) | 34-133 |
| TETRACHLORO-M-XYLENE | (47) | 33* | 45-125 |

PRL: Project Reporting Limit
Left of | is result from the first column. Right of | is result from the second column. ( ) Final result
* Outside of QC limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

Please See Revised Report

5072

METHOD 3520B/8081
PESTICIDES/PCBS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/14/98 17:00 |
| Sample ID: | 18609-965 | Date Analyzed: | 08/15/98 18:45 |
| Lab Samp ID: | H049-02 | Dilution Factor: | 1 |
| Lab File ID: | SH15015A | Matrix : | WATER |
| Ext Btch ID: | CPH021W | % Moisture : | NA |
| Calib. Ref.: | SH15003A | Instrument ID : | GCT008 |

| PARAMETERS | RESULTS (ug/L) | PQL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| ALPHA-BHC | (ND)\|ND | .03 | .015\|.02 |
| BETA-BHC | (ND)\|ND | .03 | .013\|.021 |
| DELTA-BHC | (ND)\|ND | .03 | .018\|.025 |
| GAMMA-BHC (LINDANE) | (ND)\|ND | .06 | .015\|.032 |
| ALPHA-CHLORDANE | (ND)\|ND | .03 | .013\|.012 |
| GAMMA-CHLORDANE | (ND)\|ND | .03 | .012\|.011 |
| 4,4'-DDD | (ND)\|ND | .5 | .02\|.047 |
| 4,4'-DDE | (ND)\|ND | .58 | .022\|.02 |
| 4,4'-DDT | (ND)\|ND | .1 | .025\|.027 |
| ALDRIN | (ND)\|ND | .06 | .031\|.018 |
| DIELDRIN | (ND)\|ND | .03 | .022\|.021 |
| ENDOSULFAN I | (ND)\|ND | .03 | .011\|.012 |
| ENDOSULFAN II | (ND)\|ND | .2 | .016\|.117 |
| ENDOSULFAN SULFATE | (ND)\|ND | .1 | .033\|.02 |
| ENDRIN | (ND)\|ND | .1 | .021\|.025 |
| ENDRIN ALDEHYDE | (ND)\|ND | .1 | .018\|.023 |
| ENDRIN KETONE | (ND)\|ND | .1 | .024\|.024 |
| HEPTACHLOR | (ND)\|ND | .03 | .019\|.02 |
| HEPTACHLOR EPOXIDE | (ND)\|ND | .03 | .012\|.013 |
| METHOXYCHLOR | (ND)\|ND | .5 | .12\|.117 |
| TOXAPHENE | (ND)\|ND | 5 | .588\|.572 |
| PCB-1016 | (ND)\|ND | 1 | .834\|.603 |
| PCB-1221 | (ND)\|ND | 2 | 1.12\|.831 |
| PCB-1232 | (ND)\|ND | 1 | .388\|.574 |
| PCB-1242 | (ND)\|ND | 1 | .465\|.249 |
| PCB-1248 | (ND)\|ND | 1 | .432\|.354 |
| PCB-1254 | (ND)\|ND | 1 | .299\|.495 |
| PCB-1260 | (ND)\|ND | 1 | .387\|.342 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| DECACHLOROBIPHENYL | 128\|(126) | 34-133 |
| TETRACHLORO-M-XYLENE | (47)\|33* | 45-125 |

PRL: Project Reporting Limit
Left of | is result from the first column. Right of | is result from the second column. ( ) Final result
* Outside of QC limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

REVISED REPORT

METHOD 3520B/8081
PESTICIDES/PCBS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/14/98 17:00 |
| Sample ID: | 18609-966 | Date Analyzed: | 08/15/98 19:12 |
| Lab Samp ID: | H049-03 | Dilution Factor: | 1 |
| Lab File ID: | SH15016A | Matrix : | WATER |
| Ext Btch ID: | CPH021W | % Moisture : | NA |
| Calib. Ref.: | SH15003A | Instrument ID : | GCT008 |

| PARAMETERS | RESULTS (ug/L) | | PQL (ug/L) | MDL (ug/L) | |
|---|---|---|---|---|---|
| ALPHA-BHC | (ND) | ND | .03 | .015 | .02 |
| BETA-BHC | (ND) | ND | .03 | .013 | .021 |
| DELTA-BHC | (ND) | ND | .03 | .018 | .025 |
| GAMMA-BHC (LINDANE) | (ND) | ND | .03 | .015 | .032 |
| ALPHA-CHLORDANE | (ND) | ND | .03 | .013 | .012 |
| GAMMA-CHLORDANE | (ND) | ND | .03 | .012 | .011 |
| 4,4'-DDD | (ND) | ND | .5 | .02 | .047 |
| 4,4'-DDE | (ND) | ND | .58 | .022 | .02 |
| 4,4'-DDT | (ND) | ND | .1 | .025 | .027 |
| ALDRIN | (ND) | ND | .03 | .031 | .018 |
| DIELDRIN | (ND) | ND | .03 | .022 | .021 |
| ENDOSULFAN I | (ND) | ND | .03 | .011 | .012 |
| ENDOSULFAN II | (ND) | ND | .1 | .016 | .117 |
| ENDOSULFAN SULFATE | (ND) | ND | .1 | .033 | .02 |
| ENDRIN | (ND) | ND | .1 | .021 | .025 |
| ENDRIN ALDEHYDE | .0531J | (ND) | .1 | .018 | .023 |
| ENDRIN KETONE | (ND) | ND | .1 | .024 | .024 |
| HEPTACHLOR | (ND) | ND | .03 | .019 | .02 |
| HEPTACHLOR EPOXIDE | (ND) | ND | .03 | .012 | .013 |
| METHOXYCHLOR | (ND) | ND | .5 | .12 | .117 |
| TOXAPHENE | (ND) | ND | .5 | .588 | .572 |
| PCB-1016 | (ND) | ND | 1 | .834 | .603 |
| PCB-1221 | (ND) | ND | 2 | 1.12 | .831 |
| PCB-1232 | (ND) | ND | 1 | .388 | .574 |
| PCB-1242 | (ND) | ND | 1 | .465 | .249 |
| PCB-1248 | (ND) | ND | 1 | .432 | .354 |
| PCB-1254 | (ND) | ND | 1 | .299 | .495 |
| PCB-1260 | (ND) | ND | 1 | .387 | .342 |

| SURROGATE PARAMETERS | % RECOVERY | | QC LIMIT |
|---|---|---|---|
| DECACHLOROBIPHENYL | 127 | (125) | 34-133 |
| TETRACHLORO-M-XYLENE | (53) | 36* | 45-125 |

PRL: Project Reporting Limit
Left of | is result from the first column. Right of | is result from the second column. ( ) Final result
* Outside of QC limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

Please see revised report

5073

METHOD 3520B/8081
PESTICIDES/PCBS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/14/98 17:00 |
| Sample ID: | 18609-966 | Date Analyzed: | 08/15/98 19:12 |
| Lab Samp ID: | H049-03 | Dilution Factor: | 1 |
| Lab File ID: | SH15016A | Matrix : | WATER |
| Ext Btch ID: | CPH021W | % Moisture : | NA |
| Calib. Ref.: | SH15003A | Instrument ID : | GCT008 |

| PARAMETERS | RESULTS (ug/L) | PQL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| ALPHA-BHC | (ND)\|ND | .03 | .015\|.02 |
| BETA-BHC | (ND)\|ND | .03 | .013\|.021 |
| DELTA-BHC | (ND)\|ND | .03 | .018\|.025 |
| GAMMA-BHC (LINDANE) | (ND)\|ND | .06 | .015\|.032 |
| ALPHA-CHLORDANE | (ND)\|ND | .03 | .013\|.012 |
| GAMMA-CHLORDANE | (ND)\|ND | .03 | .012\|.011 |
| 4,4'-DDD | (ND)\|ND | .5 | .02\|.047 |
| 4,4'-DDE | (ND)\|ND | .58 | .022\|.02 |
| 4,4'-DDT | (ND)\|ND | .1 | .025\|.027 |
| ALDRIN | (ND)\|ND | .06 | .031\|.018 |
| DIELDRIN | (ND)\|ND | .03 | .022\|.021 |
| ENDOSULFAN I | (ND)\|ND | .03 | .011\|.012 |
| ENDOSULFAN II | (ND)\|ND | .1 | .016\|.117 |
| ENDOSULFAN SULFATE | (ND)\|ND | .2 | .033\|.02 |
| ENDRIN | (ND)\|ND | .1 | .021\|.025 |
| ENDRIN ALDEHYDE | .0531J\|(ND) | .1 | .018\|.023 |
| ENDRIN KETONE | (ND)\|ND | .1 | .024\|.024 |
| HEPTACHLOR | (ND)\|ND | .03 | .019\|.02 |
| HEPTACHLOR EPOXIDE | (ND)\|ND | .03 | .012\|.013 |
| METHOXYCHLOR | (ND)\|ND | .5 | .12\|.117 |
| TOXAPHENE | (ND)\|ND | 5 | .588\|.572 |
| PCB-1016 | (ND)\|ND | 1 | .834\|.603 |
| PCB-1221 | (ND)\|ND | 2 | 1.12\|.831 |
| PCB-1232 | (ND)\|ND | 1 | .388\|.574 |
| PCB-1242 | (ND)\|ND | 1 | .465\|.249 |
| PCB-1248 | (ND)\|ND | 1 | .432\|.354 |
| PCB-1254 | (ND)\|ND | 1 | .299\|.495 |
| PCB-1260 | (ND)\|ND | 1 | .387\|.342 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| DECACHLOROBIPHENYL | 127\|(125) | 34-133 |
| TETRACHLORO-M-XYLENE | (53)\|36* | 45-125 |

PRL: Project Reporting Limit
Left of | is result from the first column. Right of | is result from the second column. ( ) Final result
* Outside of QC limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

REVISED REPORT

METHOD 3010A/6010A
TAL METALS BY ICP

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| SDG NO. | : 98H049 | Date Extracted: | 08/14/98 11:30 |
| Sample ID: | 18609-965 | Date Analyzed: | 08/15/98 23:07 |
| Samp ID: | H049-02 | Dilution Factor: | 1 |
| Lab File ID: | I07H023016 | Matrix : | WATER |
| Ext Btch ID: | IPH018W | % Moisture : | NA |
| Calib. Ref.: | I07H023010 | Instrument ID : | EMAXTI07 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Aluminum | ND | 500 | 25.6 |
| Antimony | ND | 500 | 39.8 |
| Barium | ND | 100 | 1.41 |
| Beryllium | ND | 10 | .12 |
| Cadmium | ND | 5 | 2.06 |
| Calcium | 30200 | 1000 | 9.61 |
| Chromium | ND | 50 | 4.77 |
| Cobalt | ND | 50 | 6.64 |
| Copper | ND | 50 | 6.47 |
| Iron | ND | 50 | 4.96 |
| Magnesium | 7450 | 1000 | 28.9 |
| Manganese | ND | 20 | .64 |
| Molybdenum | ND | 100 | 9.37 |
| Nickel | ND | 150 | 3.93 |
| Potassium | ND | 5000 | 2960 |
| Silver | ND | 50 | 4.69 |
| Sodium | 57000 | 1000 | 38.2 |
| Vanadium | ND | 100 | 4.7 |
| Zinc | 41.5 | 20 | 2.47 |

RL: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| SDG NO. | : 98H049 | Date Extracted: | 08/14/98 11:30 |
| Sample ID: | 18609-965 | Date Analyzed: | 08/14/98 18: |
| Lab Samp ID: | H049-02 | Dilution Factor: | 1 |
| Lab File ID: | I31H019061 | Matrix : | WATER |
| Ext Btch ID: | IPH018W | % Moisture : | NA |
| Calib. Ref.: | I31H019053 | Instrument ID : | EMAXTI31 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Arsenic | ND | 5 | 4.37 |
| Lead | ND | 5 | 1.42 |
| Selenium | ND | 5 | 4.21 |
| Thallium | ND | 50 | 3.31 |

RL: Reporting Limit

METHOD 3010A/6010A
TAL METALS BY ICP

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| SDG NO. | : 98H049 | Date Extracted: | 08/14/98 11:30 |
| ple ID: | 18609-966 | Date Analyzed: | 08/15/98 23:03 |
| Samp ID: | H049-03 | Dilution Factor: | 1 |
| Lab File ID: | I07H023015 | Matrix : | WATER |
| Ext Btch ID: | IPH018W | % Moisture : | NA |
| Calib. Ref.: | I07H023010 | Instrument ID : | EMAXTI07 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Aluminum | ND | 500 | 25.6 |
| Antimony | ND | 500 | 39.8 |
| Barium | ND | 100 | 1.41 |
| Beryllium | ND | 10 | .12 |
| Cadmium | ND | 5 | 2.06 |
| Calcium | 30400 | 1000 | 9.61 |
| Chromium | ND | 50 | 4.77 |
| Cobalt | ND | 50 | 6.64 |
| Copper | ND | 50 | 6.47 |
| Iron | ND | 50 | 4.96 |
| Magnesium | 7030 | 1000 | 28.9 |
| Manganese | ND | 20 | .64 |
| Molybdenum | ND | 100 | 9.37 |
| Nickel | ND | 150 | 3.93 |
| Potassium | ND | 5000 | 2960 |
| Silver | ND | 50 | 4.69 |
| Sodium | 56600 | 1000 | 38.2 |
| Vanadium | ND | 100 | 4.7 |
| Zinc | 38.6 | 20 | 2.47 |

RL: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | 08/12/98 |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| SDG NO. | : 98H049 | Date Extracted: | 08/14/98 11:30 |
| Sample ID: | 18609-966 | Date Analyzed: | 08/14/98 18 |
| Lab Samp ID: | H049-03 | Dilution Factor: | 1 |
| Lab File ID: | I31H019060 | Matrix : | WATER |
| Ext Btch ID: | IPH018W | % Moisture : | NA |
| Calib. Ref.: | I31H019053 | Instrument ID : | EMAXTI31 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Arsenic | ND | 5 | 4.37 |
| Lead | ND | 5 | 1.42 |
| Selenium | ND | 5 | 4.21 |
| Thallium | ND | 50 | 3.31 |

RL: Reporting Limit

METHOD 7470A
MERCURY BY COLD VAPOR

| | | | |
|---|---|---|---|
| CLIENT: | OHM REMEDIATION SERVICES | DATE COLLECTED: | 08/12/98 |
| PROJECT: | MCAS EL TORO/18609/D.O. 70 | DATE RECEIVED: | 08/12/98 |
| BATCH NO.: | 98H049 | DATE EXTRACTED: | 08/14/98 12:00 |
| MATRIX: | WATER | INSTRUMENT ID: | TI23 |
| CAL REF: | M98H015-7 | PREP BATCH: | HGH017W |

| SAMPLE ID | CONTROL NO | RESULT (ug/L) | DILUTION FACTOR | RL (ug/L) | MDL (ug/L) | ANALYZED DATETIME |
|---|---|---|---|---|---|---|
| 18609-965 | H049-02 | ND | 1 | .2 | .18 | 08/14/98 18:47 |
| 18609-966 | H049-03 | ND | 1 | .2 | .18 | 08/14/98 18:50 |
| MBLK1W | HGH017WB | ND | 1 | .2 | .18 | 08/14/98 18:35 |

RL: Reporting Limit

METHOD 9010A
TOTAL CYANIDE

| | | | |
|---|---|---|---|
| CLIENT: | OHM REMEDIATION SERVICES | DATE COLLECTED: | 08/12/98 |
| PROJECT: | MCAS EL TORO/18609/D.O. 70 | DATE RECEIVED: | 08/12/98 |
| BATCH NO.: | 98H049 | DATE EXTRACTED: | 08/14/98 14:00 |
| MATRIX: | WATER | INSTRUMENT ID: | TI05 |
| CAL REF: | CNH007-21 | PREP BATCH: | CNH009W |

| SAMPLE ID | CONTROL NO | RESULT (mg/L) | DILUTION FACTOR | RL (mg/L) | MDL (mg/L) | ANALYZED DATETIME |
|---|---|---|---|---|---|---|
| 18609-965 | H049-02 | ND | 1 | .01 | .0018 | 08/15/98 16:28 |
| 18609-966 | H049-03 | ND | 1 | .01 | .0018 | 08/15/98 16:29 |
| 18609-966 | H049-03D | ND | 1 | .01 | .0018 | 08/15/98 16:30 |
| MBLK1W | CNH009WB | ND | 1 | .01 | .0018 | 08/15/98 16:10 |

RL: Reporting Limit
CAL REF: CNH007-9, for CNH009WB

7010

METHOD 150.1
PH

| | | | |
|---|---|---|---|
| CLIENT: | OHM REMEDIATION SERVICES | DATE COLLECTED: | 08/12/98 |
| PROJECT: | MCAS EL TORO/18609/D.O. 70 | DATE RECEIVED: | 08/12/98 |
| BATCH NO.: | 98H049 | DATE EXTRACTED: | NA |
| MATRIX: | WATER | INSTRUMENT ID: | TI29 |
| CAL REF: | NA | PREP BATCH: | PHH005W |

| SAMPLE ID | CONTROL NO | RESULT (pH unit) | DILUTION FACTOR | RL (pH unit) | MDL (pH unit) | ANALYZED DATETIME |
|---|---|---|---|---|---|---|
| 18609-965 | H049-02 | 7.90 | 1 | .1 | NA | 08/14/98 10:05 |
| 18609-966 | H049-03 | 6.61 | 1 | .1 | NA | 08/14/98 10:10 |
| 18609-966 | H049-03D | 6.60 | 1 | .1 | NA | 08/14/98 10:15 |

RL: Reporting Limit

# ANALYTICAL REPORT

000044

SAMPLE NO: 9710389*4

Received: 10.17.97

Mailed:

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710389*4 | 18609-637 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Mod 8015 - Gas | | | | | | | |
| TPH (Gasoline Range) | 8015M | | 10.22.97 | 1 | mg/L | 0.1 | U |
| Surrogates ** | | | | | | | |
| a,a,a-Trifluorotoluene Rep. | 8015M | | 10.22.97 | 1 | Percent | 91 | |

SAMPLE NO: 9710389*4

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*4 | 18609-637 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Volatiles | | | | | | | |
| 1,1,1-Trichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,1-Dichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,1-Dichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| ,2-Dichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,2-Dichloropropane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 2-Chloroethylvinylether | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| 2-Hexanone | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Acetone | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Bromodichloromethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Bromomethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Benzene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Bromoform | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chlorobenzene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Carbon Tetrachloride | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chloroform | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chloromethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Carbon Disulfide | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Dibromochloromethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Ethylbenzene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Methyl ethyl ketone | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Methyl isobutyl ketone | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Methyl-tert-butylether | 8260A | | 10.21.97 | 1 | ug/L | 10 | U |
| Methylene chloride | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |

SAMPLE NO: 9710389*4

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*4 | 18609-637 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Volatiles | | | | | | | |
| Styrene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Trichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Toluene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Tetrachloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Vinyl acetate | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Vinyl chloride | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Total Xylene Isomers | 8260A | | 10.21.97 | 1 | ug/L | 15 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.21.97 | 1 | Percent | 95 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.21.97 | 1 | Percent | 83 | |
| Toluene-d8 Reported | 8260A | | 10.21.97 | 1 | Percent | 87 | |
| Dibromofluoromethane Rep. | 8260A | | 10.21.97 | 1 | Percent | 91 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Mod 8015 - Gas | | | | | | | |
| TPH (Gasoline Range) | 8015M | | 10.22.97 | 1 | mg/L | 0.055 | J |
| Surrogates ** | | | | | | | |
| a,a,a-Trifluorotoluene Rep. | 8015M | | 10.22.97 | 1 | Percent | 96 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | | | | | | DATE SAMPLED |
|---|---|---|---|---|---|---|---|
| 9710389*3 | 18609-642 | | | | | | 10.17.97 |
| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
| JP-5 | | | | | | | |
| TPH (Diesel Range) | 8015M | 10.20.97 | 10.22.97 | 1 | mg/L | 0.5 | U |
| JP-5 | 8015M | 10.20.97 | 10.22.97 | 1 | mg/L | 0.5 | U |
| Surrogates ** | | | | | | | |
| Naphthalene Reported | 8015M | 10.20.97 | 10.22.97 | 1 | Percent | 84 | |
| o-Terphenyl Reported | 8015M | 10.20.97 | 10.22.97 | 1 | Percent | 106 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

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OHM Remediation Services Corp.
2031 Main Street
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P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Volatiles | | | | | | | |
| 1,1,1-Trichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,1,2,2-Tetrachloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,1,2-Trichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,1-Dichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| ,1-Dichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,2-Dichloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 1,2-Dichloropropane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| 2-Chloroethylvinylether | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| 2-Hexanone | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Acetone | 8260A | | 10.21.97 | 1 | ug/L | 22 | J |
| Bromodichloromethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Bromomethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Benzene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Bromoform | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chlorobenzene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Carbon Tetrachloride | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chloroethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chloroform | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Chloromethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Carbon Disulfide | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Dibromochloromethane | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Ethylbenzene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Methyl ethyl ketone | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Methyl isobutyl ketone | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Methyl-tert-butylether | 8260A | | 10.21.97 | 1 | ug/L | 10 | U |
| Methylene chloride | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Volatiles | | | | | | | |
| Styrene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Trichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Toluene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Tetrachloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Vinyl acetate | 8260A | | 10.21.97 | 1 | ug/L | 50 | U |
| Vinyl chloride | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Total Xylene Isomers | 8260A | | 10.21.97 | 1 | ug/L | 15 | U |
| cis-1,2-Dichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| cis-1,3-Dichloropropene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| trans-1,2-Dichloroethene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| trans-1,3-Dichloropropene | 8260A | | 10.21.97 | 1 | ug/L | 5 | U |
| Surrogates ** | | | | | | | |
| 1,2-Dichloroethane-d4 Rep. | 8260A | | 10.21.97 | 1 | Percent | 99 | |
| 4-Bromofluorobenzene Rep. | 8260A | | 10.21.97 | 1 | Percent | 86 | |
| Toluene-d8 Reported | 8260A | | 10.21.97 | 1 | Percent | 91 | |
| Dibromofluoromethane Rep. | 8260A | | 10.21.97 | 1 | Percent | 89 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



SAMPLE DESCRIPTION, AQUEOUS SAMPLE — DATE SAMPLED

9710389*3 18609-642 — 10.17.97

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| B/N,A Ext.Pri.Poll. | | | | | | | |
| 1,2,4-Trichlorobenzene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 1,2-Dichlorobenzene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 1,3-Dichlorobenzene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 1,4-Dichlorobenzene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2,4,5-Trichlorophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2,4,6-Trichlorophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2,4-Dichlorophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2,4-Dimethylphenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2,4-Dinitrophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 25 | U |
| 2,4-Dinitrotoluene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2,6-Dinitrotoluene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2-Chloronaphthalene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2-Chlorophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2-Methyl-4,6-dinitrophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 25 | U |
| 2-Methylnaphthalene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2-Methylphenol (o-Cresol) | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2-Nitroaniline | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 2-Nitrophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 3,3'-Dichlorobenzidine | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 3-Nitroaniline | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 4-Bromophenylphenylether | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 4-Chloro-3-methylphenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 4-Chloroaniline | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 4-Chlorophenylphenylether | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 4-Methylphenol (p-Cresol) | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| 4-Nitroaniline | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| B/N,A Ext.Pri.Poll. | | | | | | | |
| 4-Nitrophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 25 | U |
| Acenaphthene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Acenaphthylene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Anthracene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Benzo(a)anthracene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Benzo(a)pyrene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Benzo(b)fluoranthene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Benzo(g,h,i)perylene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Benzo(k)fluoranthene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Butylbenzylphthalate | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Chrysene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Di-n-octylphthalate | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Dibenzo(a,h)anthracene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Dibenzofuran | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Dibutylphthalate | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 6.4 | J |
| Diethylphthalate | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Dimethylphthalate | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Fluoranthene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Fluorene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Hexachlorobenzene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Hexachlorobutadiene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Hexachlorocyclopentadiene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Hexachloroethane | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Indeno(1,2,3-c,d)pyrene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| N-Nitrosodiphenylamine | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| N-Nitrosodi-n-propylamine | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |

SAMPLE NO: 9710389*3

Received: 10.17.97

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OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| B/N,A Ext.Pri.Poll. | | | | | | | |
| Nitrobenzene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Naphthalene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Phenanthrene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Phenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Pentachlorophenol | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 20 | U |
| Pyrene | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Bis(2-chloroethoxy)methane | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Bis(2-chloroethyl)ether | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Bis(2-chloroisopropyl)ether | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Bis(2-ethylhexyl)phthalate | 8270B | 10.21.97 | 10.25.97 | 1 | ug/L | 10 | U |
| Surrogates ** | | | | | | | |
| 2-Fluorobiphenyl Reported | 8270B | 10.21.97 | 10.25.97 | 1 | Percent | 92 | |
| 2-Fluorophenol Reported | 8270B | 10.21.97 | 10.25.97 | 1 | Percent | 62 | |
| 2,4,6-Tribromophenol Rep. | 8270B | 10.21.97 | 10.25.97 | 1 | Percent | 103 | |
| Nitrobenzene-d5 Reported | 8270B | 10.21.97 | 10.25.97 | 1 | Percent | 84 | |
| Phenol-d5 Reported | 8270B | 10.21.97 | 10.25.97 | 1 | Percent | 52 | |
| Terphenyl-d14 Reported | 8270B | 10.21.97 | 10.25.97 | 1 | Percent | 96 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

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P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Pesticides | | | | | | | |
| Aldrin | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.05 | U |
| Dieldrin | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.05 | U |
| Endrin | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Heptachlor | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.05 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.22.97 | 1 | Percent | 99 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.22.97 | 1 | Percent | 60 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Pesticides Confirmation | | | | | | | |
| Aldrin | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| p,p'-DDD | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| p,p'-DDE | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| p,p'-DDT | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.05 | U |
| Dieldrin | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endosulfan I | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endosulfan II | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endosulfan sulfate | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.05 | U |
| Endrin | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Endrin aldehyde | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Heptachlor epoxide | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Heptachlor | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Methoxychlor | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.05 | U |
| BHC, alpha isomer | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| alpha-Chlordane | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| BHC, beta isomer | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| BHC, delta isomer | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| BHC, gamma isomer (Lindane) | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| gamma-Chlordane | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 0.03 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.22.97 | 1 | Percent | 86 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.22.97 | 1 | Percent | 50 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Polychlorinated Biphenyls | | | | | | | |
| Aroclor 1016 | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 1 | U |
| Aroclor 1221 | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 1 | U |
| Aroclor 1232 | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 1 | U |
| Aroclor 1242 | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 1 | U |
| Aroclor 1248 | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 1 | U |
| Aroclor 1254 | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 1 | U |
| Aroclor 1260 | 8081 | 10.22.97 | 10.22.97 | 1 | ug/L | 1 | U |
| Surrogates ** | | | | | | | |
| Decachlorobiphenyl Reported | 8081 | 10.22.97 | 10.22.97 | 1 | Percent | 99 | |
| Tetrachloro-meta-xylene Rpt | 8081 | 10.22.97 | 10.22.97 | 1 | Percent | 60 | |

# ANALYTICAL REPORT
000032

SAMPLE NO: 9710389*3

Received: 10.17.97

Mailed:

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| SAMPLE DESCRIPTION, AQUEOUS SAMPLE | | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| pH | 150.1 | | 10.18.97 | 1 | Units | 6.9 | |
| Aluminum | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 500 | U |
| imony | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 500 | U |
| Arsenic | 7060A | 10/21/97 | 10.22.97 | 1 | ug/L | 5 | U |
| Barium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 1.7 | J |
| Beryllium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 10 | U |
| Cadmium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 5 | U |
| Calcium | 6010A | 10.21.97 | 10.22.97 | 1 | ug/L | 310 | J |
| Chromium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 50 | U |
| Cobalt | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 50 | U |
| Copper | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 50 | U |
| Iron | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 29 | J |
| Lead | 7421 | 10/21/97 | 10.22.97 | 1 | ug/L | 5 | U |
| Magnesium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 83 | J |
| Manganese | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 20 | U |
| Mercury | 7470A | 10.24.97 | 10.27.97 | 1 | ug/L | 0.2 | U |
| Molybdenum | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 100 | U |
| Nickel | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 150 | U |
| Potassium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 5000 | U |
| Selenium | 7740 | 10/21/97 | 10.22.97 | 1 | ug/L | 5 | U |
| Silver | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 50 | U |
| Sodium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 330 | J |
| Thallium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 400 | U |
| Vanadium | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 100 | U |
| Zinc | 6010A | 10/21/97 | 10.22.97 | 1 | ug/L | 20 | U |
| Digestion | 3010 | 10/21/97 | 10.21.97 | 1 | Date | 10/21/97 | |

SAMPLE NO: 9710389*3

Received: 10.17.97

Ms. Mary Schneider
OHM Remediation Services Corp.
2031 Main Street
Irvine, CA 92614

P.O.#: 1040171
Req#: DO#0070
Project: 18609-002

REPORT OF ANALYTICAL RESULTS



| | SAMPLE DESCRIPTION, AQUEOUS SAMPLE | DATE SAMPLED |
|---|---|---|
| 9710389*3 | 18609-642 | 10.17.97 |

| PARAMETER | METHOD | PREPED | ANALYZED | DIL | UNITS | RESULT | FLG |
|---|---|---|---|---|---|---|---|
| Furnace Digestion | 3020 | 10/21/97 | 10.21.97 | 1 | Date | 10/21/97 | |

## ACRONYMS AND FLAG DEFINITIONS

Flag Definitions:

| | |
|---|---|
| * | Duplicate values. Replicate results are entered into the MS/MSD column of the QC report. RPD calculated when sample concentration is at least five times RDL. |
| B | Blank contamination. Used when associated method blank concentration is greater than the PQL. |
| J | Estimated value. Used for sample results greater than or equal to MDL, but less than the PQL. |
| NC | Not calculated. Used when sample result is greater than two times the spike amount added, or when extracted surrogates were diluted below detectable levels. |
| Q | Quality objectives were not met. Used for Method Blank, Laboratory Control Samples, Matrix Spikes, Matrix Duplicates and Surrogates. |

Acronyms:

| | |
|---|---|
| COC | Chain of Custody |
| FLG | Flag |
| LC | Actual LCS/LCSD concentration recovered |
| LCL | Lower Control Limit |
| LCS | Laboratory Control Sample |
| LCSD | Laboratory Control Sample Duplicate |
| LT | True LCS/LCSD concentration |
| MB | Method Blank |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| R1 | Unspiked sample concentration |
| RDL | Reporting Detection Limit |
| %REC | Percent Recovery |
| Rep. | Surrogate Reported value |
| RPD | Relative Percent Difference |
| S1 | Actual MS concentration |
| S2 | Actual MSD concentration |
| T | True concentration of MS/MSD |
| Theo. | Surrogate Theoretical value |
| UCL | Upper Control Limit |

| AMPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | 8081,PCB,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | CON,8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| 710409*9 | 18609-659 | AL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SB.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | AS,GFA.AF | 10.27.97 | 7060A | 534-07 | 972778 | 1002 |
| | | BA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | BE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CD.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CR.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CU.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | FE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | PB,GFA.AF | 10.24.97 | 7421 | 534-07 | 972778 | 1002 |
| | | MG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | MN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | HG,SO.AF | 10.23.97 | 7471A | 534-06 | 972738 | 1003 |
| | | NI.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | K.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SE,GFA.AF | 10.24.97 | 7740 | 534-07 | 972778 | 1002 |
| | | AG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | NA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | TL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | V.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | ZN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CN.AF | 10.24.97 | 9010A | 533-15 | 9789 | 1021 |
| | | PH,NA.AF | 10.24.97 | 9045 | 533-21 | 9749 | 8804 |
| | | MO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | DIG,NAQ.HCL | 10.23.97 | 3050 | | 972779 | 7620 |
| | | DIG,NAQ,GFA | 10.23.97 | 3050 | | 972778 | 7620 |
| | | 8270,OHM | 10.26.97 | 8270B | 537-14 | 97209 | 1009 |
| | | DIESEL.3550.OHM | 10.24.97 | 8015M | 536-01 | 97237 | 8866 |
| | | GAS.5030.AF | 10.23.97 | 8015M | 536-33 | 9787070 | 6843 |
| | | 8260,OHM | 10.26.97 | 8260A | 537-02 | 9787073 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| | | 8270,OHM.SIM | 10.25.97 | 8270.SIM | 537-11 | 97209 | 6750 |
| | | 8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | 8081,PCB,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | CON,8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| 0409*10 | 18609-661 | AL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SB.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | AS,GFA.AF | 10.27.97 | 7060A | 534-07 | 972778 | 1002 |
| | | BA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | BE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

| MPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | CD.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CR.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CU.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | FE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | PB,GFA.AF | 10.24.97 | 7421 | 534-07 | 972778 | 1002 |
| | | MG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | MN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | HG,SO.AF | 10.23.97 | 7471A | 534-06 | 972738 | 1003 |
| | | NI.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | K.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SE,GFA.AF | 10.24.97 | 7740 | 534-07 | 972778 | 1002 |
| | | AG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | NA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | TL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | V.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | ZN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CN.AF | 10.24.97 | 9010A | 533-15 | 9789 | 1021 |
| | | PH,NA.AF | 10.24.97 | 9045 | 533-21 | 9749 | 8804 |
| | | MO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | DIG,NAQ.HCL | 10.23.97 | 3050 | | 972779 | 7620 |
| | | DIG,NAQ,GFA | 10.23.97 | 3050 | | 972778 | 7620 |
| | | 8270,OHM | 10.26.97 | 8270B | 537-14 | 97209 | 1009 |
| | | DIESEL.3550.OHM | 10.24.97 | 8015M | 536-01 | 97237 | 8866 |
| | | GAS.5030.AF | 10.24.97 | 8015M | 536-33 | 9787070 | 6843 |
| | | 8260,OHM | 10.26.97 | 8260A | 537-02 | 9787073 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| | | 8270,OHM.SIM | 10.25.97 | 8270.SIM | 537-11 | 97209 | 6750 |
| | | 8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | 8081,PCB,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | CON,8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| 0409*11 | 18609-663 | AL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SB.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | AS,GFA.AF | 10.27.97 | 7060A | 534-07 | 972778 | 1002 |
| | | BA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | BE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CD.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CR.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CU.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | FE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | PB,GFA.AF | 10.24.97 | 7421 | 534-07 | 972778 | 1002 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

| MPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | MG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | MN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | HG,SO.AF | 10.23.97 | 7471A | 534-06 | 972738 | 1003 |
| | | NI.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | K.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SE,GFA.AF | 10.24.97 | 7740 | 534-07 | 972778 | 1002 |
| | | AG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | NA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | TL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | V.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | ZN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CN.AF | 10.24.97 | 9010A | 533-15 | 9789 | 1021 |
| | | PH,NA.AF | 10.24.97 | 9045 | 533-21 | 9749 | 8804 |
| | | MO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | DIG,NAQ.HCL | 10.23.97 | 3050 | | 972779 | 7620 |
| | | DIG,NAQ,GFA | 10.23.97 | 3050 | | 972778 | 7620 |
| | | 8270,OHM | 10.26.97 | 8270B | 537-14 | 97209 | 1009 |
| | | DIESEL.3550.OHM | 10.24.97 | 8015M | 536-01 | 97237 | 8866 |
| | | GAS.5030.AF | 10.23.97 | 8015M | 536-36 | 974203 | 1012 |
| | | 8260,OHM | 10.26.97 | 8260A | 537-02 | 9787073 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| | | 8270,OHM.SIM | 10.25.97 | 8270.SIM | 537-11 | 97209 | 6750 |
| | | 8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | 8081,PCB,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | CON,8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| 0409*12 | 18609-665 | AL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SB.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | AS,GFA.AF | 10.27.97 | 7060A | 534-07 | 972778 | 1002 |
| | | BA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | BE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CD.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CR.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CU.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | FE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | PB,GFA.AF | 10.24.97 | 7421 | 534-07 | 972778 | 1002 |
| | | MG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | MN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | HG,SO.AF | 10.23.97 | 7471A | 534-06 | 972738 | 1003 |
| | | NI.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | K.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SE,GFA.AF | 10.24.97 | 7740 | 534-07 | 972778 | 1002 |
| | | AG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

ORDER PLACED FOR CLIENT: OHM Remediation Services Corp. 9710409 :
VOC ANALYTICAL : GLEN LAB : 14:57:21 19 NOV 1997 - P. 9 :

000225

| AMPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | NA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | TL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | V.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | ZN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CN.AF | 10.24.97 | 9010A | 533-15 | 9789 | 1021 |
| | | PH,NA.AF | 10.24.97 | 9045 | 533-21 | 9749 | 8804 |
| | | MO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | DIG,NAQ.HCL | 10.23.97 | 3050 | | 972779 | 7620 |
| | | DIG,NAQ,GFA | 10.23.97 | 3050 | | 972778 | 7620 |
| | | 8270,OHM | 10.26.97 | 8270B | 537-14 | 97209 | 1009 |
| | | DIESEL.3550.OHM | 10.24.97 | 8015M | 536-01 | 97237 | 8866 |
| | | GAS.5030.AF | 10.23.97 | 8015M | 536-36 | 974203 | 1012 |
| | | 8260,OHM | 10.26.97 | 8260A | 537-02 | 9787073 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| | | 8270,OHM.SIM | 10.25.97 | 8270.SIM | 537-11 | 97209 | 6750 |
| | | 8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | 8081,PCB,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | CON,8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| 10409*13 | 18609-667 | AL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SB.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | AS,GFA.AF | 10.27.97 | 7060A | 534-07 | 972778 | 1002 |
| | | BA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | BE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CD.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CR.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CU.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | FE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | PB,GFA.AF | 10.24.97 | 7421 | 534-07 | 972778 | 1002 |
| | | MG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | MN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | HG,SO.AF | 10.23.97 | 7471A | 534-06 | 972738 | 1003 |
| | | NI.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | K.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SE,GFA.AF | 10.24.97 | 7740 | 534-07 | 972778 | 1002 |
| | | AG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | NA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | TL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | V.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | ZN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CN.AF | 10.24.97 | 9010A | 533-15 | 9789 | 1021 |
| | | PH,NA.AF | 10.24.97 | 9045 | 533-21 | 9749 | 8804 |
| | | MO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

| AMPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | DIG,NAQ.HCL | 10.23.97 | 3050 | | 972779 | 7620 |
| | | DIG,NAQ,GFA | 10.23.97 | 3050 | | 972778 | 7620 |
| | | 8270,OHM | 10.28.97 | 8270B | 537-14 | 97209 | 1009 |
| | | DIESEL.3550.OHM | 10.24.97 | 8015M | 536-01 | 97237 | 8866 |
| | | GAS.5030.AF | 10.23.97 | 8015M | 536-36 | 974203 | 1012 |
| | | 8260,OHM | 10.26.97 | 8260A | 537-02 | 9787073 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| | | 8270,OHM.SIM | 10.28.97 | 8270.SIM | 537-11 | 97209 | 6750 |
| | | 8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | 8081,PCB,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| | | CON,8081,OHM | 10.25.97 | 8081 | 536-26 | 97197 | 8042 |
| '10409*4 | 18609-649 | AL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SB.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | AS,GFA.AF | 10.27.97 | 7060A | 534-07 | 972778 | 1002 |
| | | BA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | BE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CD.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CR.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CU.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | FE.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | PB,GFA.AF | 10.24.97 | 7421 | 534-07 | 972778 | 1002 |
| | | MG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | MN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | HG,SO.AF | 10.23.97 | 7471A | 534-06 | 972738 | 1003 |
| | | NI.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | K.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | SE,GFA.AF | 10.24.97 | 7740 | 534-07 | 972778 | 1002 |
| | | AG.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | NA.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | TL.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | V.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | ZN.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | CN.AF | 10.24.97 | 9010A | 533-15 | 9789 | 1021 |
| | | PH,NA.AF | 10.24.97 | 9045 | 533-21 | 9749 | 8804 |
| | | MO.AF | 10.24.97 | 6010A | 535-02 | 972779 | 8488 |
| | | DIG,NAQ.HCL | 10.23.97 | 3050 | | 972779 | 7620 |
| | | DIG,NAQ,GFA | 10.23.97 | 3050 | | 972778 | 7620 |
| | | 8270,OHM | 10.25.97 | 8270B | 537-14 | 97209 | 1009 |
| | | DIESEL.3550.OHM | 10.24.97 | 8015M | 536-01 | 97237 | 8866 |
| | | GAS.5030.AF | 10.23.97 | 8015M | 536-33 | 9787069 | 6843 |
| | | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787073 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

ORDER PLACED FOR CLIENT: OHM Remediation Services Corp. 9710409 :
VOC ANALYTICAL : GLEN LAB : 14:57:23 19 NOV 1997 - P. 12 :

000228

| AMPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| 10409*16 | 18609-648 | 8260,OHM | 10.24.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| 10409*19 | 18609-654 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| 10409*20 | 18609-656 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| 10409*21 | 18609-658 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| 10409*22 | 18609-660 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| 10409*23 | 18609-662 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972805 | 8651 |
| 10409*24 | 18609-664 | 8260,OHM | 10.24.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972805 | 8651 |
| 10409*25 | 18609-666 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972805 | 8651 |
| 10409*26 | 18609-668 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972805 | 8651 |
| 10409*17 | 18609-650 | 8260,OHM | 10.24.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |
| 0409*18 | 18609-652 | 8260,OHM | 10.25.97 | 8260A | 537-02 | 9787072 | 8659 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972800 | 8651 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

VOC ANALYTICAL, GLENDALE
QC REPORT FOR 9710409
DATE PRINTED: 26 NOV 1997



NON-AQUEOUS SAMPLES

| | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: PH,NA*9749 Method: 9045 - Soil pH | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 11.0% moisture.) |
| pH | Units | - | - | - | 100 | - | 100 | - | 99 | 101 | 0 | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | | | | | | 6.6 | * | 6.6 | * | - | - | 0 | 20 | - |
| Batch: CN*9789 Method: 9010A - Cyanide, Colorimetric, Manual | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 11.0% moisture.) |
| Total Cyanide | mg/kg | 0.0304 | 0.5 | - | 97 | - | 94 | - | 85 | 115 | 3 | - | - | 99 | - | 94 | - | 69 | 134 | 5 | 30 | - |
| Batch: PB,GFA*972778 Method: 7421 - Lead, AA, Furnace | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 14.0% moisture.) |
| Lead | mg/kg | 0 | 0.3 | - | 99 | - | 103 | - | 74 | 124 | 4 | - | - | 89 | - | 87 | - | 74 | 124 | 2 | 25 | - |
| Batch: SE,GFA*972778 Method: 7740 - Selenium, AA, Furnace | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 14.0% moisture.) |
| Selenium | mg/kg | 0 | 0.5 | - | 91 | - | 95 | - | 73 | 122 | 4 | - | - | 13 | Q | 21 | Q | 73 | 122 | 48 | 25 | Q |
| Batch: HG,SO*972738 Method: 7471A - Mercury (Solids), Cold Vapor AA, Manual | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 14.0% moisture.) |
| Mercury | mg/kg | 0.015 | 0.08 | - | 101 | - | 97 | - | 77 | 120 | 5 | 25 | - | 79 | - | 93 | - | 77 | 120 | 16 | 25 | - |
| Batch: AS,GFA*972778 Method: 7060A - Arsenic, AA, Furnace | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 14.0% moisture.) |
| Arsenic | mg/kg | 0 | 0.5 | - | 94 | - | 93 | - | 74 | 120 | 1 | - | - | 67 | Q | 71 | Q | 74 | 120 | 4 | 15 | - |
| Batch: AG*972779 Method: 6010A - ICAP Metals | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 14.0% moisture.) |
| Silver | mg/kg | 0 | 1 | - | 101 | - | 100 | - | 80 | 120 | 1 | 25 | - | 89 | - | 88 | - | 80 | 120 | 1 | 25 | - |
| Aluminum | mg/kg | 0 | 50 | - | 93 | - | 93 | - | 80 | 120 | 0 | 25 | - | 147 | Q | 106 | - | 80 | 120 | 14 | 25 | - |
| Barium | mg/kg | 0 | 1 | - | 94 | - | 97 | - | 80 | 120 | 3 | 25 | - | 125 | Q | 94 | - | 80 | 120 | 13 | 25 | - |
| Beryllium | mg/kg | 0.02 | 0.2 | - | 93 | - | 95 | - | 80 | 120 | 3 | 25 | - | 96 | - | 96 | - | 80 | 120 | 0 | 25 | - |
| Calcium | mg/kg | 0 | 100 | - | 97 | - | 100 | - | 80 | 120 | 3 | 25 | - | 100 | - | 91 | - | 80 | 120 | 5 | 25 | - |
| Cadmium | mg/kg | 0.36 | 0.5 | - | 97 | - | 99 | - | 80 | 120 | 2 | 25 | - | 86 | - | 87 | - | 80 | 120 | 1 | 25 | - |
| Cobalt | mg/kg | 0 | 1 | - | 97 | - | 99 | - | 80 | 120 | 2 | 25 | - | 91 | - | 91 | - | 80 | 120 | 1 | 25 | - |
| Chromium | mg/kg | 0.4 | 1 | - | 94 | - | 96 | - | 80 | 120 | 3 | 25 | - | 94 | - | 93 | - | 80 | 120 | 2 | 25 | - |
| Copper | mg/kg | 0 | 1 | - | 92 | - | 95 | - | 80 | 120 | 3 | 25 | - | 85 | - | 76 | Q | 80 | 120 | 8 | 25 | - |
| Iron | mg/kg | 0 | 5 | - | 102 | - | 100 | - | 80 | 120 | 2 | 25 | - | - | NC | - | NC | 80 | 120 | - | 25 | NC |
| Potassium | mg/kg | 0 | 100 | - | 92 | - | 95 | - | 80 | 120 | 3 | 25 | - | - | NC | - | NC | 80 | 120 | - | 25 | NC |
| Magnesium | mg/kg | 0 | 100 | - | 95 | - | 98 | - | 80 | 120 | 3 | 25 | - | 116 | - | 96 | - | 80 | 120 | 10 | 25 | - |
| Manganese | mg/kg | 0 | 2 | - | 95 | - | 98 | - | 80 | 120 | 3 | 25 | - | - | NC | - | NC | 80 | 120 | - | 25 | NC |
| Molybdenum | mg/kg | 0 | 2 | - | 91 | - | 96 | - | 80 | 120 | 5 | 25 | - | 81 | - | 87 | - | 80 | 120 | 7 | 25 | - |
| Sodium | mg/kg | 0 | 100 | - | 96 | - | 99 | - | 80 | 120 | 3 | 25 | - | 108 | - | 100 | - | 80 | 120 | 7 | 25 | - |
| Nickel | mg/kg | 1.5 | 2 | - | 99 | - | 100 | - | 80 | 120 | 1 | 25 | - | 97 | - | 94 | - | 80 | 120 | 2 | 25 | - |
| Antimony | mg/kg | 0 | 5 | - | 94 | - | 97 | - | 80 | 120 | 3 | 25 | - | 29 | Q | 31 | Q | 80 | 120 | 7 | 25 | - |
| Thallium | mg/kg | 0 | 5 | - | 92 | - | 94 | - | 80 | 120 | 2 | 25 | - | 91 | - | 93 | - | 80 | 120 | 2 | 25 | - |
| Vanadium | mg/kg | 0 | 1 | - | 91 | - | 94 | - | 80 | 120 | 3 | 25 | - | 93 | - | 89 | - | 80 | 120 | 4 | 25 | - |
| Zinc | mg/kg | 0.4 | 1 | - | 94 | - | 97 | - | 80 | 120 | 3 | 25 | - | 104 | - | 72 | Q | 80 | 120 | 17 | 25 | - |

000230

| NON-AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | RPD | RPD | | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: MOIST*972796 Method: D2216 - Percent solid | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 5.5% moisture.) | | | | |
| -Moisture/TNFR | Percent | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | | | | | | 5.5 | * | 5.6 | * | - | - | 2 | 26 | - |
| Batch: MOIST*972800 Method: D2216 - Percent solid | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 13.0% moisture.) | | | | |
| -Moisture/TNFR | Percent | 0 | - | - | - | - | - | - | - | - | - | - | - | 13 | * | 12 | * | - | - | 8 | 26 | - |
| Batch: MOIST*972805 Method: D2216 - Percent solid | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 16.0% moisture.) | | | | |
| -Moisture/TNFR | Percent | 0 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| | | | | | | | | | | | | | | 16 | * | 15 | * | - | - | 6 | 26 | - |
| Batch: GAS*974203 Method: 8015M - Modified 8015 | | | | | | | | | | | | | | | | | | | | | | |
| TPH (Gasoline Range) | mg/kg | 0 | 10 | - | 99 | - | 97 | - | 57 | 146 | 3 | 50 | - | 89 | - | 76 | - | 57 | 146 | 16 | 50 | - |
| [a,a,a-Trifluorotoluene] | Percent | 103 | - | - | 101 | - | 104 | - | 71 | 131 | - | - | - | 120 | - | 112 | - | 71 | 131 | - | - | - |
| Batch: GAS*9787066 Method: 8015M - Modified 8015 | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 11.0% moisture.) | | | | |
| TPH (Gasoline Range) | mg/kg | 0.0087 | 10 | - | 94 | - | 100 | - | 57 | 146 | 7 | 50 | - | 74 | - | 90 | - | 57 | 146 | 19 | 50 | - |
| [a,a,a-Trifluorotoluene] | Percent | 113 | - | - | 113 | - | 107 | - | 71 | 131 | - | - | - | 120 | - | 128 | - | 71 | 131 | - | - | - |
| Batch: GAS*9787069 Method: 8015M - Modified 8015 | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 5.5% moisture.) | | | | |
| TPH (Gasoline Range) | mg/kg | 0 | 10 | - | 95 | - | 102 | - | 57 | 146 | 7 | 50 | - | 88 | - | 92 | - | 57 | 146 | 5 | 50 | - |
| [a,a,a-Trifluorotoluene] | Percent | 108 | - | - | 104 | - | 106 | - | 71 | 131 | - | - | - | 108 | - | 109 | - | 71 | 131 | - | - | - |
| Batch: GAS*9787070 Method: 8015M - Modified 8015 | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 9.6% moisture.) | | | | |
| TPH (Gasoline Range) | mg/kg | 0 | 10 | - | 87 | - | 98 | - | 57 | 146 | 12 | 50 | - | 88 | - | 93 | - | 57 | 146 | 5 | 50 | - |
| [a,a,a-Trifluorotoluene] | Percent | 119 | - | - | 108 | - | 101 | - | 71 | 131 | - | - | - | 110 | - | 107 | - | 71 | 131 | - | - | - |

000231

| NON-AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: 8260,OHM*9787072 Method: 8260A - Volatile Organics, GCMS | | | | | | | | | | | | | | | | (Matrix QC on basis of 7.7% moisture.) | | | | | | |
| 1,1,1-Trichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1,2-Trichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1-Dichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1-Dichloroethene | ug/kg | 0 | 5 | - | 103 | - | 102 | - | 65 | 135 | 1 | 30 | - | 90 | - | 98 | - | 65 | 135 | 8 | 30 | - |
| 1,2-Dichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,2-Dichloropropane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Chloroethylvinylether | ug/kg | 0 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Hexanone | ug/kg | 1.4 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Acetone | ug/kg | 97 | 50 | Q | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bromodichloromethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bromomethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Benzene | ug/kg | 0 | 5 | - | 105 | - | 107 | - | 65 | 135 | 2 | 30 | - | 96 | - | 102 | - | 65 | 135 | 6 | 30 | - |
| Bromoform | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chlorobenzene | ug/kg | 0 | 5 | - | 105 | - | 109 | - | 65 | 135 | 4 | 30 | - | 98 | - | 106 | - | 65 | 135 | 8 | 30 | - |
| Carbon Tetrachloride | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chloroform | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chloromethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dibromochloromethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Ethylbenzene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl ethyl ketone | ug/kg | 1.9 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl isobutyl ketone | ug/kg | 0.82 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl-tert-butylether | ug/kg | 0 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methylene chloride | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Trichloroethene | ug/kg | 0 | 5 | - | 103 | - | 107 | - | 61 | 135 | 3 | 30 | - | 96 | - | 103 | - | 61 | 135 | 7 | 30 | - |
| Toluene | ug/kg | 0 | 5 | - | 108 | - | 108 | - | 64 | 135 | 0 | 30 | - | 94 | - | 101 | - | 64 | 135 | 6 | 30 | - |
| Tetrachloroethene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl acetate | ug/kg | 0 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl chloride | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Xylene Isomers | ug/kg | 0 | 15 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| cis-1,2-Dichloroethene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| cis-1,3-Dichloropropene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| trans-1,2-Dichloroethene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| trans-1,3-[illegible]loropropene | ug/kg | 0 | 5 | - | - | - | [illegible] | | - | - | - | - | - | - | - | - | - | - | - | - | - | [illegible] |

000232

| NON-AQUEOUS SAMPLES | | ------ METHOD BLANK ------ | | | ---------- LAB CONTROL ---------- | | | | | | | | | ---------- MATRIX QC ---------- | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | RPD | RPD | | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: 8260,OHM*9787072 Method: 8260A - Volatile Organics, GCMS, con't | | | | | | | | | | | | | | | | (Matrix QC on basis of 7.7% moisture.) | | | | | | |
| [1,2-Dichloroethane-d4] | Percent | 96 | - | - | 111 | - | 111 | - | 52 | 149 | - | - | - | 89 | - | 94 | - | 52 | 149 | - | - | - |
| [4-Bromofluorobenzene] | Percent | 100 | - | - | 100 | - | 125 | - | 65 | 135 | - | - | - | 97 | - | 104 | - | 65 | 135 | - | - | - |
| [Toluene-d8] | Percent | 96 | - | - | 102 | - | 110 | - | 65 | 135 | - | - | - | 97 | - | 105 | - | 65 | 135 | - | - | - |
| [Dibromofluoromethane] | Percent | 96 | - | - | 105 | - | 105 | - | 65 | 135 | - | - | - | 95 | - | 103 | - | 65 | 135 | - | - | - |

000233

NON-AQUEOUS SAMPLES

Batch: 8260,OHM*9787073 Method: 8260A - Volatile Organics, GCMS

(Matrix QC on basis of 9.8% moisture.)

| | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| 1,1,1-Trichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1,2-Trichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1-Dichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,1-Dichloroethene | ug/kg | 0 | 5 | - | 98 | - | 94 | - | 65 | 135 | 4 | 30 | - | 98 | - | 90 | - | 65 | 135 | 8 | 30 | - |
| 1,2-Dichloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,2-Dichloropropane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Chloroethylvinylether | ug/kg | 0 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Hexanone | ug/kg | 0 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Acetone | ug/kg | 6.2 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bromodichloromethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bromomethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Benzene | ug/kg | 0 | 5 | - | 106 | - | 98 | - | 65 | 135 | 8 | 30 | - | 103 | - | 95 | - | 65 | 135 | 7 | 30 | - |
| Bromoform | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chlorobenzene | ug/kg | 0 | 5 | - | 107 | - | 104 | - | 65 | 135 | 3 | 30 | - | 107 | - | 101 | - | 65 | 135 | 6 | 30 | - |
| Carbon Tetrachloride | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chloroethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chloroform | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chloromethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Carbon Disulfide | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dibromochloromethane | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Ethylbenzene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl ethyl ketone | ug/kg | 0 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl isobutyl ketone | ug/kg | 0 | 50 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methyl-tert-butylether | ug/kg | 0 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Methylene chloride | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Styrene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Trichloroethene | ug/kg | 0 | 5 | - | 105 | - | 100 | - | 61 | 135 | 5 | 30 | - | 104 | - | 98 | - | 61 | 135 | 6 | 30 | - |
| Toluene | ug/kg | 0 | 5 | - | 106 | - | 99 | - | 64 | 135 | 6 | 30 | - | 103 | - | 95 | - | 64 | 135 | 7 | 30 | - |
| Tetrachloroethene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl acetate | ug/kg | 0 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Vinyl chloride | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Total Xylene Isomers | ug/kg | 0 | 15 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| cis-1,2-Dichloroethene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| cis-1,3-Dichloropropene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| trans-1,2-Dichloroethene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| trans-1,3-Dichloropropene | ug/kg | 0 | 5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

000234

| NON-AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | RPD | RPD | | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: 8260,OHM*9787073 Method: 8260A - Volatile Organics, GCMS, con't | | | | | | | | | | | | | | | | (Matrix QC on basis of 9.8% moisture.) | | | | | | |
| [1,2-Dichloroethane-d4] | Percent | 94 | - | - | 106 | - | 101 | - | 52 | 149 | - | - | - | 85 | - | 87 | - | 52 | 149 | - | - | - |
| [4-Bromofluorobenzene] | Percent | 98 | - | - | 103 | - | 96 | - | 65 | 135 | - | - | - | 103 | - | 100 | - | 65 | 135 | - | - | - |
| [Toluene-d8] | Percent | 97 | - | - | 106 | - | 103 | - | 65 | 135 | - | - | - | 106 | - | 102 | - | 65 | 135 | - | - | - |
| [Dibromofluoromethane] | Percent | 95 | - | - | 107 | - | 99 | - | 65 | 135 | - | - | - | 102 | - | 96 | - | 65 | 135 | - | - | - |
| Batch: 8081,OHM*97197 Method: 8081 - Organochlorine Pesticides and PCBs | | | | | | | | | | | | | | | | (Matrix QC on basis of 11.0% moisture.) | | | | | | |
| Aldrin | ug/kg | 0.17 | 2 | - | 96 | - | 108 | - | 37 | 126 | 12 | 50 | - | 85 | - | 85 | - | 37 | 126 | 1 | 50 | - |
| p,p'-DDD | ug/kg | 0 | 2 | - | 89 | - | 83 | - | 56 | 151 | 7 | - | - | - | - | - | - | - | - | - | - | - |
| p,p'-DDE | ug/kg | 0 | 2 | - | 98 | - | 94 | - | 70 | 136 | 5 | - | - | - | - | - | - | - | - | - | - | - |
| p,p'-DDT | ug/kg | 0 | 2 | - | 91 | - | 91 | - | 25 | 153 | 0 | 50 | - | 103 | - | 105 | - | 25 | 153 | 2 | 50 | - |
| Dieldrin | ug/kg | 0 | 2 | - | 94 | - | 100 | - | 32 | 142 | 6 | 50 | - | 102 | - | 100 | - | 32 | 142 | 2 | 50 | - |
| Endosulfan I | ug/kg | 0 | 0.7 | - | 94 | - | 100 | - | 28 | 148 | 7 | - | - | - | - | - | - | - | - | - | - | - |
| Endosulfan II | ug/kg | 0 | 2 | - | 99 | - | 99 | - | 41 | 137 | 0 | - | - | - | - | - | - | - | - | - | - | - |
| Endosulfan sulfate | ug/kg | 0 | 2 | - | 93 | - | 93 | - | 36 | 159 | 0 | - | - | - | - | - | - | - | - | - | - | - |
| Endrin | ug/kg | 0 | 2 | - | 97 | - | 94 | - | 33 | 144 | 3 | 50 | - | 104 | - | 103 | - | 33 | 144 | 1 | 50 | - |
| Endrin aldehyde | ug/kg | 0 | 2 | - | 92 | - | 94 | - | - | - | 3 | - | - | - | - | - | - | - | - | - | - | - |
| Heptachlor epoxide | ug/kg | 0 | 2 | - | 96 | - | 110 | - | 73 | 138 | 13 | - | - | - | - | - | - | - | - | - | - | - |
| Heptachlor | ug/kg | 0 | 2 | - | 98 | - | 112 | - | 35 | 138 | 14 | 50 | - | 95 | - | 97 | - | 35 | 138 | 2 | 50 | - |
| Methoxychlor | ug/kg | 0 | 2 | - | 94 | - | 95 | - | 8 | 182 | 1 | - | - | - | - | - | - | - | - | - | - | - |
| BHC, alpha isomer | ug/kg | 0 | 0.7 | - | 100 | - | 128 | - | 64 | 135 | 24 | - | - | - | - | - | - | - | - | - | - | - |
| alpha-Chlordane | ug/kg | 0 | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BHC, beta isomer | ug/kg | 0 | 2 | - | 98 | - | 101 | - | 74 | 137 | 3 | - | - | - | - | - | - | - | - | - | - | - |
| BHC, delta isomer | ug/kg | 0 | 2 | - | 90 | - | 104 | - | 71 | 131 | 14 | - | - | - | - | - | - | - | - | - | - | - |
| BHC, gamma isomer (Lindane) | ug/kg | 0 | 2 | - | 96 | - | 117 | - | 63 | 130 | 20 | 50 | - | 100 | - | 95 | - | 63 | 130 | 5 | 50 | - |
| gamma-Chlordane | ug/kg | 0 | 2 | - | 94 | - | 105 | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - |
| [Decachlorobiphenyl] | Percent | 110 | - | - | 104 | - | 98 | - | 25 | 143 | - | - | - | 119 | - | 116 | - | 25 | 143 | - | - | - |
| [Tetrachloro-meta-xylene] | Percent | 97 | - | - | 91 | - | 112 | - | 35 | 135 | - | - | - | 77 | - | 86 | - | 35 | 135 | - | - | - |
| Batch: 8081,PCB,OHM*97197 Method: 8081 - Organochlorine Pesticides and PCBs | | | | | | | | | | | | | | | | (Matrix QC on basis of 11.0% moisture.) | | | | | | |
| Aroclor 1016 | ug/kg | 0 | 33 | - | 86 | - | 91 | - | - | - | 6 | - | - | 80 | - | 65 | - | - | - | 21 | - | - |
| Aroclor 1221 | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Aroclor 1232 | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Aroclor 1242 | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Aroclor 1248 | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Aroclor 1254 | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Aroclor 1260 | ug/kg | 0 | 33 | - | 90 | - | 92 | - | 31 | 136 | 2 | 50 | - | 87 | - | 66 | - | 31 | 136 | 27 | 50 | - |
| [Decachlorobiphenyl] | Percent | 110 | - | - | 110 | - | 102 | - | 25 | 143 | - | - | - | 96 | - | 94 | - | 25 | 143 | - | - | - |
| [Tetrachloro-meta-xylene] | Percent | 97 | - | - | 103 | - | 99 | - | 35 | 135 | - | - | - | 61 | - | 70 | - | 35 | 135 | - | - | - |

000235

NON-AQUEOUS SAMPLES

| | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | |
| Batch: CON,8081,OHM*97197 Method: 8081 - Organochlorine Pesticides and PCBs | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 11.0% moisture.) | | | | | |
| Aldrin | ug/kg | 0.13 | 2 | - | 85 | - | 100 | - | 37 | 126 | 16 | 50 | - | 84 | - | 90 | - | 37 | 126 | 6 | 50 | - | |
| p,p'-DDD | ug/kg | 0 | 2 | - | 86 | - | 88 | - | 56 | 151 | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| p,p'-DDE | ug/kg | 0 | 2 | - | 89 | - | 88 | - | 70 | 136 | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| p,p'-DDT | ug/kg | 0 | 2 | - | 85 | - | 93 | - | 25 | 153 | 9 | 50 | - | 89 | - | 93 | - | 25 | 153 | 5 | 50 | - | |
| Dieldrin | ug/kg | 0 | 2 | - | 89 | - | 104 | - | 32 | 142 | 15 | 50 | - | 99 | - | 93 | - | 32 | 142 | 6 | 50 | - | |
| Endosulfan I | ug/kg | 0 | 0.7 | - | 90 | - | 97 | - | 28 | 148 | 8 | - | - | - | - | - | - | - | - | - | - | - | |
| Endosulfan II | ug/kg | 0 | 2 | - | 89 | - | 93 | - | 41 | 137 | 5 | - | - | - | - | - | - | - | - | - | - | - | |
| Endosulfan sulfate | ug/kg | 0 | 2 | - | 86 | - | 104 | - | 36 | 159 | 20 | - | - | - | - | - | - | - | - | - | - | - | |
| Endrin | ug/kg | 0 | 2 | - | 91 | - | 99 | - | 33 | 144 | 9 | 50 | - | 94 | - | 95 | - | 33 | 144 | 0 | 50 | - | |
| Endrin aldehyde | ug/kg | 0 | 2 | - | 88 | - | 90 | - | - | - | 2 | - | - | - | - | - | - | - | - | - | - | - | |
| Heptachlor epoxide | ug/kg | 0 | 2 | - | 89 | - | 104 | - | 73 | 138 | 16 | - | - | - | - | - | - | - | - | - | - | - | |
| Heptachlor | ug/kg | 0 | 2 | - | 82 | - | 99 | - | 35 | 138 | 19 | 50 | - | 84 | - | 77 | - | 35 | 138 | 10 | 50 | - | |
| Methoxychlor | ug/kg | 0 | 2 | - | 85 | - | 91 | - | 8 | 182 | 7 | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, alpha isomer | ug/kg | 0 | 0.7 | - | 74 | - | 96 | - | 64 | 135 | 26 | - | - | - | - | - | - | - | - | - | - | - | |
| alpha-Chlordane | ug/kg | 0 | 2 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, beta isomer | ug/kg | 0 | 2 | - | 87 | - | 90 | - | 74 | 137 | 4 | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, delta isomer | ug/kg | 0 | 2 | - | 73 | - | 89 | - | 71 | 131 | 20 | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, gamma isomer (Lindane) | ug/kg | 0 | 2 | - | 74 | - | 92 | - | 63 | 130 | 21 | 50 | - | 83 | - | 80 | - | 63 | 130 | 3 | 50 | - | |
| gamma-Chlordane | ug/kg | 0 | 2 | - | 87 | - | 92 | - | - | - | 6 | - | - | - | - | - | - | - | - | - | - | - | |
| [Decachlorobiphenyl] | Percent | 98 | - | - | 93 | - | 112 | - | 25 | 143 | - | - | - | 104 | - | 104 | - | 25 | 143 | - | - | - | |
| [Tetrachloro-meta-xylene] | Percent | 84 | - | - | 79 | - | 98 | - | 35 | 135 | - | - | - | 67 | - | 77 | - | 35 | 135 | - | - | - | |

000236

NON-AQUEOUS SAMPLES

Batch: 8270,OHM*97209 Method: 8270B - GC/MS for Semivolatile Organics, Capillary column (Matrix QC on basis of 16.0% moisture.)

| | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | RPD | RPD | | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| 1,2,4-Trichlorobenzene | ug/kg | 0 | 330 | - | 87 | - | - | - | 34 | 152 | - | - | - | 93 | - | 106 | - | 34 | 152 | 12 | 30 | - |
| 1,2-Dichlorobenzene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,3-Dichlorobenzene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 1,4-Dichlorobenzene | ug/kg | 0 | 330 | - | 86 | - | - | - | 25 | 135 | - | - | - | 88 | - | 108 | - | 25 | 135 | 20 | 30 | - |
| 2,4,5-Trichlorophenol | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2,4,6-Trichlorophenol | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2,4-Dichlorophenol | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2,4-Dimethylphenol | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2,4-Dinitrophenol | ug/kg | 0 | 830 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2,4-Dinitrotoluene | ug/kg | 0 | 330 | - | 104 | - | - | - | 29 | 149 | - | - | - | 98 | - | 111 | - | 29 | 149 | 12 | 30 | - |
| 2,6-Dinitrotoluene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Chloronaphthalene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Chlorophenol | ug/kg | 0 | 330 | - | 93 | - | - | - | 31 | 135 | - | - | - | 90 | - | 107 | - | 31 | 135 | 18 | 30 | - |
| 2-Methyl-4,6-dinitrophenol | ug/kg | 0 | 830 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Methylnaphthalene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Methylphenol (o-Cresol) | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Nitroaniline | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 2-Nitrophenol | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3,3'-Dichlorobenzidine | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 3-Nitroaniline | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4-Bromophenylphenylether | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4-Chloro-3-methylphenol | ug/kg | 0 | 330 | - | 100 | - | - | - | 34 | 135 | - | - | - | 99 | - | 108 | - | 34 | 135 | 8 | 30 | - |
| 4-Chloroaniline | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4-Chlorophenylphenylether | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4-Methylphenol (p-Cresol) | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4-Nitroaniline | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| 4-Nitrophenol | ug/kg | 0 | 830 | - | 100 | - | - | - | 25 | 141 | - | - | - | 88 | - | 100 | - | 25 | 141 | 12 | 30 | - |
| Acenaphthene | ug/kg | 0 | 330 | - | 96 | - | - | - | 39 | 135 | - | - | - | 106 | - | 114 | - | 39 | 135 | 7 | 30 | - |
| Acenaphthylene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Anthracene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Benzo(a)anthracene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Benzo(a)pyrene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Benzo(b)fluoranthene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Benzo(g,h,i)perylene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Benzo(k)fluoranthene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Butylbenzylphthalate | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Chrysene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |

000237

| NON-AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | RPD | RPD | | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: 8270,OHM*97209 Method: 8270B - GC/MS for Semivolatile Organics, Capillary column, con't | | | | | | | | | | | | | | | | (Matrix QC on basis of 16.0% moisture.) | | | | | | |
| Di-n-octylphthalate | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dibenzo(a,h)anthracene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dibenzofuran | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dibutylphthalate | ug/kg | 150 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Diethylphthalate | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dimethylphthalate | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Fluoranthene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Fluorene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hexachlorobenzene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hexachlorobutadiene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hexachlorocyclopentadiene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Hexachloroethane | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Indeno(1,2,3-c,d)pyrene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| N-Nitrosodiphenylamine | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| N-Nitrosodi-n-propylamine | ug/kg | 0 | 330 | - | 102 | - | - | - | 27 | 135 | - | - | - | 112 | - | 123 | - | 27 | 135 | 9 | 30 | - |
| Nitrobenzene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Naphthalene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Phenanthrene | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Phenol | ug/kg | 0 | 330 | - | 94 | - | - | - | 25 | 135 | - | - | - | 88 | - | 102 | - | 25 | 135 | 15 | 30 | - |
| Pentachlorophenol | ug/kg | 0 | 660 | - | 105 | - | - | - | 38 | 146 | - | - | - | 104 | - | 115 | - | 38 | 146 | 9 | 30 | - |
| Pyrene | ug/kg | 0 | 330 | - | 102 | - | - | - | 37 | 146 | - | - | - | 113 | - | 125 | - | 37 | 146 | 11 | 30 | - |
| Bis(2-chloroethoxy)methane | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bis(2-chloroethyl)ether | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bis(2-chloroisopropyl)ether | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Bis(2-ethylhexyl)phthalate | ug/kg | 0 | 330 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| [2-Fluorobiphenyl] | Percent | 95 | - | - | 107 | - | - | - | 34 | 135 | - | - | - | 113 | - | 123 | - | 34 | 135 | - | - | - |
| [2-Fluorophenol] | Percent | 79 | - | - | 86 | - | - | - | 25 | 135 | - | - | - | 89 | - | 110 | - | 25 | 135 | - | - | - |
| [2,4,6-Tribromophenol] | Percent | 102 | - | - | 113 | - | - | - | 25 | 144 | - | - | - | 121 | - | 136 | - | 25 | 144 | - | - | - |
| [Nitrobenzene-d5] | Percent | 94 | - | - | 102 | - | - | - | 25 | 135 | - | - | - | 106 | - | 120 | - | 25 | 135 | - | - | - |
| [Phenol-d5] | Percent | 92 | - | - | 98 | - | - | - | 25 | 135 | - | - | - | 105 | - | 125 | - | 25 | 135 | - | - | - |
| [Terphenyl-d14] | Percent | 87 | - | - | 96 | - | - | - | 32 | 136 | - | - | - | 103 | - | 117 | - | 32 | 136 | - | - | - |
| Batch: DIESEL*97237 Method: 8015M - Modified 8015 | | | | | | | | | | | | | | | | (Matrix QC on basis of 9.8% moisture.) | | | | | | |
| TPH (Diesel Range) | mg/kg | 0 | 10 | - | 104 | - | 105 | - | 51 | 153 | 1 | 50 | - | 102 | - | 92 | - | 51 | 153 | 10 | 50 | - |
| JP-5 | mg/kg | 0 | 10 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| [Naphthalene] | Percent | 75 | - | - | 76 | - | 74 | - | 52 | 145 | - | - | - | 78 | - | 70 | - | 52 | 145 | - | - | - |
| [o-Terphenyl] | Percent | 98 | - | - | 138 | - | 136 | - | 47 | 142 | - | - | - | 135 | - | 135 | - | 47 | 142 | - | - | - |

000238

NON-AQUEOUS SAMPLES

| | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | RPD | RPD | | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: 8270,OHM*97209 Method: 8270.SIM - GC/MS for Semivolatile Organics, Capillary column | | | | | | | | | | | | | | | | | | | | | | | (Matrix QC on basis of 16.0% moisture.) |
| Benzo(a)pyrene | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Dibenzo(a,h)anthracene | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| N-Nitrosodi-n-propylamine | ug/kg | 0 | 33 | - | 132 | - | 136 | Q | 27 | 135 | 2 | 30 | - | 110 | - | 109 | - | 27 | 135 | 1 | 30 | - |
| Bis(2-chloroethyl)ether | ug/kg | 0 | 33 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| [2-Fluorobiphenyl] | Percent | 48 | - | - | 98 | - | 95 | - | 34 | 135 | - | - | - | 84 | - | 85 | - | 34 | 135 | - | - | - |
| [Terphenyl-d14] | Percent | 56 | - | - | 108 | - | 104 | - | 32 | 136 | - | - | - | 77 | - | 81 | - | 32 | 136 | - | - | - |

VOC ANALYTICAL, GLENDALE
SUPPLEMENTAL QC REPORT FOR 9710409
DATE PRINTED: 24 NOV 1997

NON-AQUEOUS SAMPLES

000239

Batch: PH,NA*9749 Method: 9045 - Soil pH (Matrix QC on basis of 11.0% moisture.)

| | | N/A | C7103055*1 | ..... | C7103056*1 | ..... | 9710409*3 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | - | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | - | - |
| Time Analyzed | Hours | - | 11:00 | 11:00 | 11:00 | 11:00 | 11:00 | 11:00 | - | - | - |
| Date Calibrated | Date | - | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | - | - |
| pH | Units | - | 6.02 | 6.00 | 6.02 | 6.00 | 7.42 | 7.42 | - | - | - |

Batch: CN*9789 Method: 9010A - Cyanide, Colorimetric, Manual (Matrix QC on basis of 11.0% moisture.)

| | | B7101609*1 | C7103107*1 | ..... | C7103108*1 | ..... | 9710409*3 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 15:20 | 15:20 | 15:20 | 15:20 | 15:20 | 15:20 | - | 15:20 | 15:20 | 15:20 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Date Distilled | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Distilled | Hours | 09:50 | 09:50 | 09:50 | 09:50 | 09:50 | 09:50 | - | 09:50 | 09:50 | 09:50 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Total Cyanide | mg/kg | 0.0304 | 7.26 | 7.50 | 7.05 | 7.50 | 0 | - | 5.55 | 5.28 | 5.62 |

Batch: DIG,NAQ,GFA*972778 Method: 3050 - Acid Digestion of Sediments, etc.

| | | (BLANK) | (LCS) | ..... | (LCSD) | ..... | (MTX QC) | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Furnace Digestion | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 |

Batch: PB,GFA*972778 Method: 7421 - Lead, AA, Furnace (Matrix QC on basis of 14.0% moisture.)

| | | B7101435*1 | C7102773*1 | ..... | C7102774*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:06 | 14:53 | 14:53 | 14:55 | 14:55 | 14:11 | - | 14:13 | 14:16 | 14:16 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Lead | mg/kg | 0 | 4.96 | 5.00 | 5.14 | 5.00 | 1.74 | - | 5.19 | 5.08 | 5.6 |

000240

NON-AQUEOUS SAMPLES

Batch: SE,GFA*972778 Method: 7740 - Selenium, AA, Furnace (Matrix QC on basis of 14.0% moisture.)

| | | B7101436*1 | C7102775*1 | ..... | C7102776*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:30 | 14:33 | 14:33 | 14:35 | 14:35 | 16:51 | - | 16:54 | 16:56 | 16:56 |
| Date Calibrated | Date | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Selenium | mg/kg | 0 | 9.05 | 10.0 | 9.45 | 10.0 | 0 | - | 0.607 | 0.993 | 4.77 |

Batch: DIG,NAQ*972779 Method: 3050 - Acid Digestion of Sediments, etc.

| | | (BLANK) | (LCS) | ..... | (LCSD) | ..... | (MTX QC) | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Digestion | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 |

Batch: HG,SO*972738 Method: 7471A - Mercury (Solids), Cold Vapor AA, Manual (Matrix QC on basis of 14.0% moisture.)

| | | B7101330*1 | C7102567*1 | ..... | C7102568*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | - | 10/23/97 | 10/23/97 | 10/23/97 |
| Time Analyzed | Hours | 15:29 | 15:51 | 15:51 | 15:53 | 15:53 | 15:38 | - | 15:38 | 15:39 | 15:39 |
| Date Calibrated | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | - | 10/23/97 | 10/23/97 | 10/23/97 |
| Date Digested | Date | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | - | 10/22/97 | 10/22/97 | 10/22/97 |
| Time Digested | Hours | 19:01 | 19:01 | 19:01 | 19:01 | 19:01 | 19:01 | - | 19:01 | 19:01 | 19:01 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Mercury | mg/kg | 0.015 | 0.675 | 0.667 | 0.645 | 0.667 | 0 | - | 0.763 | 0.898 | 0.966 |

Batch: AS,GFA*972778 Method: 7060A - Arsenic, AA, Furnace (Matrix QC on basis of 14.0% moisture.)

| | | B7101434*1 | C7102771*1 | ..... | C7102772*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | - | 10/27/97 | 10/27/97 | 10/27/97 |
| Time Analyzed | Hours | 11:21 | 12:12 | 12:12 | 12:14 | 12:14 | 11:26 | - | 11:28 | 11:31 | 11:31 |
| Date Calibrated | Date | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | - | 10/27/97 | 10/27/97 | 10/27/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Arsenic | mg/kg | 0 | 4.72 | 5.00 | 4.67 | 5.00 | 0.767 | - | 3.96 | 4.12 | 5.52 |

000241

NON-AQUEOUS SAMPLES

Batch: AG*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101456*1 | C7102815*1 | ..... | C7102816*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Silver | mg/kg | 0 | 20.1 | 20.0 | 19.9 | 20.0 | 0 | - | 43 | 42.7 | 48.5 |

Batch: AL*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101457*1 | C7102817*1 | ..... | C7102818*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Aluminum | mg/kg | 0 | 93.0 | 100 | 92.7 | 100 | 7790 | - | 15000 | 12800 | 12700 |

Batch: BA*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101458*1 | C7102819*1 | ..... | C7102820*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Barium | mg/kg | 0 | 94.1 | 100 | 96.6 | 100 | 128 | - | 250 | 221 | 226 |

Batch: BE*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101459*1 | C7102821*1 | ..... | C7102822*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Beryllium | mg/kg | 0.02 | 37.0 | 40.0 | 38.0 | 40.0 | 0.465 | - | 9.72 | 9.72 | [illegible] |

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NON-AQUEOUS SAMPLES

Batch: CA*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101460*1 | C7102823*1 | ..... | C7102824*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Calcium | mg/kg | 0 | 4850 | 5000 | 4980 | 5000 | 4770 | - | 9580 | 9130 | 9560 |

Batch: CD*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101461*1 | C7102825*1 | ..... | C7102826*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Cadmium | mg/kg | 0.36 | 48.3 | 50.0 | 49.3 | 50.0 | 0 | - | 41.9 | 42.4 | 48.5 |

Batch: CO*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101462*1 | C7102827*1 | ..... | C7102828*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Cobalt | mg/kg | 0 | 96.7 | 100 | 99.0 | 100 | 6.98 | - | 51.3 | 51 | 55.5 |

Batch: CR*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101463*1 | C7102829*1 | ..... | C7102830*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Chromium | mg/kg | 0.4 | 93.5 | 100 | 96.1 | 100 | 7.67 | - | 53.4 | 52.6 | 56.2 |

NON-AQUEOUS SAMPLES

000243

Batch: CU*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101464*1 | C7102831*1 | ..... | C7102832*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Copper | mg/kg | 0 | 92.3 | 100 | 95.0 | 100 | 15.1 | - | 56.7 | 52.3 | 63.8 |

Batch: FE*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101465*1 | C7102833*1 | ..... | C7102834*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Iron | mg/kg | 0 | 102 | 100 | 100 | 100 | 11600 | - | 19500 | 16900 | 16700 |

Batch: K*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101466*1 | C7102835*1 | ..... | C7102836*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Potassium | mg/kg | 0 | 4590 | 5000 | 4730 | 5000 | 4300 | - | 5840 | 5050 | 5310 |

Batch: MG*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101467*1 | C7102837*1 | ..... | C7102838*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Magnesium | mg/kg | 0 | 4760 | 5000 | 4900 | 5000 | 5120 | - | 10900 | 9810 | 10000 |

000244

NON-AQUEOUS SAMPLES

Batch: MN*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101468*1 | C7102839*1 | ..... | C7102840*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Manganese | mg/kg | 0 | 95.3 | 100 | 97.8 | 100 | 244 | - | 343 | 317 | 338 |

Batch: MO*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101469*1 | C7102841*1 | ..... | C7102842*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Molybdenum | mg/kg | 0 | 91.4 | 100 | 95.9 | 100 | 0 | - | 39.4 | 42.4 | 48.5 |

Batch: NA*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101470*1 | C7102843*1 | ..... | C7102844*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:20 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Sodium | mg/kg | 0 | 4790 | 5000 | 4930 | 5000 | 128 | - | 1070 | 1060 | 1090 |

Batch: NI*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101471*1 | C7102845*1 | ..... | C7102846*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Nickel | mg/kg | 1.5 | 99.7 | 101 | 101 | 101 | 6.63 | - | 53.6 | 52.3 | 55.1 |

000245

NON-AQUEOUS SAMPLES

Batch: SB*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101472*1 | C7102847*1 | ..... | C7102848*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Antimony | mg/kg | 0 | 93.9 | 100 | 97.1 | 100 | 2.09 | - | 84.4 | 90.1 | 291 |

Batch: TL*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101473*1 | C7102849*1 | ..... | C7102850*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Thallium | mg/kg | 0 | 92.1 | 100 | 93.6 | 100 | 1.05 | - | 177 | 181 | 194 |

Batch: V*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101474*1 | C7102851*1 | ..... | C7102852*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Vanadium | mg/kg | 0 | 91.0 | 100 | 94.1 | 100 | 24.4 | - | 114 | 111 | 121 |

Batch: ZN*972779 Method: 6010A - ICAP Metals (Matrix QC on basis of 14.0% moisture.)

| | | B7101475*1 | C7102853*1 | ..... | C7102854*1 | ..... | 9710409*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 14:17 | 14:50 | 14:50 | 14:51 | 14:51 | 14:20 | - | 14:21 | 14:22 | 14:22 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Zinc | mg/kg | 0.4 | 95.8 | 102 | 98.7 | 102 | 48.8 | - | 99.5 | 83.9 | |

000246

NON-AQUEOUS SAMPLES

Batch: MOIST*972796 Method: D2216 - Percent solid (Matrix QC on basis of 5.5% moisture.)

| | | B7101540*1 | N/A ..... | | N/A ..... | | 9710389*1 ..... | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| -Moisture/TNFR | Percent | 0 | - | - | - | - | 5.82 | 5.93 | - | - | - |

Batch: MOIST*972800 Method: D2216 - Percent solid (Matrix QC on basis of 13.0% moisture.)

| | | B7101541*1 | N/A ..... | | N/A ..... | | 9710409*10 ..... | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| -Moisture/TNFR | Percent | 0 | - | - | - | - | 14.9 | 13.8 | - | - | - |

Batch: MOIST*972805 Method: D2216 - Percent solid (Matrix QC on basis of 16.0% moisture.)

| | | B7101542*1 | N/A ..... | | N/A ..... | | 9710422*6 ..... | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| -Moisture/TNFR | Percent | 0 | - | - | - | - | 19 | 17.9 | - | - | - |

Batch: GAS*974203 Method: 8015M - Modified 8015

| | | B7101502*1 | C7102904*1 | ..... | C7102905*1 | ..... | 9710426*2 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | - | 10/24/97 | 10/24/97 | 10/23/97 |
| Time Analyzed | Hours | 14:34 | 12:40 | 12:40 | 20:14 | 20:14 | - | - | - | - | - |
| Date Calibrated | Date | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | - | - | - | - | - |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Carbon Range | . | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | - | C6-C12 | C6-C12 | C6-C12 |
| TPH (Gasoline Range) | mg/kg | 0 | 0.545 | 0.550 | 0.531 | 0.550 | 0 | - | 0.492 | 0.420 | 0.550 |
| a,a,a-Trifluorotoluene Rep. | mg/kg | 0.0515 | 0.0507 | 0.0500 | 0.0519 | 0.0500 | 0.0527 | - | 0.0601 | 0.0558 | 0.0500 |
| a,a,a-Trifluorotoluene Th. | mg/kg | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0500 | - | 0.0500 | 0.0500 | 0.0500 |

Batch: GAS*9787066 Method: 8015M - Modified 8015 (Matrix QC on basis of 11.0% moisture.)

| | | B7101380*1 | C7102665*1 | ..... | C7102666*1 | ..... | 9710388*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/22/97 | 10/22/97 | 10/22/97 | 10/23/97 | 10/23/97 | 10/22/97 | - | 10/22/97 | 10/22/97 | 10/22/97 |
| Time Analyzed | Hours | 07:57 | 06:50 | 06:50 | 02:16 | 02:16 | 17:46 | - | 18:20 | 18:53 | 18:53 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Carbon Range | . | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | - | C6-C12 | C6-C12 | C6-C12 |
| TPH (Gasoline Range) | mg/kg | 0.0087 | 1.03 | 1.10 | 1.10 | 1.10 | 0 | - | 0.919 | 1.12 | 1.24 |
| a,a,a-Trifluorotoluene Rep. | mg/kg | 0.0563 | 0.0566 | 0.0500 | 0.0537 | 0.0500 | 0.0611 | - | 0.0676 | 0.0717 | 0.0561 |

NON-AQUEOUS SAMPLES

000247

Batch: GAS*9787066 Method: 8015M - Modified 8015, con't (Matrix QC on basis of 11.0% moisture.)

| | | B7101380*1 | C7102665*1 | ..... | C7102666*1 | ..... | 9710388*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| a,a,a-Trifluorotoluene Th. | mg/kg | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0561 | - | 0.0561 | 0.0561 | 0.0561 |

Batch: GAS*9787069 Method: 8015M - Modified 8015 (Matrix QC on basis of 5.5% moisture.)

| | | B7101500*1 | C7102900*1 | ..... | C7102901*1 | ..... | 9710389*1 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | - | 10/23/97 | 10/23/97 | 10/23/97 |
| Time Analyzed | Hours | 07:55 | 06:47 | 06:47 | 14:15 | 14:15 | 15:23 | - | 15:57 | 16:31 | 16:31 |
| Date Calibrated | Date | 08/05/97 | 08/05/97 | 08/05/97 | 08/05/97 | 08/05/97 | 08/05/97 | - | 08/05/97 | 08/05/97 | 08/05/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Carbon Range | . | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | - | C6-C12 | C6-C12 | C6-C12 |
| TPH (Gasoline Range) | mg/kg | 0 | 1.04 | 1.10 | 1.12 | 1.10 | 0 | - | 1.02 | 1.07 | 1.16 |
| a,a,a-Trifluorotoluene Rep. | mg/kg | 0.0542 | 0.0522 | 0.0500 | 0.0529 | 0.0500 | 0.0525 | - | 0.0573 | 0.0577 | 0.0529 |
| a,a,a-Trifluorotoluene Th. | mg/kg | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0529 | - | 0.0529 | 0.0529 | 0.0529 |

Batch: GAS*9787070 Method: 8015M - Modified 8015 (Matrix QC on basis of 9.6% moisture.)

| | | B7101499*1 | C7102899*1 | ..... | C7103117*1 | ..... | 9710409*9 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/23/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/23/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 22:09 | 03:51 | 03:51 | 06:26 | 06:26 | 01:34 | - | 02:09 | 02:43 | 02:43 |
| Date Calibrated | Date | 08/05/97 | 08/05/97 | 08/05/97 | 08/05/97 | 08/05/97 | 08/05/97 | - | 08/05/97 | 08/05/97 | 08/05/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Carbon Range | . | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | C6-C12 | - | C6-C12 | C6-C12 | C6-C12 |
| TPH (Gasoline Range) | mg/kg | 0 | 0.953 | 1.10 | 1.08 | 1.10 | 0 | - | 1.07 | 1.13 | 1.22 |
| a,a,a-Trifluorotoluene Rep. | mg/kg | 0.0597 | 0.0541 | 0.0500 | 0.0504 | 0.0500 | 0.0608 | - | 0.0608 | 0.059 | 0.0553 |
| a,a,a-Trifluorotoluene Th. | mg/kg | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0500 | 0.0553 | - | 0.0553 | 0.0553 | 0.0553 |

000248

NON-AQUEOUS SAMPLES

Batch: 8260,OHM*9787072 Method: 8260A - Volatile Organics, GCMS

(Matrix QC on basis of 7.7% moisture.)

| | | B7101632*1 | C7103140*1 | ..... | C7103141*1 | ..... | 9710409*26 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/25/97 | - | 10/25/97 | 10/25/97 | 10/25/97 |
| Time Analyzed | Hours | 21:14 | 19:24 | 19:24 | 20:01 | 20:01 | 05:02 | - | 05:37 | 06:13 | 05:02 |
| Date Calibrated | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | - | 10/23/97 | 10/23/97 | 10/23/97 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| 1,1,1-Trichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1,2-Trichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1-Dichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1-Dichloroethene | ug/kg | 0 | 51.6 | 50.0 | 51.1 | 50.0 | 0 | - | 49 | 52.9 | 54.2 |
| 1,2-Dichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,2-Dichloropropane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Chloroethylvinylether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Hexanone | ug/kg | 1.4 | - | - | - | - | 0 | - | - | - | - |
| Acetone | ug/kg | 97 | - | - | - | - | 7.8 | - | - | - | - |
| Bromodichloromethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Bromomethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Benzene | ug/kg | 0 | 52.7 | 50.0 | 53.7 | 50.0 | 0 | - | 51.9 | 55.3 | 54.2 |
| Bromoform | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chlorobenzene | ug/kg | 0 | 52.3 | 50.0 | 54.6 | 50.0 | 0 | - | 52.9 | 57.2 | 54.2 |
| Carbon Tetrachloride | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chloroform | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chloromethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Carbon Disulfide | ug/kg | 0 | - | - | - | - | - | - | - | - | - |
| Dibromochloromethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Ethylbenzene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Methyl ethyl ketone | ug/kg | 1.9 | - | - | - | - | 0 | - | - | - | - |
| Methyl isobutyl ketone | ug/kg | 0.82 | - | - | - | - | 0 | - | - | - | - |
| Methyl-tert-butylether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Methylene chloride | ug/kg | 0 | - | - | - | - | 1.08 | - | - | - | - |
| Styrene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Trichloroethene | ug/kg | 0 | 51.7 | 50.0 | 53.4 | 50.0 | 0 | - | 52.3 | 56 | 54.2 |
| Toluene | ug/kg | 0 | 53.9 | 50.0 | 54.1 | 50.0 | 0 | - | 51.2 | 54.6 | 54.2 |
| Tetrachloroethene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Vinyl acetate | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Vinyl chloride | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Total Xylene Isomers | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |

NON-AQUEOUS SAMPLES

000249

Batch: 8260,OHM*9787072 Method: 8260A - Volatile Organics, GCMS, con't

(Matrix QC on basis of 7.7% moisture.)

| | | B7101632*1 | C7103140*1 | ..... | C7103141*1 | ..... | 9710409*26 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| cis-1,2-Dichloroethene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| cis-1,3-Dichloropropene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| trans-1,2-Dichloroethene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| trans-1,3-Dichloropropene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,2-Dichloroethane-d4 Rep. | ug/kg | 48.1 | 55.4 | 50.0 | 55.3 | 50.0 | 43 | - | 48.3 | 50.7 | 54.2 |
| 1,2-Dichloroethane-d4 Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 54.2 | - | 54.2 | 54.2 | 54.2 |
| 4-Bromofluorobenzene Rep. | ug/kg | 50.1 | 49.9 | 50.0 | 62.6 | 50.0 | 55 | - | 52.4 | 56.3 | 54.2 |
| 4-Bromofluorobenzene Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 54.2 | - | 54.2 | 54.2 | 54.2 |
| Toluene-d8 Reported | ug/kg | 48.1 | 51.1 | 50.0 | 54.8 | 50.0 | 52.5 | - | 52.8 | 57.1 | 54.2 |
| Toluene-d8 Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 54.2 | - | 54.2 | 54.2 | 54.2 |
| Dibromofluoromethane Rep. | ug/kg | 47.8 | 52.6 | 50.0 | 52.3 | 50.0 | 51.2 | - | 51.6 | 55.7 | 54.2 |
| Dibromofluoromethane Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 54.2 | - | 54.2 | 54.2 | 54.2 |

NON-AQUEOUS SAMPLES

000250

Batch: 8260,OHM*9787073 Method: 8260A - Volatile Organics, GCMS

(Matrix QC on basis of 9.8% moisture.)

| | | B7101639*1 | C7103155*1 | ..... | C7103156*1 | ..... | 9710409*13 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/25/97 | 10/25/97 | 10/25/97 | 10/25/97 | 10/25/97 | 10/26/97 | - | 10/26/97 | 10/26/97 | 10/26/97 |
| Time Analyzed | Hours | 19:38 | 17:51 | 17:51 | 18:27 | 18:27 | 02:25 | - | 03:01 | 03:36 | 02:25 |
| Date Calibrated | Date | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | 10/23/97 | - | 10/23/97 | 10/23/97 | 10/23/97 |
| Date Extracted | Date | - | - | - | - | - | - | - | - | - | - |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| 1,1,1-Trichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1,2,2-Tetrachloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1,2-Trichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1-Dichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,1-Dichloroethene | ug/kg | 0 | 48.9 | 50.0 | 47.0 | 50.0 | 0 | - | 54.1 | 50.1 | 55.4 |
| 1,2-Dichloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,2-Dichloropropane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Chloroethylvinylether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Hexanone | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Acetone | ug/kg | 6.2 | - | - | - | - | 4.21 | - | - | - | - |
| Bromodichloromethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Bromomethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Benzene | ug/kg | 0 | 53.0 | 50.0 | 49.1 | 50.0 | 0 | - | 57 | 52.9 | 55.4 |
| Bromoform | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chlorobenzene | ug/kg | 0 | 53.4 | 50.0 | 51.8 | 50.0 | 0 | - | 59.3 | 56.1 | 55.4 |
| Carbon Tetrachloride | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chloroform | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chloromethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Carbon Disulfide | ug/kg | 0 | - | - | - | - | - | - | - | - | - |
| Dibromochloromethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Ethylbenzene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Methyl ethyl ketone | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Methyl isobutyl ketone | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Methyl-tert-butylether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Methylene chloride | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Styrene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Trichloroethene | ug/kg | 0 | 52.3 | 50.0 | 49.8 | 50.0 | 0 | - | 57.4 | 54.2 | 55.4 |
| Toluene | ug/kg | 0 | 52.9 | 50.0 | 49.7 | 50.0 | 0 | - | 56.9 | 52.8 | 55.4 |
| Tetrachloroethene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Vinyl acetate | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Vinyl chloride | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |

NON-AQUEOUS SAMPLES

000251

Batch: 8260,OHM*9787073 Method: 8260A - Volatile Organics, GCMS, con't (Matrix QC on basis of 9.8% moisture.)

| | | B7101639*1 | C7103155*1 | ..... | C7103156*1 | ..... | 9710409*13 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Total Xylene Isomers | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| cis-1,2-Dichloroethene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| cis-1,3-Dichloropropene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| trans-1,2-Dichloroethene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| trans-1,3-Dichloropropene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,2-Dichloroethane-d4 Rep. | ug/kg | 47.0 | 53.1 | 50.0 | 50.4 | 50.0 | 50.1 | - | 47 | 48.3 | 55.4 |
| 1,2-Dichloroethane-d4 Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 55.4 | - | 55.4 | 55.4 | 55.4 |
| 4-Bromofluorobenzene Rep. | ug/kg | 49.0 | 51.5 | 50.0 | 47.9 | 50.0 | 55.9 | - | 57.2 | 55.5 | 55.4 |
| 4-Bromofluorobenzene Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 55.4 | - | 55.4 | 55.4 | 55.4 |
| Toluene-d8 Reported | ug/kg | 48.3 | 53.0 | 50.0 | 51.4 | 50.0 | 51.8 | - | 58.6 | 56.4 | 55.4 |
| Toluene-d8 Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 55.4 | - | 55.4 | 55.4 | 55.4 |
| Dibromofluoromethane Rep. | ug/kg | 47.6 | 53.7 | 50.0 | 49.6 | 50.0 | 59.2 | - | 56.4 | 53 | 55.4 |
| Dibromofluoromethane Theo. | ug/kg | 50.0 | 50.0 | 50.0 | 50.0 | 50.0 | 55.4 | - | 55.4 | 55.4 | 55.4 |

NON-AQUEOUS SAMPLES

000252

Batch: 8081,OHM*97197 Method: 8081 - Organochlorine Pesticides and PCBs (Matrix QC on basis of 11.0% moisture.)

| | | B7101826*1 | C7103518*1 | ..... | C7103519*1 | ..... | 9710409*3 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/25/97 | 10/25/97 | 10/25/97 | 10/27/97 | 10/27/97 | 10/25/97 | - | 10/25/97 | 10/25/97 | 10/25/97 |
| Time Analyzed | Hours | 03:22 | 04:03 | 04:03 | 19:55 | 19:55 | 07:24 | - | 08:04 | 08:44 | 08:44 |
| Date Calibrated | Date | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | - | 10/21/97 | 10/21/97 | 10/21/97 |
| Date Extracted | Date | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | - | 10/22/97 | 10/22/97 | 10/22/97 |
| Time Extracted | Hours | 16:45 | 16:45 | 16:45 | 16:45 | 16:45 | 16:45 | - | 16:45 | 16:45 | 16:45 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Aldrin | ug/kg | 0.17 | 8.00 | 8.33 | 9.02 | 8.33 | 0.157 | - | 8.13 | 8.08 | 9.52 |
| p,p'-DDD | ug/kg | 0 | 7.41 | 8.33 | 6.90 | 8.33 | 0 | - | - | - | - |
| p,p'-DDE | ug/kg | 0 | 8.16 | 8.33 | 7.79 | 8.33 | 0 | - | - | - | - |
| p,p'-DDT | ug/kg | 0 | 7.59 | 8.33 | 7.58 | 8.33 | 0 | - | 9.64 | 9.83 | 9.36 |
| Dieldrin | ug/kg | 0 | 7.83 | 8.33 | 8.30 | 8.33 | 0 | - | 9.54 | 9.33 | 9.36 |
| Endosulfan I | ug/kg | 0 | 7.79 | 8.33 | 8.32 | 8.33 | 0 | - | - | - | - |
| Endosulfan II | ug/kg | 0 | 8.22 | 8.33 | 8.21 | 8.33 | 0 | - | - | - | - |
| Endosulfan sulfate | ug/kg | 0 | 7.71 | 8.33 | 7.72 | 8.33 | 0 | - | - | - | - |
| Endrin | ug/kg | 0 | 8.10 | 8.33 | 7.84 | 8.33 | 0 | - | 9.72 | 9.62 | 9.36 |
| Endrin aldehyde | ug/kg | 0 | 7.67 | 8.33 | 7.87 | 8.33 | 0 | - | - | - | - |
| Heptachlor epoxide | ug/kg | 0 | 8.03 | 8.33 | 9.17 | 8.33 | 0 | - | - | - | - |
| Heptachlor | ug/kg | 0 | 8.17 | 8.33 | 9.36 | 8.33 | 0 | - | 8.92 | 9.09 | 9.36 |
| Methoxychlor | ug/kg | 0 | 7.80 | 8.33 | 7.89 | 8.33 | 0 | - | - | - | - |
| BHC, alpha isomer | ug/kg | 0 | 8.37 | 8.33 | 10.7 | 8.33 | 0 | - | - | - | - |
| alpha-Chlordane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| BHC, beta isomer | ug/kg | 0 | 8.15 | 8.33 | 8.42 | 8.33 | 0 | - | - | - | - |
| BHC, delta isomer | ug/kg | 0 | 7.52 | 8.33 | 8.68 | 8.33 | 0 | - | - | - | - |
| BHC, gamma isomer (Lindane) | ug/kg | 0 | 7.98 | 8.33 | 9.71 | 8.33 | 0 | - | 9.37 | 8.91 | 9.36 |
| gamma-Chlordane | ug/kg | 0 | 7.85 | 8.33 | 8.77 | 8.33 | 0 | - | - | - | - |
| Decachlorobiphenyl Reported | ug/kg | 9.13 | 8.65 | 8.33 | 8.13 | 8.33 | 9.3 | - | 11.2 | 10.9 | 9.36 |
| Decachlorobiphenyl Theoretical | ug/kg | 8.33 | 8.33 | 8.33 | 8.33 | 8.33 | 9.36 | - | 9.36 | 9.36 | 9.36 |
| Tetrachloro-meta-xylene Rpt. | ug/kg | 8.10 | 7.56 | 8.33 | 9.32 | 8.33 | 6.58 | - | 7.22 | 8.02 | 9.36 |
| Tetrachloro-meta-xylene Theor. | ug/kg | 8.33 | 8.33 | 8.33 | 8.33 | 8.33 | 9.36 | - | 9.36 | 9.36 | 9.36 |

000253

NON-AQUEOUS SAMPLES

Batch: 8081,PCB,OHM*97197 Method: 8081 - Organochlorine Pesticides and PCBs (Matrix QC on basis of 11.0% moisture.)

| | | B7101824*1 | C7103514*1 | ..... | C7103515*1 | ..... | 9710409*3 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/25/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/27/97 | 10/25/97 | - | 10/25/97 | 10/28/97 | 10/29/97 |
| Time Analyzed | Hours | 03:22 | 20:36 | 20:36 | 21:16 | 21:16 | 07:24 | - | 19:29 | 19:29 | 19:29 |
| Date Calibrated | Date | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | - | 10/21/97 | 10/21/97 | 10/21/97 |
| Date Extracted | Date | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | - | 10/22/97 | 10/22/97 | 10/17/97 |
| Time Extracted | Hours | 16:45 | 16:45 | 16:45 | 16:45 | 16:45 | 16:45 | - | 16:45 | 16:45 | 16:45 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Aroclor 1016 | ug/kg | 0 | 143 | 167 | 152 | 167 | 0 | - | 146 | 122 | 188 |
| Aroclor 1221 | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Aroclor 1232 | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Aroclor 1242 | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Aroclor 1248 | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Aroclor 1254 | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Aroclor 1260 | ug/kg | 0 | 150 | 167 | 153 | 167 | 0 | - | 164 | 125 | 188 |
| Decachlorobiphenyl Reported | ug/kg | 9.13 | 9.14 | 8.33 | 8.48 | 8.33 | 9.3 | - | 9 | 8.76 | 9.36 |
| Decachlorobiphenyl Theoretical | ug/kg | 8.33 | 8.33 | 8.33 | 8.33 | 8.33 | 9.36 | - | 9.36 | 9.36 | 9.36 |
| Tetrachloro-meta-xylene Rpt. | ug/kg | 8.10 | 8.54 | 8.33 | 8.27 | 8.33 | 6.58 | - | 5.66 | 6.55 | 9.36 |
| Tetrachloro-meta-xylene Theor. | ug/kg | 8.33 | 8.33 | 8.33 | 8.33 | 8.33 | 9.36 | - | 9.36 | 9.36 | 9.36 |

VOC ANA[illegible]AL, GLENDALE
SUPPLEME[illegible]AL QC REPORT FOR 9710409
DATE PRINTED: 24 NOV 1997

NON-AQUEOUS SAMPLES

000254

Batch: CON,8081,OHM*97197 Method: 8081 - Organochlorine Pesticides and PCBs (Matrix QC on basis of 11.0% moisture.)

| | | B711838*1 | C7111628*1 | ..... | C7111629*1 | ..... | 9710409*3 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/25/97 | 10/25/97 | 10/25/97 | 10/25/97 | 10/25/97 | 10/25/97 | - | 10/25/97 | 10/25/97 | 10/25/97 |
| Time Analyzed | Hours | 03:22 | 04:03 | 04:03 | 19:55 | 19:55 | 07:24 | - | 08:04 | 08:44 | 08:44 |
| Date Calibrated | Date | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | - | 10/21/97 | 10/21/97 | 10/21/97 |
| Date Extracted | Date | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | - | 10/22/97 | 10/22/97 | 10/22/97 |
| Time Extracted | Hours | 16:45 | 16:45 | 16:45 | 16:45 | 16:45 | 16:45 | - | 16:45 | 16:45 | 16:45 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| Aldrin | ug/kg | 0.13 | 7.09 | 8.33 | 8.35 | 8.33 | 0.124 | - | 7.99 | 8.5 | 9.48 |
| p,p'-DDD | ug/kg | 0 | 7.19 | 8.33 | 7.29 | 8.33 | 0 | - | - | - | - |
| p,p'-DDE | ug/kg | 0 | 7.38 | 8.33 | 7.34 | 8.33 | 0 | - | - | - | - |
| p,p'-DDT | ug/kg | 0 | 7.10 | 8.33 | 7.74 | 8.33 | 0 | - | 8.3 | 8.73 | 9.36 |
| Dieldrin | ug/kg | 0 | 7.43 | 8.33 | 8.64 | 8.33 | 0 | - | 9.25 | 8.71 | 9.36 |
| Endosulfan I | ug/kg | 0 | 7.46 | 8.33 | 8.06 | 8.33 | 0 | - | - | - | - |
| Endosulfan II | ug/kg | 0 | 7.38 | 8.33 | 7.74 | 8.33 | 0 | - | - | - | - |
| Endosulfan sulfate | ug/kg | 0 | 7.14 | 8.33 | 8.70 | 8.33 | 0 | - | - | - | - |
| Endrin | ug/kg | 0 | 7.54 | 8.33 | 8.26 | 8.33 | 0 | - | 8.82 | 8.86 | 9.36 |
| Endrin aldehyde | ug/kg | 0 | 7.37 | 8.33 | 7.53 | 8.33 | 0 | - | - | - | - |
| Heptachlor epoxide | ug/kg | 0 | 7.38 | 8.33 | 8.67 | 8.33 | 0 | - | - | - | - |
| Heptachlor | ug/kg | 0 | 6.80 | 8.33 | 8.24 | 8.33 | 0 | - | 7.9 | 7.17 | 9.36 |
| Methoxychlor | ug/kg | 0 | 7.08 | 8.33 | 7.61 | 8.33 | 0 | - | - | - | - |
| BHC, alpha isomer | ug/kg | 0 | 6.14 | 8.33 | 7.97 | 8.33 | 0 | - | - | - | - |
| alpha-Chlordane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| BHC, beta isomer | ug/kg | 0 | 7.22 | 8.33 | 7.51 | 8.33 | 0 | - | - | - | - |
| BHC, delta isomer | ug/kg | 0 | 6.06 | 8.33 | 7.40 | 8.33 | 0 | - | - | - | - |
| BHC, gamma isomer (Lindane) | ug/kg | 0 | 6.19 | 8.33 | 7.64 | 8.33 | 0 | - | 7.74 | 7.49 | 9.36 |
| gamma-Chlordane | ug/kg | 0 | 7.28 | 8.33 | 7.70 | 8.33 | 0 | - | - | - | - |
| Decachlorobiphenyl Reported | ug/kg | 8.20 | 7.72 | 8.33 | 9.34 | 8.33 | 8.09 | - | 9.75 | 9.75 | 9.36 |
| Decachlorobiphenyl Theoretical | ug/kg | 8.33 | 8.33 | 8.33 | 8.33 | 8.33 | 9.36 | - | 9.36 | 9.36 | 9.36 |
| Tetrachloro-meta-xylene Rpt. | ug/kg | 7.00 | 6.60 | 8.33 | 8.13 | 8.33 | 5.83 | - | 6.25 | 7.25 | 9.36 |
| Tetrachloro-meta-xylene Theor. | ug/kg | 8.33 | 8.33 | 8.33 | 8.33 | 8.33 | 9.36 | - | 9.36 | 9.36 | 9.36 |

000255

NON-AQUEOUS SAMPLES

Batch: 8270,OHM*97209 Method: 8270B - GC/MS for Semivolatile Organics, Capillary column (Matrix QC on basis of 16.0% moisture.)

| | | B7101781*1 | C7103431*1 | ..... | N/A | ..... | 9710422*6 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/27/97 | 10/27/97 | 10/21/97 | - | - | 10/27/97 | - | 10/27/97 | 10/27/97 | 10/27/97 |
| Time Analyzed | Hours | 16:00 | 16:46 | 16:46 | - | - | 03:19 | - | 3:26 | 4:12 | 03:19 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | - | - | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Date Extracted | Date | 10/21/97 | 10/21/97 | 10/21/97 | - | - | 10/21/97 | - | 10/21/97 | 10/21/97 | 10/21/97 |
| Time Extracted | Hours | 10:00 | 10:00 | 10:00 | - | - | 10:00 | - | 10:00 | 10:00 | 10:00 |
| Dilution Factor | Times | 1 | 1 | 1 | - | - | 1 | - | 1 | 1 | 1 |
| 1,2,4-Trichlorobenzene | ug/kg | 0 | 2900 | 3330 | - | - | 0 | - | 1860 | 2100 | 1990 |
| 1,2-Dichlorobenzene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,3-Dichlorobenzene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 1,4-Dichlorobenzene | ug/kg | 0 | 2860 | 3330 | - | - | 0 | - | 1750 | 2150 | 1990 |
| 2,4,5-Trichlorophenol | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2,4,6-Trichlorophenol | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2,4-Dichlorophenol | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2,4-Dimethylphenol | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2,4-Dinitrophenol | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2,4-Dinitrotoluene | ug/kg | 0 | 3460 | 3330 | - | - | 0 | - | 1960 | 2210 | 1990 |
| 2,6-Dinitrotoluene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Chloronaphthalene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Chlorophenol | ug/kg | 0 | 3110 | 3330 | - | - | 0 | - | 2690 | 3220 | 2980 |
| 2-Methyl-4,6-dinitrophenol | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Methylnaphthalene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Methylphenol (o-Cresol) | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Nitroaniline | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Nitrophenol | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 3,3'-Dichlorobenzidine | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 3-Nitroaniline | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 4-Bromophenylphenylether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 4-Chloro-3-methylphenol | ug/kg | 0 | 3340 | 3330 | - | - | 0 | - | 2980 | 3240 | 2980 |
| 4-Chloroaniline | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 4-Chlorophenylphenylether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 4-Methylphenol (p-Cresol) | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 4-Nitroaniline | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 4-Nitrophenol | ug/kg | 0 | 3340 | 3330 | - | - | 0 | - | 2650 | 2990 | 2980 |
| Acenaphthene | ug/kg | 0 | 3210 | 3330 | - | - | 0 | - | 2110 | 2270 | 1990 |
| Acenaphthylene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Anthracene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Benzo(a)[illegible]acene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |

000256

NON-AQUEOUS SAMPLES

Batch: 8270,OHM*97209 Method: 8270B - GC/MS for Semivolatile Organics, Capillary column, con't (Matrix QC on basis of 16.0% moisture.)

| | | B7101781*1 | C7103431*1 | ..... | N/A | ..... | 9710422*6 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Benzo(a)pyrene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Benzo(b)fluoranthene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Benzo(g,h,i)perylene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Benzo(k)fluoranthene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Butylbenzylphthalate | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Chrysene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Di-n-octylphthalate | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Dibenzo(a,h)anthracene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Dibenzofuran | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Dibutylphthalate | ug/kg | 150 | - | - | - | - | 226 | - | - | - | - |
| Diethylphthalate | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Dimethylphthalate | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Fluoranthene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Fluorene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Hexachlorobenzene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Hexachlorobutadiene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Hexachlorocyclopentadiene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Hexachloroethane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Indeno(1,2,3-c,d)pyrene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| N-Nitrosodiphenylamine | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| N-Nitrosodi-n-propylamine | ug/kg | 0 | 3410 | 3330 | - | - | 0 | - | 2230 | 2450 | 1990 |
| Nitrobenzene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Naphthalene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Phenanthrene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Phenol | ug/kg | 0 | 3130 | 3330 | - | - | 0 | - | 2630 | 3060 | 2980 |
| Pentachlorophenol | ug/kg | 0 | 3500 | 3330 | - | - | 0 | - | 3130 | 3440 | 2980 |
| Pyrene | ug/kg | 0 | 3410 | 3330 | - | - | 0 | - | 2240 | 2490 | 1990 |
| Bis(2-chloroethoxy)methane | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Bis(2-chloroethyl)ether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Bis(2-chloroisopropyl)ether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Bis(2-ethylhexyl)phthalate | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Fluorobiphenyl Reported | ug/kg | 1590 | 1790 | 1790 | - | - | 2170 | - | 2250 | 2440 | 1990 |
| 2-Fluorobiphenyl Theo. | ug/kg | 1670 | 1670 | 1670 | - | - | 1990 | - | 1990 | 1990 | 1990 |
| 2-Fluorophenol Reported | ug/kg | 1980 | 2150 | 2150 | - | - | 2580 | - | 2650 | 3290 | 2980 |
| 2-Fluorophenol Theoretical | ug/kg | 2500 | 2500 | 2500 | - | - | 2980 | - | 2980 | 2980 | 2980 |
| 2,4,6-Tribromophenol Rep. | ug/kg | 2540 | 2830 | 2830 | - | - | 3250 | - | 3600 | 4040 | 2980 |
| 2,4,6-Tribromophenol Theo. | ug/kg | 2500 | 2500 | 2500 | - | - | 2980 | - | 2980 | 2980 | 2980 |

000257

NON-AQUEOUS SAMPLES

Batch: 8270,OHM*97209 Method: 8270B - GC/MS for Semivolatile Organics, Capillary column, con't (Matrix QC on basis of 16.0% moisture.)

| | | B7101781*1 | C7103431*1 | ..... | N/A | ..... | 9710422*6 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Nitrobenzene-d5 Reported | ug/kg | 1570 | 1710 | 1710 | - | - | 2060 | - | 2110 | 2390 | 1990 |
| Nitrobenzene-d5 Theoretical | ug/kg | 1670 | 1670 | 1670 | - | - | 1990 | - | 1990 | 1990 | 1990 |
| Phenol-d5 Reported | ug/kg | 2290 | 2440 | 2440 | - | - | 2960 | - | 3130 | 3730 | 2980 |
| Phenol-d5 Theoretical | ug/kg | 2500 | 2500 | 2500 | - | - | 2980 | - | 2980 | 2980 | 2980 |
| Terphenyl-d14 Reported | ug/kg | 1450 | 1610 | 1610 | - | - | 1930 | - | 2050 | 2330 | 1990 |
| Terphenyl-d14 Theoretical | ug/kg | 1670 | 1670 | 1670 | - | - | 1990 | - | 1990 | 1990 | 1990 |

Batch: DIESEL*97237 Method: 8015M - Modified 8015 (Matrix QC on basis of 9.8% moisture.)

| | | B7101297*1 | C7102498*1 | ..... | C7102499*1 | ..... | 9710409*13 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/25/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Time Analyzed | Hours | 00:24 | 23:15 | 23:15 | 23:50 | 23:50 | 19:47 | - | 20:22 | 20:56 | 19:47 |
| Date Calibrated | Date | 09/24/97 | 09/24/97 | 09/24/97 | 09/24/97 | 09/24/97 | 09/24/97 | - | 09/24/97 | 09/24/97 | 09/24/97 |
| Date Extracted | Date | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | 10/22/97 | - | 10/22/97 | 10/22/97 | 10/22/97 |
| Time Extracted | Hours | 12:15 | 12:15 | 12:15 | 12:15 | 12:15 | 12:15 | - | 12:15 | 12:15 | 12:15 |
| Dilution Factor | Times | 1 | 1 | 1 | 1 | 1 | 1 | - | 1 | 1 | 1 |
| TPH (Diesel Range) | mg/kg | 0 | 41.4 | 40.0 | 41.8 | 40.0 | 0 | - | 45.2 | 40.8 | 44.3 |
| JP-5 | mg/kg | 0 | - | - | - | - | - | - | - | - | - |
| Carbon Range | . | C8-C25 | C10-C25 | C10-C25 | C10-C25 | C10-C25 | C8-C25 | - | C10-C25 | C10-C25 | C10-C25 |
| Naphthalene Reported | mg/kg | 1.49 | 1.52 | 2.00 | 1.48 | 2.00 | 1.83 | - | 1.72 | 1.54 | 2.22 |
| Naphthalene Theoretical | mg/kg | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.22 | - | 2.22 | 2.22 | 2.22 |
| o-Terphenyl Reported | mg/kg | 1.95 | 2.76 | 2.00 | 2.72 | 2.00 | 2.25 | - | 2.99 | 2.99 | 2.22 |
| o-Terphenyl Theoretical | mg/kg | 2.00 | 2.00 | 2.00 | 2.00 | 2.00 | 2.22 | - | 2.22 | 2.22 | 2.22 |

VOC ANALYTICAL, GLENDALE
SUPPLEMENTAL QC REPORT FOR 9710409
DATE PRINTED: 24 NOV 1997

NON-AQUEOUS SAMPLES

000258

Batch: 8270,OHM*97209 Method: 8270.SIM - GC/MS for Semivolatile Organics, Capillary column (Matrix QC on basis of 16.0% moisture.)

| | | B7101743*1 | C7103356*1 | ..... | C7103357*1 | ..... | 9710422*6 | ..... | ..... | ..... | ..... |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | UNITS | MB | LC | LT | LC | LT | R1 | R2 | S1 | S2 | T |
| Date Analyzed | Date | 10/25/97 | 10/25/97 | 10/25/97 | 10/25/97 | 10/25/97 | 10/26/97 | - | 10/26/97 | 10/26/97 | 10/26/97 |
| Time Analyzed | Hours | 4:20 | 4:59 | 4:59 | 5:37 | 5:37 | 1:15 | - | 1:50 | 2:29 | 1:15 |
| Date Calibrated | Date | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | 10/24/97 | - | 10/24/97 | 10/24/97 | 10/24/97 |
| Date Extracted | Date | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | 10/21/97 | - | 10/21/97 | 10/21/97 | 10/21/97 |
| Time Extracted | Hours | 10:00 | 10:00 | 10:00 | 10:00 | 10:00 | 10:00 | - | 10:00 | 10:00 | 10:00 |
| Dilution Factor | Times | 1 | 10 | 10 | 10 | 10 | 1 | - | 5 | 5 | 1 |
| Benzo(a)pyrene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| Dibenzo(a,h)anthracene | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| N-Nitrosodi-n-propylamine | ug/kg | 0 | 4410 | 3330 | 4520 | 3330 | 0 | - | 2190 | 2170 | 1990 |
| Bis(2-chloroethyl)ether | ug/kg | 0 | - | - | - | - | 0 | - | - | - | - |
| 2-Fluorobiphenyl Reported | ug/kg | 808 | 1630 | 1670 | 1580 | 1670 | 876 | - | 1670 | 1690 | 1990 |
| 2-Fluorobiphenyl Theo. | ug/kg | 1670 | 1670 | 1670 | 1670 | 1670 | 1990 | - | 1990 | 1990 | 1990 |
| Terphenyl-d14 Reported | ug/kg | 941 | 1810 | 1670 | 1730 | 1670 | 1210 | - | 1520 | 1610 | 1990 |
| Terphenyl-d14 Theoretical | ug/kg | 1670 | 1670 | 1670 | 1670 | 1670 | 1990 | - | 1990 | 1990 | 1990 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:57:44 20 NOV 1997 - P. 4 :

000262

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 10409*8 | | | | | | | | | |
| 70B | 2-Fluorophenol | 97209 | 10/26/97 | 2620 | 2800 | 95 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/26/97 | 3000 | 2800 | 108 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/26/97 | 2040 | 1850 | 110 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/26/97 | 2100 | 1850 | 114 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/26/97 | 3230 | 2800 | 117 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1840 | 1850 | 99 | | 32 | 136 |
| 15M | Naphthalene | 97237 | 10/24/97 | 1.90 | 2.21 | 86 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.21 | 2.21 | 100 | | 47 | 142 |
| 15M | a,a,a-Trifluorotoluene Re | 9787069 | 10/23/97 | 0.0601 | 0.0553 | 109 | | 71 | 131 |
| 50A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 48.1 | 55.3 | 87 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 56.3 | 55.3 | 102 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 52.4 | 55.3 | 95 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 54.2 | 55.3 | 98 | | 65 | 135 |
| 70.SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 1207 | 1850 | 65 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/25/97 | 1167 | 1850 | 63 | | 32 | 136 |
| 31 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.89 | 9.21 | 75 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.92 | 9.21 | 108 | | 25 | 143 |
| 31 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.89 | 9.21 | 75 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.92 | 9.21 | 108 | | 25 | 143 |
| 31 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.17 | 9.21 | 67 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.77 | 9.21 | 95 | | 25 | 143 |
| .0409*9 | | | | | | | | | |
| '0B | 2-Fluorophenol | 97209 | 10/26/97 | 2230 | 2800 | 81 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/26/97 | 2500 | 2800 | 92 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/26/97 | 1800 | 1850 | 98 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/26/97 | 1830 | 1850 | 99 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/26/97 | 2630 | 2800 | 95 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1570 | 1850 | 85 | | 32 | 136 |
| 5M | Naphthalene | 97237 | 10/24/97 | 1.79 | 2.21 | 81 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.23 | 2.21 | 101 | | 47 | 142 |
| 5M | a,a,a-Trifluorotoluene Re | 9787070 | 10/23/97 | 0.0608 | 0.0553 | 110 | | 71 | 131 |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 47.7 | 55.3 | 86 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 52.2 | 55.3 | 94 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 53.2 | 55.3 | 96 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 55.2 | 55.3 | 100 | | 65 | 135 |
| 0.SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 1080 | 1850 | 59 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/25/97 | 989 | 1850 | 54 | | 32 | 136 |
| 1 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 7.58 | 9.21 | 82 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.82 | 9.21 | 107 | | 25 | 143 |
| 1 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 7.58 | 9.21 | 82 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.82 | 9.21 | 107 | | 25 | 143 |
| 1 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.79 | 9.21 | 74 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.88 | 9.21 | 96 | | 25 | 143 |
| )409*10 | | | | | | | | | |
| )B | 2-Fluorophenol | 97209 | 10/26/97 | 2100 | 2900 | 72 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/26/97 | 2400 | 2900 | 84 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/26/97 | 1630 | 1920 | 85 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/26/97 | 1680 | 1920 | 87 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/26/97 | 2470 | 2900 | 86 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1540 | 1920 | 80 | | 32 | 136 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:58:24 20 NOV 1997 - P. 5 :

000263

| ETHOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| )15M | Naphthalene | 97237 | 10/24/97 | 1.95 | 2.30 | 85 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.37 | 2.30 | 103 | | 47 | 142 |
| )15M | a,a,a-Trifluorotoluene Re | 9787070 | 10/24/97 | 0.0629 | 0.0574 | 110 | | 71 | 131 |
| 260A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 48.2 | 57.5 | 84 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 52.6 | 57.5 | 92 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 56.0 | 57.5 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 57.7 | 57.5 | 100 | | 65 | 135 |
| 270.SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 939 | 1920 | 49 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/25/97 | 950 | 1920 | 50 | | 32 | 136 |
| )81 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.76 | 9.57 | 71 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.51 | 9.57 | 99 | | 25 | 143 |
| )81 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.76 | 9.57 | 71 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.51 | 9.57 | 99 | | 25 | 143 |
| )81 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 5.91 | 9.57 | 62 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 12.4 | 9.57 | 130 | | 25 | 143 |
| '10409*11 | | | | | | | | | |
| '70B | 2-Fluorophenol | 97209 | 10/26/97 | 2180 | 2800 | 79 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/26/97 | 2500 | 2800 | 92 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/26/97 | 1780 | 1840 | 96 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/26/97 | 1830 | 1840 | 99 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/26/97 | 2660 | 2800 | 96 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1640 | 1840 | 89 | | 32 | 136 |
| 15M | Naphthalene | 97237 | 10/24/97 | 1.91 | 2.21 | 87 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.28 | 2.21 | 104 | | 47 | 142 |
| 15M | a,a,a-Trifluorotoluene Re | 974203 | 10/23/97 | 0.0584 | 0.0551 | 106 | | 71 | 131 |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 51.7 | 55.1 | 94 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 53.4 | 55.1 | 97 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 52.6 | 55.1 | 95 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 55.1 | 55.1 | 100 | | 65 | 135 |
| 70.SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 1020 | 1840 | 56 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/25/97 | 1040 | 1840 | 57 | | 32 | 136 |
| 31 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.77 | 9.18 | 74 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.97 | 9.18 | 98 | | 25 | 143 |
| 31 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.77 | 9.18 | 74 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.97 | 9.18 | 98 | | 25 | 143 |
| 31 | Tetrachloro-meta-xylene R | 97197 | 10/25/97 | 6.16 | 9.18 | 67 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.39 | 9.18 | 91 | | 25 | 143 |
| 0409*12 | | | | | | | | | |
| 0B | 2-Fluorophenol | 97209 | 10/26/97 | 2000 | 2800 | 72 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/26/97 | 2270 | 2800 | 82 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/26/97 | 1600 | 1860 | 84 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/26/97 | 1620 | 1860 | 87 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/26/97 | 2400 | 2800 | 86 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1420 | 1860 | 77 | | 32 | 136 |
| 5M | Naphthalene | 97237 | 10/24/97 | 2.06 | 2.22 | 93 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.50 | 2.22 | 113 | | 47 | 142 |
| 5M | a,a,a-Trifluorotoluene Re | 974203 | 10/23/97 | 0.0609 | 0.0555 | 110 | | 71 | 131 |
| )A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 50.7 | 55.6 | 91 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 56.4 | 55.6 | 102 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 52.4 | 55.6 | 94 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 55.9 | 55.6 | 101 | | 65 | 135 |
| ).SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 841 | 1860 | 45 | | 34 | 135 |

| ETHOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| | Terphenyl-d14 | 97209 | 10/25/97 | 869 | 1860 | 47 | | 32 | 136 |
| )81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.02 | 9.26 | 76 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.59 | 9.26 | 104 | | 25 | 143 |
| )81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.02 | 9.26 | 76 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.59 | 9.26 | 104 | | 25 | 143 |
| )81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 6.33 | 9.26 | 68 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.66 | 9.26 | 94 | | 25 | 143 |
| '10409*13 | | | | | | | | | |
| :70B | 2-Fluorophenol | 97209 | 10/28/97 | 2640 | 2800 | 95 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/28/97 | 2900 | 2800 | 105 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/28/97 | 1830 | 1850 | 99 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/28/97 | 1830 | 1850 | 99 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/28/97 | 3100 | 2800 | 112 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/28/97 | 1800 | 1850 | 96 | | 32 | 136 |
| )15M | Naphthalene | 97237 | 10/24/97 | 1.83 | 2.22 | 83 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.25 | 2.22 | 102 | | 47 | 142 |
| )15M | a,a,a-Trifluorotoluene Re | 974203 | 10/23/97 | 0.0645 | 0.0554 | 116 | | 71 | 131 |
| '60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 50.1 | 55.4 | 90 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 59.2 | 55.4 | 107 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 51.8 | 55.4 | 93 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 55.9 | 55.4 | 101 | | 65 | 135 |
| 70.SIM | 2-Fluorobiphenyl | 97209 | 10/28/97 | 938 | 1850 | 51 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/28/97 | 980 | 1850 | 53 | | 32 | 136 |
| 81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.63 | 9.23 | 83 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 10.30 | 9.23 | 112 | | 25 | 143 |
| 81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.63 | 9.23 | 83 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 10.30 | 9.23 | 112 | | 25 | 143 |
| 81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 6.74 | 9.23 | 73 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 16.0 | 9.23 | 173 | Q | 25 | 143 |
| 10409*14 | | | | | | | | | |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 51.2 | 56.2 | 91 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 52.4 | 56.2 | 93 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 54.2 | 56.2 | 96 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 56.0 | 56.2 | 100 | | 65 | 135 |
| 10409*15 | | | | | | | | | |
| 50A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 54.4 | 61.0 | 89 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 58.5 | 61.0 | 96 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 59.1 | 61.0 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 61.1 | 61.0 | 100 | | 65 | 135 |
| 0409*16 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 50.0 | 58.1 | 86 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 53.8 | 58.1 | 93 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 56.7 | 58.1 | 98 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 56.9 | 58.1 | 98 | | 65 | 135 |
| 0409*17 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 49.5 | 59.5 | 83 | | 52 | 149 |

000265

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 56.4 | 59.5 | 95 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 58.4 | 59.5 | 98 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 59.8 | 59.5 | 100 | | 65 | 135 |
| 0409*18 | | | | | | | | | |
| 50A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 47.1 | 55.3 | 85 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 52.9 | 55.3 | 96 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 54.0 | 55.3 | 98 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 54.8 | 55.3 | 99 | | 65 | 135 |
| 0409*19 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 48.4 | 53.7 | 90 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 51.3 | 53.7 | 96 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 52.0 | 53.7 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 54.0 | 53.7 | 101 | | 65 | 135 |
| 0409*20 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 55.1 | 56.8 | 97 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 57.4 | 56.8 | 101 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 53.6 | 56.8 | 94 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 56.9 | 56.8 | 100 | | 65 | 135 |
| 04 21 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 49.8 | 54.6 | 91 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 53.1 | 54.6 | 97 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 52.7 | 54.6 | 96 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 54.9 | 54.6 | 100 | | 65 | 135 |
| 0409*22 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 47.6 | 52.9 | 90 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 51.2 | 52.9 | 97 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 50.9 | 52.9 | 96 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 53.4 | 52.9 | 101 | | 65 | 135 |
| 0409*23 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 49.8 | 54.2 | 92 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 52.5 | 54.2 | 97 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 52.7 | 54.2 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 54.2 | 54.2 | 100 | | 65 | 135 |
| 409*24 | | | | | | | | | |
| A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 51.5 | 54.4 | 95 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 57.7 | 54.4 | 106 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 50.5 | 54.4 | 93 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 54.3 | 54.4 | 100 | | 65 | 135 |
| 409*25 | | | | | | | | | |
| A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 46.7 | 54.1 | 86 | | 52 | 149 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:59:50 20 NOV 1997 - P. 8 :

000266

| ETHOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 52.3 | 54.1 | 97 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 52.1 | 54.1 | 96 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 53.8 | 54.1 | 100 | | 65 | 135 |
| 710409*26 | | | | | | | | | |
| 260A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 43.0 | 54.2 | 79 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 51.2 | 54.2 | 95 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 52.5 | 54.2 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 55.0 | 54.2 | 102 | | 65 | 135 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 12:03:52 20 NOV 1997 - P. 1 :

000267

| ETHOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 710589*1*S1 | | | | | | | | | |
| 015M | a,a,a-Trifluorotoluene Re | 9787069 | 10/23/97 | 0.0573 | 0.0529 | 108 | | 71 | 131 |
| 710409*1*R1 | | | | | | | | | |
| 270.SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 1050 | 1940 | 54 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/25/97 | 1199 | 1940 | 62 | | 32 | 136 |
| 710409*1*S1 | | | | | | | | | |
| 270.SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 1050 | 1940 | 54 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/25/97 | 1199 | 1940 | 62 | | 32 | 136 |
| 710409*1*S2 | | | | | | | | | |
| 270.SIM | 2-Fluorobiphenyl | 97209 | 10/25/97 | 1050 | 1940 | 54 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/25/97 | 1199 | 1940 | 62 | | 32 | 136 |
| 710409*13*R1 | | | | | | | | | |
| 015M | Naphthalene | 97237 | 10/24/97 | 1.83 | 2.22 | 83 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.25 | 2.22 | 102 | | 47 | 142 |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 50.1 | 55.4 | 90 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 59.2 | 55.4 | 107 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 51.8 | 55.4 | 93 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 55.9 | 55.4 | 101 | | 65 | 135 |
| 10409*13*S1 | | | | | | | | | |
| 15M | Naphthalene | 97237 | 10/24/97 | 1.72 | 2.22 | 78 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.99 | 2.22 | 135 | | 47 | 142 |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 47.0 | 55.4 | 85 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 56.4 | 55.4 | 102 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 58.6 | 55.4 | 106 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 57.2 | 55.4 | 103 | | 65 | 135 |
| 10409*13*S2 | | | | | | | | | |
| 15M | Naphthalene | 97237 | 10/24/97 | 1.54 | 2.22 | 70 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.99 | 2.22 | 135 | | 47 | 142 |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/26/97 | 48.3 | 55.4 | 87 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/26/97 | 53.0 | 55.4 | 96 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/26/97 | 56.4 | 55.4 | 102 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/26/97 | 55.5 | 55.4 | 100 | | 65 | 135 |
| 01297*1*MB | | | | | | | | | |
| 5M | Naphthalene | 97237 | 10/25/97 | 1.49 | 2.00 | 75 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/25/97 | 1.95 | 2.00 | 98 | | 47 | 142 |
| 02 *1*LC | | | | | | | | | |
| 5M | Naphthalene | 97237 | 10/24/97 | 1.52 | 2.00 | 76 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.76 | 2.00 | 138 | | 47 | 142 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 12:04:08 20 NOV 1997 - P. 2 :

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| '102499*1*LC | | | | | | | | | |
| )15M | Naphthalene | 97237 | 10/24/97 | 1.48 | 2.00 | 74 | | 52 | 145 |
| | o-Terphenyl | 97237 | 10/24/97 | 2.72 | 2.00 | 136 | | 47 | 142 |
| '101502*1*MB | | | | | | | | | |
| '15M | a,a,a-Trifluorotoluene | Re974203 | 10/23/97 | 0.0515 | 0.0500 | 103 | | 71 | 131 |
| 102904*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re974203 | 10/23/97 | 0.0507 | 0.0500 | 101 | | 71 | 131 |
| 102905*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re974203 | 10/23/97 | 0.0519 | 0.0500 | 104 | | 71 | 131 |
| 101380*1*MB | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787066 | 10/22/97 | 0.0563 | 0.0500 | 113 | | 71 | 131 |
| 102665*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787066 | 10/22/97 | 0.0566 | 0.0500 | 113 | | 71 | 131 |
| 102666*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787066 | 10/23/97 | 0.0537 | 0.0500 | 107 | | 71 | 131 |
| 101500*1*MB | | | | | | | | | |
| .5M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0542 | 0.0500 | 108 | | 71 | 131 |
| 02900*1*LC | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0522 | 0.0500 | 104 | | 71 | 131 |
| 02901*1*LC | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0529 | 0.0500 | 106 | | 71 | 131 |
| 0409*9*R1 | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787070 | 10/23/97 | 0.0608 | 0.0553 | 110 | | 71 | 131 |
| )409*9*S1 | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787070 | 10/24/97 | 0.0608 | 0.0553 | 110 | | 71 | 131 |
| )409*9*S2 | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787070 | 10/24/97 | 0.0590 | 0.0553 | 107 | | 71 | 131 |
| )1499*1*MB | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787070 | 10/23/97 | 0.0597 | 0.0500 | 119 | | 71 | 131 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 12:04:22 20 NOV 1997 - P. 3 :

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 101614*1*MB | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787070 | 10/24/97 | 0.0541 | 0.0500 | 108 | | 71 | 131 |
| 102899*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787070 | 10/24/97 | 0.0541 | 0.0500 | 108 | | 71 | 131 |
| 103117*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787070 | 10/24/97 | 0.0504 | 0.0500 | 101 | | 71 | 131 |
| 10426*2*R1 | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re974203 | 10/23/97 | 0.0527 | 0.0500 | 105 | | 71 | 131 |
| 20A | a,a,a-Trifluorotoluene | Re974203 | 10/23/97 | 0.0527 | 0.0500 | 105 | | 34 | 175 |
| 10426*2*S1 | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re974203 | 10/24/97 | 0.0601 | 0.0500 | 120 | | 71 | 131 |
| 20A | a,a,a-Trifluorotoluene | Re974203 | 10/24/97 | 0.0601 | 0.0500 | 120 | | 34 | 175 |
| 10426*2*S2 | | | | | | | | | |
| 15 | a,a,a-Trifluorotoluene | Re974203 | 10/24/97 | 0.0558 | 0.0500 | 112 | | 71 | 131 |
| 20A | a,a,a-Trifluorotoluene | Re974203 | 10/24/97 | 0.0558 | 0.0500 | 112 | | 34 | 175 |
| 0388*1*S1 | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787066 | 10/22/97 | 0.0676 | 0.0561 | 120 | | 71 | 131 |
| 0388*1*S2 | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787066 | 10/22/97 | 0.0717 | 0.0561 | 128 | | 71 | 131 |
| 0389*1*S2 | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0577 | 0.0529 | 109 | | 71 | 131 |
| 1838*1*MB | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.00 | 8.33 | 84 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.20 | 8.33 | 98 | | 25 | 143 |
| 01824*1*MB | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 8.10 | 8.33 | 97 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.13 | 8.33 | 110 | | 25 | 143 |
| 1826*1*MB | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 8.10 | 8.33 | 97 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.13 | 8.33 | 110 | | 25 | 143 |
| 3514*1*LC | | | | | | | | | |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 12:04:39 20 NOV 1997 - P. 4 :

| ETHOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| )81 | Tetrachloro-meta-xylene | R97197 | 10/27/97 | 8.54 | 8.33 | 103 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/27/97 | 9.14 | 8.33 | 110 | | 25 | 143 |
| '103515*1*LC | | | | | | | | | |
| )81 | Tetrachloro-meta-xylene | R97197 | 10/27/97 | 8.27 | 8.33 | 99 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/27/97 | 8.48 | 8.33 | 102 | | 25 | 143 |
| 103518*1*LC | | | | | | | | | |
| '81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.56 | 8.33 | 91 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.65 | 8.33 | 104 | | 25 | 143 |
| 103519*1*LC | | | | | | | | | |
| 81 | Tetrachloro-meta-xylene | R97197 | 10/27/97 | 9.32 | 8.33 | 112 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/27/97 | 8.13 | 8.33 | 98 | | 25 | 143 |
| 111628*1*LC | | | | | | | | | |
| 81 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 6.60 | 8.33 | 79 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 7.72 | 8.33 | 93 | | 25 | 143 |
| 111629*1*LC | | | | | | | | | |
| 31 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 8.13 | 8.33 | 98 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.34 | 8.33 | 112 | | 25 | 143 |
| 0409*26*R1 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 43.0 | 54.2 | 79 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 51.2 | 54.2 | 95 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 52.5 | 54.2 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 55.0 | 54.2 | 102 | | 65 | 135 |
| 0409*26*S1 | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 48.3 | 54.2 | 89 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 51.6 | 54.2 | 95 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 52.8 | 54.2 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 52.4 | 54.2 | 97 | | 65 | 135 |
| )409*26*S2 | | | | | | | | | |
| )A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/25/97 | 50.7 | 54.2 | 94 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/25/97 | 55.7 | 54.2 | 103 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/25/97 | 57.1 | 54.2 | 105 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/25/97 | 56.3 | 54.2 | 104 | | 65 | 135 |
| '1632*1*MB | | | | | | | | | |
| 'A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 48.1 | 50.0 | 96 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 47.8 | 50.0 | 96 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 48.1 | 50.0 | 96 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 50.1 | 50.0 | 100 | | 65 | 135 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 12:04:59 20 NOV 1997 - P. 5 :

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 103140*1*LC | | | | | | | | | |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 55.4 | 50.0 | 111 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 52.6 | 50.0 | 105 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 51.1 | 50.0 | 102 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 49.9 | 50.0 | 100 | | 65 | 135 |
| 103141*1*LC | | | | | | | | | |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787072 | 10/24/97 | 55.3 | 50.0 | 111 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787072 | 10/24/97 | 52.3 | 50.0 | 105 | | 65 | 135 |
| | Toluene-d8 | 9787072 | 10/24/97 | 54.8 | 50.0 | 110 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787072 | 10/24/97 | 62.6 | 50.0 | 125 | | 65 | 135 |
| 101639*1*MB | | | | | | | | | |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/25/97 | 47.0 | 50.0 | 94 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/25/97 | 47.6 | 50.0 | 95 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/25/97 | 48.3 | 50.0 | 97 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/25/97 | 49.0 | 50.0 | 98 | | 65 | 135 |
| 103155*1*LC | | | | | | | | | |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/25/97 | 53.1 | 50.0 | 106 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/25/97 | 53.7 | 50.0 | 107 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/25/97 | 53.0 | 50.0 | 106 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/25/97 | 51.5 | 50.0 | 103 | | 65 | 135 |
| 103156*1*LC | | | | | | | | | |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787073 | 10/25/97 | 50.4 | 50.0 | 101 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787073 | 10/25/97 | 49.6 | 50.0 | 99 | | 65 | 135 |
| | Toluene-d8 | 9787073 | 10/25/97 | 51.4 | 50.0 | 103 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787073 | 10/25/97 | 47.9 | 50.0 | 96 | | 65 | 135 |
| 0422*6*R1 | | | | | | | | | |
| 0B | 2-Fluorophenol | 97209 | 10/27/97 | 2580 | 3000 | 87 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/27/97 | 2960 | 3000 | 100 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/27/97 | 2060 | 1990 | 104 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/27/97 | 2170 | 1990 | 109 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/27/97 | 3250 | 3000 | 109 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/27/97 | 1930 | 1990 | 97 | | 32 | 136 |
| 5M | a,a,a-Trifluorotoluene Re | 9787070 | 10/24/97 | 0.0716 | 0.0595 | 120 | | 71 | 131 |
| ).SIM | 2-Fluorobiphenyl | 97209 | 10/26/97 | 876 | 1990 | 44 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1207 | 1990 | 61 | | 32 | 136 |
| )422*6*S1 | | | | | | | | | |
| )B | 2-Fluorophenol | 97209 | 10/27/97 | 2650 | 3000 | 89 | | 25 | 135 |
| | )henol-d5 | 97209 | 10/27/97 | 3130 | 3000 | 105 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/27/97 | 2110 | 1990 | 106 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/27/97 | 2250 | 1990 | 113 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/27/97 | 3601 | 3000 | 121 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/27/97 | 2050 | 1990 | 103 | | 32 | 136 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 12:05:25 20 NOV 1997 - P. 6 :

| ETHOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| )15M | a,a,a-Trifluorotoluene | Re9787070 | 10/24/97 | 0.0714 | 0.0595 | 120 | | 71 | 131 |
| 270.SIM | 2-Fluorobiphenyl | 97209 | 10/26/97 | 1675 | 1990 | 84 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1521 | 1990 | 77 | | 32 | 136 |
| '10422*6*S2 | | | | | | | | | |
| '70B | 2-Fluorophenol | 97209 | 10/27/97 | 3290 | 3000 | 110 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/27/97 | 3730 | 3000 | 125 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/27/97 | 2390 | 1990 | 120 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/27/97 | 2442 | 1990 | 123 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/27/97 | 4040 | 3000 | 136 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/27/97 | 2334 | 1990 | 117 | | 32 | 136 |
| 15M | a,a,a-Trifluorotoluene | Re9787070 | 10/24/97 | 0.0680 | 0.0595 | 114 | | 71 | 131 |
| 70.SIM | 2-Fluorobiphenyl | 97209 | 10/26/97 | 1690 | 1990 | 85 | | 34 | 135 |
| | Terphenyl-d14 | 97209 | 10/26/97 | 1610 | 1990 | 81 | | 32 | 136 |
| 101781*1*MB | | | | | | | | | |
| 70B | 2-Fluorophenol | 97209 | 10/27/97 | 1980 | 2500 | 79 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/27/97 | 2290 | 2500 | 92 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/27/97 | 1570 | 1670 | 94 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/27/97 | 1590 | 1670 | 95 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/27/97 | 2540 | 2500 | 102 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/27/97 | 1450 | 1670 | 87 | | 32 | 136 |
| 103431*1*LC | | | | | | | | | |
| 70B | 2-Fluorophenol | 97209 | 10/27/97 | 2150 | 2500 | 86 | | 25 | 135 |
| | Phenol-d5 | 97209 | 10/27/97 | 2440 | 2500 | 98 | | 25 | 135 |
| | Nitrobenzene-d5 | 97209 | 10/27/97 | 1710 | 1670 | 102 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97209 | 10/27/97 | 1790 | 1670 | 107 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97209 | 10/27/97 | 2830 | 2500 | 113 | | 25 | 144 |
| | Terphenyl-d14 | 97209 | 10/27/97 | 1610 | 1670 | 96 | | 32 | 136 |
| 0409*3*S1 | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.22 | 9.36 | 77 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 11.10 | 9.36 | 119 | | 25 | 143 |
| 1 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 5.66 | 9.36 | 61 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.00 | 9.36 | 96 | | 25 | 143 |
| 1 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 6.25 | 9.36 | 67 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.75 | 9.36 | 104 | | 25 | 143 |
| )409*3*S2 | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 8.02 | 9.36 | 86 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 10.80 | 9.36 | 116 | | 25 | 143 |
| 1 | Tetrachloro-meta-xylene | R97197 | 10/28/97 | 6.55 | 9.36 | 70 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/28/97 | 8.76 | 9.36 | 94 | | 25 | 143 |
| | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 7.25 | 9.36 | 77 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.75 | 9.36 | 104 | | 25 | 143 |
| '388*1*R1 | | | | | | | | | |
| M | a,a,a-Trifluorotoluene | Re9787066 | 10/22/97 | 0.0611 | 0.0561 | 109 | | 71 | 131 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 12:05:52 20 NOV 1997 - P. 7 :

| ETHOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 7 89*1*R1 | | | | | | | | | |
| 015M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0525 | 0.0529 | 99 | | 71 | 131 |
| 710409*3*R1 | | | | | | | | | |
| 081 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 6.58 | 9.36 | 70 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.30 | 9.36 | 99 | | 25 | 143 |
| 081 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 6.58 | 9.36 | 70 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 9.30 | 9.36 | 99 | | 25 | 143 |
| 081 | Tetrachloro-meta-xylene | R97197 | 10/25/97 | 5.83 | 9.36 | 62 | | 35 | 135 |
| | Decachlorobiphenyl | 97197 | 10/25/97 | 8.09 | 9.36 | 86 | | 25 | 143 |

METHOD 5030A/8260A
VOLATILE ORGANICS BY GC/MS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | DaTime Collcted: | NA |
| Project | : MCAS EL TORO/18609/D.O. 70 | DaTime Received: | 08/13/98 |
| Batch No. | : 98H049 | DaTime Extrctd : | 08/13/98 01:5 |
| Sample ID | : MBLK1W | DaTime Analyzd : | 08/13/98 01:58 |
| Lab Cnt NO. | : VOH1301B | Dilutn Factor : | 1 |
| Lab File ID | : RHV206 | Matrix : | WATER |
| Ext Btch ID | : VOH1301B | % Moisture : | NA |
| Calib. Ref. | : RHV205 | Instrument ID : | T-001 |

| PARAMETERS | RESULTS (ug/L) | PRL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| 1,1,1-Trichloroethane | ND | 5 | 1.13 |
| 1,1,2,2-Tetrachloroethane | ND | 5 | .488 |
| 1,1,2-Trichloroethane | ND | 5 | .515 |
| 1,1-Dichloroethane | ND | 5 | 1.21 |
| 1,1-Dichloroethene | ND | 5 | 1.96 |
| 1,2-Dichloroethane | ND | 5 | .583 |
| 1,2-Dichloropropane | ND | 5 | .533 |
| 2-Butanone | ND | 50 | 7.87 |
| 2-Chloroethylvinylether | ND | 50 | .828 |
| 2-Hexanone | ND | 50 | 1.01 |
| 4-Methyl-2-Pentanone | ND | 50 | 1.02 |
| Acetone | ND | 50 | 10.3 |
| Benzene | ND | 5 | .849 |
| Bromodichloromethane | ND | 5 | .334 |
| Bromoform | ND | 5 | .293 |
| Bromomethane | ND | 5 | 1.53 |
| Carbon Disulfide | ND | 5 | 1.31 |
| Carbon Tetrachloride | ND | 5 | 1.28 |
| Chlorobenzene | ND | 5 | .68 |
| Chloroethane | ND | 5 | 2. |
| Chloroform | ND | 5 | .854 |
| Chloromethane | ND | 5 | 1.69 |
| cis-1,2-Dichloroethene | ND | 5 | .973 |
| cis-1,3-Dichloropropene | ND | 5 | .474 |
| Dibromochloromethane | ND | 5 | .292 |
| Ethylbenzene | ND | 5 | .72 |
| Methyl tert-butyl ether (MTBE) | ND | 10 | .955 |
| Methylene Chloride | ND | 5 | 1.76 |
| Styrene | ND | 5 | .583 |
| Tetrachloroethene | ND | 5 | 1.22 |
| Toluene | ND | 5 | .922 |
| trans-1,2-Dichloroethene | ND | 5 | 1.52 |
| trans-1,3-Dichloropropene | ND | 5 | .449 |
| Trichloroethene | ND | 5 | .9 |
| Vinyl Acetate | ND | 50 | 6.17 |
| Vinyl Chloride | ND | 5 | 1.68 |
| Xylenes | ND | 5 | 2.41 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| 1,2-Dichloroethane-d4 | 99 | 62-139 |
| Toluene-d8 | 93 | 75-125 |
| Bromofluorobenzene | 96 | 75-125 |

PRL: Project Reporting Limit
* : Out side of QC Limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

2013

METHOD 3520B/8270B
SEMIVOLATILE ORGANICS BY GC/MS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | NA |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/12/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/12/98 18:30 |
| Sample ID: | MBLK1W | Date Analyzed: | 08/15/98 13:52 |
| Lab Samp ID: | SVH013WB | Dilution Factor: | 1 |
| Lab File ID: | RHS103 | Matrix : | WATER |
| Ext Btch ID: | SVH013W | % Moisture : | NA |
| Calib. Ref.: | RHS102 | Instrument ID : | T-004 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| 1,2,4-TRICHLOROBENZENE | ND | 10 | .86 |
| 1,2-DICHLOROBENZENE | ND | 10 | .51 |
| 1,3-DICHLOROBENZENE | ND | 10 | .8 |
| 1,4-DICHLOROBENZENE | ND | 10 | 1.12 |
| 2,2'-OXYBIS(1-CHLOROPROPANE) | ND | 10 | 4.82 |
| 2,4,5-TRICHLOROPHENOL | ND | 25 | 2.73 |
| 2,4,6-TRICHLOROPHENOL | ND | 10 | 2.64 |
| 2,4-DICHLOROPHENOL | ND | 10 | 2.43 |
| 2,4-DIMETHYLPHENOL | ND | 10 | 1.4 |
| 2,4-DINITROPHENOL | ND | 25 | 4.92 |
| 2,4-DINITROTOLUENE | ND | 10 | 2.47 |
| 2,6-DINITROTOLUENE | ND | 10 | 1.67 |
| 2-CHLORONAPHTHALENE | ND | 10 | .87 |
| 2-CHLOROPHENOL | ND | 10 | 2.23 |
| 2-METHYLNAPHTHALENE | ND | 10 | 1.03 |
| 2-METHYLPHENOL | ND | 10 | 1.53 |
| 2-NITROANILINE | ND | 25 | 3.11 |
| 2-NITROPHENOL | ND | 10 | 2.99 |
| 3,3'-DICHLOROBENZIDINE | ND | 10 | 4.38 |
| 3-NITROANILINE | ND | 25 | 1.62 |
| 4,6-DINITRO-2-METHYLPHENOL | ND | 25 | 3.17 |
| 4-BROMOPHENYL-PHENYLETHER | ND | 10 | .56 |
| 4-CHLORO-3-METHYLPHENOL | ND | 10 | 3.09 |
| 4-CHLOROANILINE | ND | 10 | 2.92 |
| 4-CHLOROPHENYL-PHENYLETHER | ND | 10 | 1.99 |
| 4-METHYLPHENOL (2) | ND | 10 | 2.15 |
| 4-NITROANILINE | ND | 25 | 3.58 |
| 4-NITROPHENOL | ND | 25 | 6.03 |
| ACENAPHTHENE | ND | 10 | 1.04 |
| ACENAPHTHYLENE | ND | 10 | .77 |
| ANTHRACENE | ND | 10 | 1.05 |
| BENZO(A)ANTHRACENE | ND | 10 | 1.04 |
| BENZO(A)PYRENE | ND | 10 | 1.27 |
| BENZO(B)FLUORANTHENE | ND | 10 | 3.14 |
| BENZO(G,H,I)PERYLENE | ND | 10 | .52 |
| BENZO(K)FLUORANTHENE | ND | 10 | 3.69 |
| BIS(2-CHLOROETHOXY)METHANE | ND | 10 | 2.14 |
| BIS(2-CHLOROETHYL)ETHER | ND | 10 | 2.61 |
| BIS(2-ETHYLHEXYL)PHTHALATE | ND | 10 | 1.46 |
| BUTYLBENZYLPHTHALATE | ND | 10 | 1.68 |
| CHRYSENE | ND | 10 | 1.46 |
| DI-N-BUTYLPHTHALATE | ND | 10 | 2.3 |
| DI-N-OCTYLPHTHALATE | ND | 10 | .89 |
| DIBENZO(A,H)ANTHRACENE | ND | 10 | 1.36 |
| DIBENZOFURAN | ND | 10 | .92 |
| DIETHYLPHTHALATE | ND | 10 | .98 |
| DIMETHYLPHTHALATE | ND | 10 | 1.07 |
| FLUORANTHENE | ND | 10 | 1.17 |
| FLUORENE | ND | 10 | 2.36 |
| HEXACHLOROBENZENE | ND | 10 | 1.23 |
| HEXACHLOROBUTADIENE | ND | 10 | .84 |
| HEXACHLOROCYCLOPENTADIENE | ND | 10 | 8.88 |
| HEXACHLOROETHANE | ND | 10 | 1.95 |
| INDENO(1,2,3-CD)PYRENE | ND | 10 | 1.17 |
| N-NITROSO-DI-N-PROPYLAMINE | ND | 10 | 1.34 |
| N-NITROSODIPHENYLAMINE (1) | ND | 10 | 1.59 |
| NAPHTHALENE | ND | 10 | 1.3 |
| NITROBENZENE | ND | 10 | 1.39 |
| PENTACHLOROPHENOL | ND | 10 | 2.94 |
| PHENANTHRENE | ND | 10 | .66 |
| PHENOL | ND | 10 | 2.43 |
| PYRENE | ND | 10 | .39 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| 2-FLUOROPHENOL | 62 | 25-125 |
| PHENOL-D5 | 68 | 25-125 |
| NITROBENZENE-D5 | 70 | 32-125 |
| 2-FLUOROBIPHENYL | 71 | 43-125 |
| 2,4,6-TRIBROMOPHENOL | 56 | 25-134 |
| TERPHENYL-D14 | 76 | 42-126 |

PRL - Project Reporting Limit
(1) Cannot be separated from Diphenylamine
(2) Cannot be separated from 3-Methylphenol

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
BATCH NO.: 98H049
METHOD: METHOD 5030A/M8015

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | WATER | | | % MOISTURE: | NA |
| DILTN FACTR: | 1 | 1 | 1 | | |
| SAMPLE ID: | MBLK1W | | | | |
| CONTROL NO.: | VAH0839B | VAH0839L | VAH0839C | | |
| LAB FILE ID: | EH12-4 | EH12-5 | EH12-6 | | |
| DATIME EXTRCTD: | 08/12/9814:09 | 08/12/9814:43 | 08/12/9815:17 | DATE COLLECTED: | NA |
| DATIME ANALYZD: | 08/12/9814:09 | 08/12/9814:43 | 08/12/9815:17 | DATE RECEIVED: | 08/12/98 |
| PREP. BATCH: | VAH0839 | VAH0839 | VAH0839 | | |
| CALIB. REF: | EH12-2 | EH12-2 | EH12-2 | | |

ACCESSION:

| PARAMETER | BLNK RSLT mg/L | SPIKE AMT mg/L | BS RSLT mg/L | BS % REC | SPIKE AMT mg/L | BSD RSLT mg/L | BSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Gasoline | ND | 1.1 | 1.13 | 103 | 1.1 | 1.18 | 107 | 4 | 67-136 | 30 |

| SURROGATE PARAMETER | SPIKE AMT mg/L | BS RSLT mg/L | BS % REC | SPIKE AMT mg/L | BSD RSLT mg/L | BSD % REC | QC LIMIT % |
|---|---|---|---|---|---|---|---|
| Bromofluorobenzene | .05 | .0492 | 98 | .05 | .0489 | 98 | 65-135 |

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
B[illegible] NO.: 98H049
METHOD: METHOD M8015

==========

MATRIX: WATER % MOISTURE: NA

| | | | | | |
|---|---|---|---|---|---|
| DILUTION FACTOR: | 1 | 1 | 1 | | |
| SAMPLE ID: | MBLK1W | | | | |
| LAB SAMP ID: | DSH022WB | DSH022WL | DSH022WC | | |
| LAB FILE ID: | NH10-152 | NH10-182 | NH10-183 | | |
| DATE EXTRACTED: | 08/13/9818:30 | 08/13/9818:30 | 08/13/9818:30 | DATE COLLECTED: | NA |
| DATE ANALYZED: | 08/14/9812:42 | 08/15/9805:36 | 08/15/9806:09 | DATE RECEIVED: | 08/13/98 |
| PREP. BATCH: | DSH022W | DSH022W | DSH022W | | |
| CALIB. REF: | NH10-148 | NH10-179 | NH10-179 | | |

ACCESSION:

| PARAMETER | BLNK RSLT (mg/L) | SPIKE AMT (mg/L) | BS RSLT (mg/L) | BS % REC | SPIKE AMT (mg/L) | BSD RSLT (mg/L) | BSD % REC | RPD ( % ) | QC LIMIT ( % ) | MAX RPD ( % ) |
|---|---|---|---|---|---|---|---|---|---|---|
| Diesel | ND | 5 | 4.5 | 90 | 5 | 4.64 | 93 | 3 | 61-143 | 30 |

==========

| SURROGATE PARAMETER | SPIKE AMT (mg/L) | BS RSLT (mg/L) | BS % REC | SPIKE AMT (mg/L) | BSD RSLT (mg/L) | BSD % REC | QC LIMIT ( % ) |
|---|---|---|---|---|---|---|---|
| Bromobenzene | 1 | 1.51 | 84 | 1 | .832 | 83 | 65-135 |
| I[illegible]osane | 1 | 1.12 | 112 | 1 | 1.12 | 112 | 60-145 |

METHOD 3520B/8081
PESTICIDES/PCBS

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | NA |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/14/98 |
| Batch No. | : 98H049 | Date Extracted: | 08/14/98 17:0 |
| Sample ID: | MBLK1W | Date Analyzed: | 08/15/98 15:08 |
| Lab Samp ID: | CPH021WB | Dilution Factor: | 1 |
| Lab File ID: | SH15007A | Matrix : | WATER |
| Ext Btch ID: | CPH021W | % Moisture : | NA |
| Calib. Ref.: | SH15003A | Instrument ID : | GCT008 |

| PARAMETERS | RESULTS (ug/L) | | PQL (ug/L) | MDL (ug/L) | |
|---|---|---|---|---|---|
| ALPHA-BHC | (ND) | ND | .03 | .015 | .02 |
| BETA-BHC | (ND) | ND | .03 | .013 | .021 |
| DELTA-BHC | (ND) | ND | .03 | .018 | .025 |
| GAMMA-BHC (LINDANE) | (ND) | ND | .03 | .015 | .032 |
| ALPHA-CHLORDANE | (ND) | ND | .03 | .013 | .012 |
| GAMMA-CHLORDANE | (ND) | ND | .03 | .012 | .011 |
| 4,4'-DDD | (ND) | ND | .5 | .02 | .047 |
| 4,4'-DDE | (ND) | ND | .58 | .022 | .02 |
| 4,4'-DDT | (ND) | ND | .1 | .025 | .027 |
| ALDRIN | (ND) | ND | .03 | .031 | .018 |
| DIELDRIN | (ND) | ND | .03 | .022 | .021 |
| ENDOSULFAN I | (ND) | ND | .03 | .011 | .012 |
| ENDOSULFAN II | (ND) | ND | .1 | .016 | .117 |
| ENDOSULFAN SULFATE | (ND) | ND | .1 | .033 | .02 |
| ENDRIN | (ND) | ND | .1 | .021 | .025 |
| ENDRIN ALDEHYDE | (ND) | ND | .1 | .018 | .023 |
| ENDRIN KETONE | (ND) | ND | .1 | .024 | .024 |
| HEPTACHLOR | (ND) | ND | .03 | .019 | .02 |
| HEPTACHLOR EPOXIDE | (ND) | ND | .03 | .012 | .013 |
| METHOXYCHLOR | (ND) | ND | .5 | .12 | .117 |
| TOXAPHENE | (ND) | ND | .5 | .588 | .572 |
| PCB-1016 | (ND) | ND | 1 | .834 | .603 |
| PCB-1221 | (ND) | ND | 2 | 1.12 | .831 |
| PCB-1232 | (ND) | ND | 1 | .388 | .574 |
| PCB-1242 | (ND) | ND | 1 | .465 | .249 |
| PCB-1248 | (ND) | ND | 1 | .432 | .354 |
| PCB-1254 | (ND) | ND | 1 | .299 | .495 |
| PCB-1260 | (ND) | ND | 1 | .387 | .342 |

| SURROGATE PARAMETERS | % RECOVERY | | QC LIMIT |
|---|---|---|---|
| DECACHLOROBIPHENYL | 133 | (129) | 34-133 |
| TETRACHLORO-M-XYLENE | 81 | (67) | 45-125 |

PRL: Project Reporting Limit
Left of | is result from the first column. Right of | is result from the second column. ( ) Final result
* Outside of QC limit
J : An estimated value between PRL and MDL
E : Value exceed the upper level of the initial calibration
B : Found in the associated blank
D : Value from dilution analysis

Please see Revised Report 5077

METHOD 3520B/8081
PESTICIDES/PCBS

| | | | |
|---|---|---|---|
| lient | : OHM REMEDIATION SERVICES | Date Collected: | NA |
| roi | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/14/98 |
| at . | : 98H049 | Date Extracted: | 08/14/98 17:00 |
| ample ID: | MBLK1W | Date Analyzed: | 08/15/98 15:08 |
| ab Samp ID: | CPH021WB | Dilution Factor: | 1 |
| ab File ID: | SH15007A | Matrix : | WATER |
| xt Btch ID: | CPH021W | % Moisture : | NA |
| alib. Ref.: | SH15003A | Instrument ID : | GCT008 |

| PARAMETERS | RESULTS (ug/L) | PQL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| LPHA-BHC | (ND)\|ND | .03 | .015\|.02 |
| ETA-BHC | (ND)\|ND | .03 | .013\|.021 |
| ELTA-BHC | (ND)\|ND | .03 | .018\|.025 |
| AMMA-BHC (LINDANE) | (ND)\|ND | .06 | .015\|.032 |
| LPHA-CHLORDANE | (ND)\|ND | .03 | .013\|.012 |
| AMMA-CHLORDANE | (ND)\|ND | .03 | .012\|.011 |
| .4'-DDD | (ND)\|ND | .5 | .02\|.047 |
| .4'-DDE | (ND)\|ND | .58 | .022\|.02 |
| 4'-DDT | (ND)\|ND | .1 | .025\|.027 |
| LDRIN | (ND)\|ND | .06 | .031\|.018 |
| IELDRIN | (ND)\|ND | .03 | .022\|.021 |
| NDOSULFAN I | (ND)\|ND | .03 | .011\|.012 |
| NDOSULFAN II | (ND)\|ND | .2 | .016\|.117 |
| NDOSULFAN SULFATE | (ND)\|ND | .1 | .033\|.02 |
| NDRIN | (ND)\|ND | .1 | .021\|.025 |
| NDRIN ALDEHYDE | (ND)\|ND | .1 | .018\|.023 |
| ENDRIN KETONE | (ND)\|ND | .1 | .024\|.024 |
| HLOR | (ND)\|ND | .03 | .019\|.02 |
| EPTACHLOR EPOXIDE | (ND)\|ND | .03 | .012\|.013 |
| ETHOXYCHLOR | (ND)\|ND | .5 | .12\|.117 |
| TOXAPHENE | (ND)\|ND | 5 | .588\|.572 |
| CB-1016 | (ND)\|ND | 1 | .834\|.603 |
| CB-1221 | (ND)\|ND | 2 | 1.12\|.831 |
| CB-1232 | (ND)\|ND | 1 | .388\|.574 |
| CB-1242 | (ND)\|ND | 1 | .465\|.249 |
| CB-1248 | (ND)\|ND | 1 | .432\|.354 |
| CB-1254 | (ND)\|ND | 1 | .299\|.495 |
| CB-1260 | (ND)\|ND | 1 | .387\|.342 |

| SURROGATE PARAMETERS | % RECOVERY | QC LIMIT |
|---|---|---|
| DECACHLOROBIPHENYL | 133\|(129) | 34-133 |
| TETRACHLORO-M-XYLENE | 81\|(67) | 45-125 |

PRL: Project Reporting Limit
Left of | is result from the first column. Right of | is result from the second column. ( ) Final result
* Outside of QC limit
: An estimated value between PRL and MDL
: Value exceed the upper level of the initial calibration
: Found in the associated blank
: Value from dilution analysis

REVISED REPORT

5077

METHOD 3010A/6010A
TAL METALS BY ICP

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | NA |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/14/98 |
| SDG NO. | : 98H049 | Date Extracted: | 08/14/98 11:30 |
| Sample ID: | MBLK1W | Date Analyzed: | 08/15/98 22:45 |
| Lab Samp ID: | IPH018WB | Dilution Factor: | 1 |
| Lab File ID: | I07H023012 | Matrix : | WATER |
| Ext Btch ID: | IPH018W | % Moisture : | NA |
| Calib. Ref.: | I07H023010 | Instrument ID : | EMAXTI07 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Aluminum | ND | 500 | 25.6 |
| Antimony | ND | 500 | 39.8 |
| Barium | ND | 100 | 1.41 |
| Beryllium | ND | 10 | .12 |
| Cadmium | ND | 5 | 2.06 |
| Calcium | ND | 1000 | 9.61 |
| Chromium | ND | 50 | 4.77 |
| Cobalt | ND | 50 | 6.64 |
| Copper | ND | 50 | 6.47 |
| Iron | ND | 50 | 4.96 |
| Magnesium | ND | 1000 | 28.9 |
| Manganese | ND | 20 | .64 |
| Molybdenum | ND | 100 | 9.37 |
| Nickel | ND | 150 | 3.93 |
| Potassium | ND | 5000 | 2960 |
| Silver | ND | 50 | 4.69 |
| Sodium | ND | 1000 | 38.2 |
| Vanadium | ND | 100 | 4.7 |
| Zinc | ND | 20 | 2.47 |

RL: Reporting Limit

METHOD 3010A/6010A
METALS BY TRACE-ICP

| | | | |
|---|---|---|---|
| Client | : OHM REMEDIATION SERVICES | Date Collected: | NA |
| Project | : MCAS EL TORO/18609/D.O. 70 | Date Received: | 08/14/98 |
| SDG NO. | : 98H049 | Date Extracted: | 08/14/98 11:30 |
| Sample ID: | MBLK1W | Date Analyzed: | 08/14/98 17:39 |
| Lab Samp ID: | IPH018WB | Dilution Factor: | 1 |
| Lab File ID: | I31H019056 | Matrix : | WATER |
| Ext Btch ID: | IPH018W | % Moisture : | NA |
| Calib. Ref.: | I31H019053 | Instrument ID : | EMAXTI31 |

| PARAMETERS | RESULTS (ug/L) | RL (ug/L) | MDL (ug/L) |
|---|---|---|---|
| Arsenic | ND | 5 | 4.37 |
| Lead | ND | 5 | 1.42 |
| Selenium | ND | 5 | 4.21 |
| Thallium | ND | 50 | 3.31 |

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
SDG NO.: 98H049
METHOD: METHOD 3010A/6010A

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | WATER | | | % MOISTURE: | NA |
| DILTN FACTR: | 1 | 1 | 1 | | |
| SAMPLE ID: | MBLK1W | | | | |
| CONTROL NO.: | IPH018WB | IPH018WL | IPH018WC | | |
| LAB FILE ID: | I07H023012 | I07H023013 | I07H023014 | | |
| DATIME EXTRCTD: | 08/14/9811:30 | 08/14/9811:30 | 08/14/9811:30 | DATE COLLECTED: | NA |
| DATIME ANALYZD: | 08/15/9822:45 | 08/15/9822:48 | 08/15/9822:52 | DATE RECEIVED: | 08/14/98 |
| PREP. BATCH: | IPH018W | IPH018W | IPH018W | | |
| CALIB. REF: | I07H023010 | I07H023010 | I07H023010 | | |

ACCESSION:

| PARAMETER | BLNK RSLT ug/L | SPIKE AMT ug/L | BS RSLT ug/L | BS % REC | SPIKE AMT ug/L | BSD RSLT ug/L | BSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ND | 10000 | 10500 | 105 | 10000 | 10300 | 103 | 2 | 80-120 | 20 |
| Antimony | ND | 5000 | 5070 | 101 | 5000 | 4930 | 99 | 3 | 80-120 | 20 |
| Barium | ND | 1000 | 1050 | 105 | 1000 | 1030 | 103 | 2 | 80-120 | 20 |
| Beryllium | ND | 1000 | 1050 | 105 | 1000 | 1030 | 103 | 2 | 80-120 | 20 |
| Cadmium | ND | 1000 | 1040 | 104 | 1000 | 1020 | 102 | 2 | 80-120 | 20 |
| Calcium | ND | 50000 | 52000 | 104 | 50000 | 51000 | 102 | 2 | 80-120 | 20 |
| Chromium | ND | 1000 | 1060 | 106 | 1000 | 1030 | 103 | 2 | 80-120 | 20 |
| Cobalt | ND | 1000 | 1070 | 107 | 1000 | 1040 | 104 | 3 | 80-120 | 20 |
| Copper | ND | 1000 | 1050 | 105 | 1000 | 1020 | 102 | 2 | 80-120 | 20 |
| Iron | ND | 10000 | 10500 | 105 | 10000 | 10300 | 103 | 2 | 80-120 | 20 |
| Magnesium | ND | 50000 | 52000 | 104 | 50000 | 50800 | 102 | 2 | 80-120 | 20 |
| Manganese | ND | 1000 | 1050 | 105 | 1000 | 1030 | 103 | 2 | 80-120 | 20 |
| Molybdenum | ND | 1000 | 1080 | 108 | 1000 | 1080 | 108 | 0 | 80-120 | 20 |
| Nickel | ND | 1000 | 1050 | 105 | 1000 | 1010 | 101 | 4 | 80-120 | 20 |
| Potassium | ND | 50000 | 53000 | 106 | 50000 | 50200 | 100 | 6 | 80-120 | 20 |
| Silver | ND | 1000 | 1050 | 105 | 1000 | 1030 | 103 | 2 | 80-120 | 2 |
| Sodium | ND | 50000 | 52600 | 105 | 50000 | 51900 | 104 | 1 | 80-120 | 20 |
| Vanadium | ND | 1000 | 1040 | 104 | 1000 | 1020 | 102 | 2 | 80-120 | 20 |
| Zinc | ND | 1000 | 1050 | 105 | 1000 | 1020 | 102 | 2 | 80-120 | 20 |

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
SDG NO.: 98H049
METHOD: METHOD 3010A/6010A

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | WATER | | | % MOISTURE: | NA |
| DILTN FACTR: | 1 | 1 | 1 | | |
| SAMPLE ID: | MBLK1W | | | | |
| CONTROL NO.: | IPH018WB | IPH018WL | IPH018WC | | |
| LAB FILE ID: | I31H019056 | I31H019057 | I31H019058 | | |
| DATIME EXTRCTD: | 08/14/9811:30 | 08/14/9811:30 | 08/14/9811:30 | DATE COLLECTED: | NA |
| DATIME ANALYZD: | 08/14/9817:39 | 08/14/9817:44 | 08/14/9817:48 | DATE RECEIVED: | 08/14/98 |
| PREP. BATCH: | IPH018W | IPH018W | IPH018W | | |
| CALIB. REF: | I31H019053 | I31H019053 | I31H019053 | | |

ACCESSION:

| PARAMETER | BLNK RSLT ug/L | SPIKE AMT ug/L | BS RSLT ug/L | BS % REC | SPIKE AMT ug/L | BSD RSLT ug/L | BSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1000 | 1040 | 104 | 1000 | 1060 | 106 | 2 | 80-120 | 20 |
| Lead | ND | 1000 | 1140 | 114 | 1000 | 1110 | 111 | 2 | 80-120 | 20 |
| Selenium | ND | 1000 | 1080 | 108 | 1000 | 1090 | 109 | 1 | 80-120 | 20 |
| Thallium | ND | 1000 | 1070 | 107 | 1000 | 1090 | 109 | 2 | 80-120 | 20 |

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
METHOD: METHOD 7470A
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 98H049
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: HGH017WL/C

DATE RECEIVED: 08/14/98
DATE EXTRACTED: 08/14/98 12:00
DATE ANALYZED: 08/14/98 18:38/18:41

ACCESSION:

| PARAMETER | BLNK RSLT (ug/L) | SPIKE AMT (ug/L) | BS RSLT (ug/L) | BS % REC | SPIKE AMT (ug/L) | BSD RSLT (ug/L) | BSD % REC | RPD % | QC LIMIT % | RPD LIMIT % |
|---|---|---|---|---|---|---|---|---|---|---|
| Mercury | ND | 5.00 | 4.86 | 97 | 5.00 | 5.05 | 101 | 4 | 77-120 | 15 |

7016

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
SDG NO.: 98H049
METHOD: METHOD 3010A/6010A

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | WATER | | | % MOISTURE: | NA |
| DILTN FACTR: | 1 | 1 | 1 | | |
| SAMPLE ID: | 18609-965 | | | | |
| CONTROL NO.: | H049-02 | H049-02M | H049-02S | | |
| LAB FILE ID: | I07H023016 | I07H023018 | I07H023019 | | |
| DATIME EXTRCTD: | 08/14/9811:30 | 08/14/9811:30 | 08/14/9811:30 | DATE COLLECTED: | 08/12/98 |
| DATIME ANALYZD: | 08/15/9823:07 | 08/15/9823:18 | 08/15/9823:22 | DATE RECEIVED: | 08/12/98 |
| PREP. BATCH: | IPH018W | IPH018W | IPH018W | | |
| CALIB. REF: | I07H023010 | I07H023010 | I07H023010 | | |

ACCESSION:

| PARAMETER | SMPL RSLT ug/L | SPIKE AMT ug/L | MS RSLT ug/L | MS % REC | SPIKE AMT ug/L | MSD RSLT ug/L | MSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Aluminum | ND | 10000 | 10300 | 103 | 10000 | 9890 | 99 | 4 | 80-120 | 20 |
| Antimony | ND | 5000 | 4960 | 99 | 5000 | 4780 | 96 | 4 | 80-120 | 20 |
| Barium | ND | 1000 | 1100 | 110 | 1000 | 1070 | 107 | 3 | 80-120 | 20 |
| Beryllium | ND | 1000 | 1020 | 102 | 1000 | 989 | 99 | 3 | 80-120 | 20 |
| Cadmium | ND | 1000 | 1020 | 102 | 1000 | 991 | 99 | 3 | 80-120 | 20 |
| Calcium | 30200 | 50000 | 81800 | 103 | 50000 | 78100 | 96 | 7 | 80-120 | 20 |
| Chromium | ND | 1000 | 1040 | 104 | 1000 | 991 | 99 | 5 | 80-120 | 20 |
| Cobalt | ND | 1000 | 1040 | 104 | 1000 | 998 | 100 | 5 | 80-120 | 20 |
| Copper | ND | 1000 | 1030 | 103 | 1000 | 988 | 99 | 4 | 80-120 | 20 |
| Iron | ND | 10000 | 10300 | 103 | 10000 | 9930 | 99 | 3 | 80-120 | 20 |
| Magnesium | 7450 | 50000 | 58400 | 102 | 50000 | 56300 | 98 | 4 | 80-120 | 20 |
| Manganese | ND | 1000 | 1030 | 103 | 1000 | 997 | 100 | 4 | 80-120 | 20 |
| Molybdenum | ND | 1000 | 1050 | 105 | 1000 | 1040 | 104 | 1 | 80-120 | 20 |
| Nickel | ND | 1000 | 1020 | 102 | 1000 | 977 | 98 | 4 | 80-120 | 20 |
| Potassium | ND | 50000 | 51700 | 103 | 50000 | 50500 | 101 | 2 | 80-120 | 20 |
| ver | ND | 1000 | 1030 | 103 | 1000 | 994 | 99 | 3 | 80-120 | 20 |
| um | 57000 | 50000 | 110000 | 106 | 50000 | 105000 | 96 | 10 | 80-120 | 20 |
| Vanadium | ND | 1000 | 1020 | 102 | 1000 | 983 | 98 | 4 | 80-120 | 20 |
| Zinc | 41.5 | 1000 | 1060 | 101 | 1000 | 1010 | 97 | 4 | 80-120 | 20 |

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
SDG NO.: 98H049
METHOD: METHOD 3010A/6010A

| | | | | | |
|---|---|---|---|---|---|
| MATRIX: | WATER | | | % MOISTURE: | NA |
| DILTN FACTR: | 1 | 1 | 1 | | |
| SAMPLE ID: | 18609-965 | | | | |
| CONTROL NO.: | H049-02 | H049-02M | H049-02S | | |
| LAB FILE ID: | I31H019061 | I31H019063 | I31H019064 | | |
| DATIME EXTRCTD: | 08/14/9811:30 | 08/14/9811:30 | 08/14/9811:30 | DATE COLLECTED: | 08/12/98 |
| DATIME ANALYZD: | 08/14/9818:14 | 08/14/9818:26 | 08/14/9818:30 | DATE RECEIVED: | 08/12/98 |
| PREP. BATCH: | IPH018W | IPH018W | IPH018W | | |
| CALIB. REF: | I31H019053 | I31H019053 | I31H019053 | | |

ACCESSION:

| PARAMETER | SMPL RSLT ug/L | SPIKE AMT ug/L | MS RSLT ug/L | MS % REC | SPIKE AMT ug/L | MSD RSLT ug/L | MSD % REC | RPD % | QC LIMIT % | MAX RPD % |
|---|---|---|---|---|---|---|---|---|---|---|
| Arsenic | ND | 1000 | 1020 | 102 | 1000 | 994 | 99 | 2 | 80-120 | 20 |
| Lead | ND | 1000 | 1130 | 113 | 1000 | 1050 | 105 | 8 | 80-120 | 20 |
| Selenium | ND | 1000 | 1030 | 103 | 1000 | 1000 | 100 | 2 | 80-120 | 20 |
| Thallium | ND | 1000 | 1040 | 104 | 1000 | 1010 | 101 | 3 | 80-120 | 20 |

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
BATCH NO.: 98H049
METHOD: METHOD 3010A/6010A

| | | | | |
|---|---|---|---|---|
| MATRIX: | WATER | | % MOISTURE: | NA |
| DILUTION FACTOR: | 1 | 5 | | |
| SAMPLE ID: | 18609-965 | 18609-965DL | | |
| EMAX SAMP ID: | H049-02 | H049-02T | | |
| LAB FILE ID: | I07H023016 | I07H023017 | | |
| DATE EXTRACTED: | 08/14/9811:30 | 08/14/9811:30 | DATE COLLECTED: | 08/12/98 |
| DATE ANALYZED: | 08/15/9823:07 | 08/15/9823:15 | DATE RECEIVED: | 08/12/98 |
| PREP. BATCH: | IPH018W | IPH018W | | |
| CALIB. REF: | I07H023010 | I07H023010 | | |

ACCESSION:

| PARAMETER | SMPL RSLT (ug/L) | SERIAL DIL RSLT (ug/L) | DIF RSLT % | QC LIMIT ( % ) |
|---|---|---|---|---|
| Aluminum | ND | ND | 0 | 10 |
| Antimony | ND | ND | 0 | 10 |
| Barium | ND | ND | 0 | 10 |
| Beryllium | ND | ND | 0 | 10 |
| Cadmium | ND | ND | 0 | 10 |
| Calcium | 30200 | 31200 | 3 | 10 |
| Chromium | ND | ND | 0 | 10 |
| Cobalt | ND | ND | 0 | 10 |
| Copper | ND | ND | 0 | 10 |
| Iron | ND | ND | 0 | 10 |
| Magnesium | 7450 | 7770 | 4 | 10 |
| Manganese | ND | ND | 0 | 10 |
| Molybdenum | ND | ND | 0 | 10 |
| Nickel | ND | ND | 0 | 10 |
| Potassium | ND | ND | 0 | 10 |
| [illegible]er | ND | ND | 0 | 10 |
| [illegible]um | 57000 | 57600 | 1 | 10 |
| Vanadium | ND | ND | 0 | 10 |
| Zinc | 41.5 | ND | NA | 10 |

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
BATCH NO.: 98H049
METHOD: METHOD 3010A/6010A

==========

| | | | | |
|---|---|---|---|---|
| MATRIX: | WATER | | % MOISTURE: | NA |
| DILUTION FACTOR: | 1 | 5 | | |
| SAMPLE ID: | 18609-965 | 18609-965DL | | |
| EMAX SAMP ID: | H049-02 | H049-02T | | |
| LAB FILE ID: | I31H019061 | I31H019062 | | |
| DATE EXTRACTED: | 08/14/9811:30 | 08/14/9811:30 | DATE COLLECTED: | 08/12/98 |
| DATE ANALYZED: | 08/14/9818:14 | 08/14/9818:22 | DATE RECEIVED: | 08/12/98 |
| PREP. BATCH: | IPH018W | IPH018W | | |
| CALIB. REF: | I31H019053 | I31H019053 | | |

ACCESSION:

| PARAMETER | SMPL RSLT (ug/L) | SERIAL DIL RSLT (ug/L) | DIF RSLT % | QC LIMIT ( % ) |
|---|---|---|---|---|
| Arsenic | ND | ND | 0 | 10 |
| Lead | ND | ND | 0 | 10 |
| Selenium | ND | ND | 0 | 10 |
| Thallium | ND | ND | 0 | 10 |

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: OHM Remediation Services
PROJECT: MCAS El Toro/18609/D.O. 70
METHOD: METHOD 9010A
MATRIX: WATER
% STURE: NA

BATCH NO.: 98H049
SAMPLE ID: 18609-966
CONTROL NO.: H049-03D

DATE RECEIVED: 08/12/98
DATE EXTRACTED: 08/14/98 14:00
DATE ANALYZED: 08/15/98 16:30

ACCESSION:

| PARAMETER | SAMPLE (mg/L) | DUP. SAMPLE (mg/L) | RPD ( % ) | RPD LIMIT ( % ) |
|---|---|---|---|---|
| Cyanide | ND | ND | 0 | 20 |

7020

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: OHM Remediation Services
PROJECT: MCAS El Toro/18609/D.O. 70
METHOD: METHOD 9010A
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 98H049
SAMPLE ID: LCS1W/LCD1W
CONTROL NO.: CNH005WL/C

DATE RECEIVED: NA
DATE EXTRACTED: 08/14/98 14:00
DATE ANALYZED: 08/15/98 16:11/16:12

ACCESSION:

| PARAMETER | BLNK RSLT (mg/L) | SPIKE AMT (mg/L) | BS RSLT (mg/L) | BS % REC | SPIKE AMT (mg/L) | BSD RSLT (mg/L) | BSD % REC | RPD % | QC LIMIT % | RPD LIMIT % |
|---|---|---|---|---|---|---|---|---|---|---|
| Cyanide | ND | .10 | .104 | 104 | .10 | .105 | 105 | 1 | 80-120 | 20 |

7017

EMAX QUALITY CONTROL DATA
DUPLICATE ANALYSIS

CLIENT: OHM REMEDIATION SERVICES
PROJECT: MCAS EL TORO/18609/D.O. 70
METHOD: METHOD 150.1
MATRIX: WATER
% MOISTURE: NA

BATCH NO.: 98H049
SAMPLE ID: 18609-966
CONTROL NO.: H049-03D

DATE RECEIVED: 08/12/98
DATE EXTRACTED: NA
DATE ANALYZED: 08/14/98 10:15

ACCESSION:

| PARAMETER | SAMPLE (pH unit) | DUP. SAMPLE (pH unit) | RPD ( % ) | RPD LIMIT ( % ) |
|---|---|---|---|---|
| pH | 6.61 | 6.60 | 0 | 20 |

## ACRONYMS AND FLAG DEFINITIONS

Flag Definitions:

| | |
|---|---|
| * | Duplicate values. Replicate results are entered into the MS/MSD column of the QC report. RPD calculated when sample concentration is at least five times RDL. |
| B | Blank contamination. Used when associated method blank concentration is greater than the PQL. |
| J | Estimated value. Used for sample results greater than or equal to MDL, but less than the PQL. |
| NC | Not calculated. Used when sample result is greater than two times the spike amount added, or when extracted surrogates were diluted below detectable levels. |
| Q | Quality objectives were not met. Used for Method Blank, Laboratory Control Samples, Matrix Spikes, Matrix Duplicates and Surrogates. |

Acronyms:

| | |
|---|---|
| COC | Chain of Custody |
| FLG | Flag |
| J | Estimated value between MDL and PQL |
| LC | Actual LCS/LCSD concentration recovered |
| LCL | Lower Control Limit |
| LCS | Laboratory Control Sample |
| LCSD | Laboratory Control Sample Duplicate |
| LT | True LCS/LCSD concentration |
| MB | Method Blank |
| MS | Matrix Spike |
| MSD | Matrix Spike Duplicate |
| R1 | Unspiked sample concentration |
| RDL | Reporting Detection Limit |
| %REC | Percent Recovery |
| Rep. | Surrogate Reported value |
| RPD | Relative Percent Difference |
| S1 | Actual MS concentration |
| S2 | Actual MSD concentration |
| T | True concentration of MS/MSD |
| Theo. | Surrogate Theoretical value |
| U | Not detected above the MDL |
| UCL | Upper Control Limit |

ORDER PLACED FOR CLIENT: OHM Remediation Services Corp. 9710389 :
VOC ANALYTICAL : GLEN LAB : 11:39:54 22 NOV 1997 - P. 2 :

000054

| MPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | CD.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | CA.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | CR.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | CO.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | CU.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | FE.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | PB,GFA.AF | 10.27.97 | 7421 | 534-04 | 972710 | 1002 |
| | | MG.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | MN.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | HG,SO.AF | 10.23.97 | 7471A | 534-06 | 972737 | 1003 |
| | | NI.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | K.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | SE,GFA.AF | 10.21.97 | 7740 | 534-07 | 972710 | 1002 |
| | | AG.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | NA.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | TL.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | V.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | ZN.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | CN.AF | 10.23.97 | 9010A | 533-15 | 9788 | 1021 |
| | | PH,NA.AF | 10.21.97 | 9045 | 533-21 | 9747 | 8804 |
| | | MO.AF | 10.21.97 | 6010A | 535-02 | 972708 | 8488 |
| | | DIG,NAQ.HCL | 10.21.97 | 3050 | | 972708 | 7093 |
| | | DIG,NAQ,GFA | 10.21.97 | 3050 | | 972710 | 7093 |
| | | 8270,OHM | 10.27.97 | 8270B | 537-14 | 97212 | 1009 |
| | | DIESEL.3550.OHM | 10.24.97 | 8015M | 536-01 | 97236 | 8866 |
| | | GAS.5030.AF | 10.23.97 | 8015M | 536-33 | 9787069 | 6843 |
| | | MOIST.SOIL | 10.23.97 | D2216 | | 972796 | 8651 |
| | | 8260,OHM | 10.20.97 | 8260A | 537-02 | 9787063 | 8659 |
| | | 8270,OHM.SIM | 10.27.97 | 8270.SIM | 537-11 | 97212 | 6750 |
| | | CON,8081,OHM | 10.24.97 | 8081 | 536-26 | 97194 | 8042 |
| )389*3 | 18609-642 | AL.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | SB.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | AS,GFA.AF | 10.22.97 | 7060A | 534-04 | 972713 | 1002 |
| | | BA.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | BE.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | CD.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | CA.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | CR.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | CO.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | CU.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | FE.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | PB,GFA.AF | 10.22.97 | 7421 | 534-04 | 972713 | 1002 |
| | | MG.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | MN.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

| MPLES... | SAMPLE DESCRIPTION.. | DETERM..... | DATE..... ANALYZED | METHOD..... | EQUIP. | BATCH.. | ID.NO |
|---|---|---|---|---|---|---|---|
| | | NI.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | K.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | SE,GFA.AF | 10.22.97 | 7740 | 534-04 | 972713 | 1002 |
| | | AG.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | NA.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | TL.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | V.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | ZN.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | PH.AF | 10.18.97 | 150.1 | 533-21 | 97356 | 1021 |
| | | MO.AF | 10.22.97 | 6010A | 535-02 | 972717 | 8488 |
| | | DIG,AQ.HCL | 10.21.97 | 3010 | | 972717 | 7620 |
| | | DIG,AQ,GFA | 10.21.97 | 3020 | | 972713 | 7620 |
| | | BNA.8270.OHM | 10.25.97 | 8270B | 537-14 | 97207 | 1009 |
| | | DIESEL.3520.OHM | 10.22.97 | 8015M | 536-01 | 97234 | 8866 |
| | | GAS.5030.AF | 10.22.97 | 8015M | 536-23 | 975143 | 7424 |
| | | VOA,8260.OHM | 10.21.97 | 8260A | 537-01 | 971169 | 7430 |
| | | HG.AF | 10.27.97 | 7470A | 534-06 | 972783 | 1002 |
| | | PEST.8081.OHM | 10.22.97 | 8081 | 536-26 | 97195 | 7616 |
| | | PCB.8081 | 10.22.97 | 8081 | 536-26 | 97195 | 7616 |
| | | CON,PEST.8081.OHM | 10.22.97 | 8081 | 536-26 | 97195 | 8042 |
| 10389*4 | 18609-637 | GAS.5030.AF | 10.22.97 | 8015M | 536-23 | 975143 | 7424 |
| | | VOA,8260.OHM | 10.21.97 | 8260A | 537-01 | 971169 | 7430 |
| 10389*5 | 18609-639 | MOIST.SOIL | 10.23.97 | D2216 | | 972796 | 8651 |
| | | 8260,OHM | 10.20.97 | 8260A | 537-02 | 9787063 | 8659 |
| 10389*6 | 18609-641 | MOIST.SOIL | 10.23.97 | D2216 | | 972796 | 8651 |
| | | 8260,OHM | 10.24.97 | 8260A | 537-02 | 9787063 | 8659 |

Notes: Equipment = VOC Analytical identification number for a particular piece of analytical equipment.

ID.NO = VOC Analytical employee identification number of analyst.

VOC ANALYT , GLENDALE
QC REPORT 9710389
DATE PRINTED: 26 NOV 1997



| AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: PH*97356 Method: 150.1 - pH, Electrometric | | | | | | | | | | | | | | | | | | | | | | |
| pH | Units | - | - | - | 101 | - | 100 | - | 99 | 101 | 0 | 20 | - | 8.0 | * | 8.1 | * | - | - | 1 | 20 | - |
| Batch: PB,GFA*972713 Method: 7421 - Lead, AA, Furnace | | | | | | | | | | | | | | | | | | | | | | |
| Lead | ug/L | 1.0 | 5 | - | 95 | - | 97 | - | 74 | 124 | 1 | - | - | 95 | - | 94 | - | 74 | 124 | 1 | 15 | - |
| Batch: SE,GFA*972713 Method: 7740 - Selenium, AA, Furnace | | | | | | | | | | | | | | | | | | | | | | |
| Selenium | ug/L | 0.700 | 5 | - | 89 | - | 94 | - | 73 | 122 | 5 | - | - | 64 | Q | 65 | Q | 73 | 122 | 2 | 15 | - |
| Batch: AS,GFA*972713 Method: 7060A - Arsenic, AA, Furnace | | | | | | | | | | | | | | | | | | | | | | |
| Arsenic | ug/L | 0 | 5 | - | 100 | - | 101 | - | 74 | 120 | 1 | - | - | 101 | - | 98 | - | 74 | 120 | 3 | 15 | - |
| Batch: AG*972717 Method: 6010A - ICAP Metals | | | | | | | | | | | | | | | | | | | | | | |
| Silver | ug/L | 0 | 50 | - | 103 | - | 105 | - | 80 | 120 | 2 | 15 | - | 88 | - | 87 | - | 80 | 120 | 1 | 15 | - |
| Aluminum | ug/L | 21 | 500 | - | 84 | - | 87 | - | 80 | 120 | 3 | 15 | - | 105 | - | 102 | - | 80 | 120 | 3 | 15 | - |
| Barium | ug/L | 0 | 100 | - | 98 | - | 98 | - | 80 | 120 | 0 | 15 | - | 102 | - | 102 | - | 80 | 120 | 0 | 15 | - |
| Beryllium | ug/L | 0 | 10 | - | 99 | - | 99 | - | 80 | 120 | 0 | 15 | - | 105 | - | 105 | - | 80 | 120 | 0 | 15 | - |
| Calcium | ug/L | 0 | 1000 | - | 105 | - | 106 | - | 80 | 120 | 1 | 15 | - | 106 | - | 106 | - | 80 | 120 | 0 | 15 | - |
| Cadmium | ug/L | 0 | 5 | - | 108 | - | 108 | - | 80 | 120 | 0 | 15 | - | 107 | - | 107 | - | 80 | 120 | 0 | 15 | - |
| Cobalt | ug/L | 0 | 50 | - | 104 | - | 105 | - | 80 | 120 | 1 | 15 | - | 105 | - | 106 | - | 80 | 120 | 1 | 15 | - |
| Chromium | ug/L | 0 | 50 | - | 99 | - | 100 | - | 80 | 120 | 1 | 15 | - | 102 | - | 104 | - | 80 | 120 | 2 | 15 | - |
| Copper | ug/L | 0 | 50 | - | 94 | - | 93 | - | 80 | 120 | 1 | 15 | - | 87 | - | 87 | - | 80 | 120 | 0 | 15 | - |
| Iron | ug/L | 0 | 50 | - | 105 | - | 106 | - | 80 | 120 | 1 | 15 | - | 109 | - | 109 | - | 80 | 120 | 0 | 15 | - |
| Potassium | ug/L | 0 | 5000 | - | 97 | - | 98 | - | 80 | 120 | 1 | 15 | - | 100 | - | 100 | - | 80 | 120 | 0 | 15 | - |
| Magnesium | ug/L | 0 | 1000 | - | 97 | - | 98 | - | 80 | 120 | 1 | 15 | - | 103 | - | 103 | - | 80 | 120 | 0 | 15 | - |
| Manganese | ug/L | 0 | 20 | - | 101 | - | 102 | - | 80 | 120 | 1 | 15 | - | 108 | - | 108 | - | 80 | 120 | 0 | 15 | - |
| Molybdenum | ug/L | 5.1 | 100 | - | 101 | - | 102 | - | 80 | 120 | 1 | 15 | - | 102 | - | 102 | - | 80 | 120 | 1 | 15 | - |
| Sodium | ug/L | 0 | 1000 | - | 99 | - | 99 | - | 80 | 120 | 1 | 15 | - | 102 | - | 102 | - | 80 | 120 | 0 | 15 | - |
| Nickel | ug/L | 10 | 150 | - | 109 | - | 111 | - | 80 | 120 | 2 | 15 | - | 110 | - | 114 | - | 80 | 120 | 4 | 15 | - |
| Antimony | ug/L | 0 | 500 | - | 103 | - | 103 | - | 80 | 120 | 0 | 15 | - | 104 | - | 104 | - | 80 | 120 | 0 | 15 | - |
| Thallium | ug/L | 17 | 400 | - | 98 | - | 100 | - | 80 | 120 | 2 | 15 | - | 106 | - | 106 | - | 80 | 120 | 0 | 15 | - |
| Vanadium | ug/L | 0 | 100 | - | 96 | - | 97 | - | 80 | 120 | 0 | 15 | - | 101 | - | 100 | - | 80 | 120 | 1 | 15 | - |
| Zinc | ug/L | 0 | 20 | - | 104 | - | 105 | - | 80 | 120 | 1 | 15 | - | 110 | - | 112 | - | 80 | 120 | 1 | 15 | - |
| Batch: HG*972783 Method: 7470A - Mercury (Liquid), Cold Vapor AA, Manual | | | | | | | | | | | | | | | | | | | | | | |
| Mercury | ug/L | 0 | 0.2 | - | 100 | - | 108 | - | 77 | 120 | 7 | 15 | - | 95 | - | 105 | - | 77 | 120 | 10 | 15 | - |

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AQUEOUS SAMPLES

| | METHOD BLANK | | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | |
| Batch: VOA,8260*971169 Method: 8260A - Volatile Organics, GCMS | | | | | | | | | | | | | | | | | | | | | | | |
| 1,1,1-Trichloroethane | ug/L | 0 | 5 | - | 81 | - | 72 | - | 71 | 132 | 12 | - | - | - | - | - | - | - | - | - | - | - | |
| 1,1,2,2-Tetrachloroethane | ug/L | 0 | 5 | - | 102 | - | 104 | - | 50 | 134 | 2 | - | - | - | - | - | - | - | - | - | - | - | |
| 1,1,2-Trichloroethane | ug/L | 0 | 5 | - | 107 | - | 101 | - | 67 | 133 | 6 | - | - | - | - | - | - | - | - | - | - | - | |
| 1,1-Dichloroethane | ug/L | 0 | 5 | - | 93 | - | 96 | - | 49 | 135 | 3 | - | - | - | - | - | - | - | - | - | - | - | |
| 1,1-Dichloroethene | ug/L | 0 | 5 | - | 84 | - | 86 | - | 75 | 125 | 1 | 20 | - | 76 | - | 69 | Q | 75 | 125 | 10 | 20 | - | |
| 1,2-Dichloroethane | ug/L | 0 | 5 | - | 93 | - | 92 | - | 68 | 129 | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| 1,2-Dichloropropane | ug/L | 0 | 5 | - | 90 | - | 92 | - | 68 | 127 | 2 | - | - | - | - | - | - | - | - | - | - | - | |
| 2-Chloroethylvinylether | ug/L | 0 | 50 | - | 188 | - | 169 | - | 1 | 214 | 11 | - | - | - | - | - | - | - | - | - | - | - | |
| 2-Hexanone | ug/L | 0 | 50 | - | 99 | - | 116 | - | 20 | 149 | 15 | - | - | - | - | - | - | - | - | - | - | - | |
| Acetone | ug/L | 6.7 | 50 | - | 107 | - | 106 | - | 32 | 176 | 0 | - | - | - | - | - | - | - | - | - | - | - | |
| Bromodichloromethane | ug/L | 0 | 5 | - | 96 | - | 95 | - | 69 | 132 | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| Bromomethane | ug/L | 0 | 5 | - | 90 | - | 90 | - | 55 | 146 | 0 | - | - | - | - | - | - | - | - | - | - | - | |
| Benzene | ug/L | 0 | 5 | - | 87 | - | 85 | - | 75 | 125 | 3 | 20 | - | 81 | - | 79 | - | 75 | 125 | 2 | 20 | - | |
| Bromoform | ug/L | 0 | 5 | - | 113 | - | 105 | - | 53 | 148 | 8 | - | - | - | - | - | - | - | - | - | - | - | |
| Chlorobenzene | ug/L | 0 | 5 | - | 99 | - | 93 | - | 75 | 125 | 5 | 20 | - | 92 | - | 93 | - | 75 | 125 | 2 | 20 | - | |
| Carbon Tetrachloride | ug/L | 0 | 5 | - | 87 | - | 79 | - | 70 | 140 | 9 | - | - | - | - | - | - | - | - | - | - | - | |
| Chloroethane | ug/L | 0 | 5 | - | 103 | - | 98 | - | 52 | 137 | 5 | - | - | - | - | - | - | - | - | - | - | - | |
| Chloroform | ug/L | 0 | 5 | - | 97 | - | 93 | - | 77 | 128 | 5 | - | - | - | - | - | - | - | - | - | - | - | |
| Chloromethane | ug/L | 0 | 5 | - | 100 | - | 100 | - | 37 | 129 | 0 | - | - | - | - | - | - | - | - | - | - | - | |
| Carbon Disulfide | ug/L | 0 | 5 | - | 75 | - | 74 | - | 37 | 140 | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| Dibromochloromethane | ug/L | 0 | 5 | - | 99 | - | 98 | - | 65 | 142 | 1 | - | - | - | - | - | - | - | - | - | - | - | |
| Ethylbenzene | ug/L | 0 | 5 | - | 94 | - | 91 | - | 80 | 135 | 3 | - | - | - | - | - | - | - | - | - | - | - | |
| Methyl ethyl ketone | ug/L | 0 | 50 | - | 118 | - | 129 | - | 5 | 153 | 8 | - | - | - | - | - | - | - | - | - | - | - | |
| Methyl isobutyl ketone | ug/L | 0 | 50 | - | 105 | - | 103 | - | 16 | 150 | 2 | - | - | - | - | - | - | - | - | - | - | - | |
| Methyl-tert-butylether | ug/L | 0 | 10 | - | 97 | - | 98 | - | 39 | 148 | 2 | - | - | - | - | - | - | - | - | - | - | - | |
| Methylene chloride | ug/L | 0 | 5 | - | 94 | - | 100 | - | 51 | 139 | 6 | - | - | - | - | - | - | - | - | - | - | - | |
| Styrene | ug/L | 0 | 5 | - | 98 | - | 92 | - | 80 | 129 | 6 | - | - | - | - | - | - | - | - | - | - | - | |
| Trichloroethene | ug/L | 0 | 5 | - | 94 | - | 89 | - | 71 | 125 | 6 | 20 | - | 87 | - | 86 | - | 71 | 125 | 1 | 20 | - | |
| Toluene | ug/L | 0 | 5 | - | 96 | - | 88 | - | 74 | 125 | 9 | 20 | - | 85 | - | 86 | - | 74 | 125 | 0 | 20 | - | |
| Tetrachloroethene | ug/L | 0 | 5 | - | 103 | - | 91 | - | 67 | 145 | 12 | - | - | - | - | - | - | - | - | - | - | - | |
| Vinyl acetate | ug/L | 0 | 50 | - | 111 | - | 86 | - | 24 | 143 | 25 | - | - | - | - | - | - | - | - | - | - | - | |
| Vinyl chloride | ug/L | 0 | 5 | - | 98 | - | 95 | - | 48 | 140 | 3 | - | - | - | - | - | - | - | - | - | - | - | |
| Total Xylene Isomers | ug/L | 0 | 15 | - | 95 | - | 89 | - | 79 | 136 | 6 | - | - | - | - | - | - | - | - | - | - | - | |
| cis-1,2-Dichloroethene | ug/L | 0 | 5 | - | 97 | - | 90 | - | 54 | 143 | 7 | - | - | - | - | - | - | - | - | - | - | - | |
| cis-1,3-Dichloropropene | ug/L | 0 | 5 | - | 96 | - | 88 | - | 66 | 129 | 9 | - | - | - | - | - | - | - | - | - | - | - | |
| trans-1,2-Dichloroethene | ug/L | 0 | 5 | - | 86 | - | 86 | - | 48 | 134 | 0 | - | - | - | - | - | - | - | - | - | - | - | |
| trans-1,3-Dichloropropene | ug/L | 0 | 5 | - | 102 | - | 91 | - | 66 | 130 | 11 | - | - | - | - | - | - | - | - | - | - | - | |

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| AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | RPD | RPD | | MS | | MSD | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG |
| Batch: VOA,8260*971169 Method: 8260A - Volatile Organics, GCMS, con't | | | | | | | | | | | | | | | | | | | | | | |
| [1,2-Dichloroethane-d4] | Percent | 92 | - | - | 96 | - | 89 | - | 62 | 139 | - | - | - | - | - | - | - | - | - | - | - | - |
| [4-Bromofluorobenzene] | Percent | 83 | - | - | 88 | - | 89 | - | 75 | 125 | - | - | - | 83 | - | 83 | - | 75 | 125 | - | - | - |
| [Toluene-d8] | Percent | 91 | - | - | 86 | - | 89 | - | 75 | 125 | - | - | - | 88 | - | 89 | - | 75 | 125 | - | - | - |
| [Dibromofluoromethane] | Percent | 90 | - | - | 87 | - | 85 | - | 75 | 125 | - | - | - | 86 | - | 83 | - | 75 | 125 | - | - | - |
| Batch: GAS*975143 Method: 8015M - Modified 8015 | | | | | | | | | | | | | | | | | | | | | | |
| TPH (Gasoline Range) | mg/L | 0 | 0.1 | - | 96 | - | - | - | 67 | 136 | - | - | - | 92 | - | 95 | - | 67 | 136 | 3 | 30 | - |
| [a,a,a-Trifluorotoluene] | Percent | 112 | - | - | 99 | - | - | - | 76 | 126 | - | - | - | 104 | - | 106 | - | 76 | 126 | - | - | - |
| Batch: CON,PEST*97195 Method: 8081 - Organochlorine Pesticides and PCBs | | | | | | | | | | | | | | | | | | | | | | |
| Aldrin | ug/L | 0 | 0.03 | - | 60 | - | 91 | - | 47 | 125 | 41 | 30 | Q | - | - | - | - | - | - | - | - | - |
| p,p'-DDD | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| p,p'-DDE | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| p,p'-DDT | ug/L | 0 | 0.05 | - | 44 | - | 68 | - | 34 | 143 | 44 | 30 | Q | - | - | - | - | - | - | - | - | - |
| Dieldrin | ug/L | 0 | 0.03 | - | 66 | - | 116 | - | 42 | 132 | 55 | 30 | Q | - | - | - | - | - | - | - | - | - |
| Endosulfan I | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Endosulfan II | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Endosulfan sulfate | ug/L | 0 | 0.05 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Endrin | ug/L | 0 | 0.03 | - | 62 | - | 88 | - | 43 | 134 | 34 | 30 | Q | - | - | - | - | - | - | - | - | - |
| Endrin aldehyde | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Heptachlor epoxide | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| Heptachlor | ug/L | 0 | 0.03 | - | 56 | - | 89 | - | 45 | 128 | 45 | 30 | Q | - | - | - | - | - | - | - | - | - |
| Methoxychlor | ug/L | 0 | 0.05 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BHC, alpha isomer | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| alpha-Chlordane | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BHC, beta isomer | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BHC, delta isomer | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| BHC, gamma isomer (Lindane) | ug/L | 0 | 0.03 | - | 57 | Q | 89 | - | 73 | 125 | 44 | 30 | Q | - | - | - | - | - | - | - | - | - |
| gamma-Chlordane | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - |
| [Decachlorobiphenyl] | Percent | 101 | - | - | 58 | - | 87 | - | 34 | 133 | - | - | - | - | - | - | - | - | - | - | - | - |
| [Tetrachloro-meta-xylene] | Percent | 64 | - | - | 58 | - | 93 | - | 45 | 125 | - | - | - | - | - | - | - | - | - | - | - | - |

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AQUEOUS SAMPLES

| | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | |
| Batch: PCB*97195 Method: 8081 - Organochlorine Pesticides and PCBs | | | | | | | | | | | | | | | | | | | | | | | |
| Aroclor 1016 | ug/L | 0 | 1 | - | 100 | - | 90 | - | - | - | 11 | - | - | - | - | - | - | - | - | - | - | - | |
| Aroclor 1221 | ug/L | 0 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Aroclor 1232 | ug/L | 0 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Aroclor 1242 | ug/L | 0 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Aroclor 1248 | ug/L | 0 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Aroclor 1254 | ug/L | 0 | 1 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Aroclor 1260 | ug/L | 0 | 1 | - | 98 | - | 81 | - | 41 | 126 | 19 | 30 | - | - | - | - | - | - | - | - | - | - | |
| [Decachlorobiphenyl] | Percent | 98 | - | - | 75 | - | 72 | - | 34 | 133 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [Tetrachloro-meta-xylene] | Percent | 72 | - | - | 77 | - | 82 | - | 45 | 125 | - | - | - | - | - | - | - | - | - | - | - | - | |
| Batch: PEST*97195 Method: 8081 - Organochlorine Pesticides and PCBs | | | | | | | | | | | | | | | | | | | | | | | |
| Aldrin | ug/L | 0 | 0.03 | - | 104 | - | 68 | - | 47 | 125 | 42 | 30 | Q | - | - | - | - | - | - | - | - | - | |
| p,p'-DDD | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| p,p'-DDE | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| p,p'-DDT | ug/L | 0 | 0.05 | - | 96 | - | 62 | - | 34 | 143 | 42 | 30 | Q | - | - | - | - | - | - | - | - | - | |
| Dieldrin | ug/L | 0 | 0.03 | - | 99 | - | 67 | - | 42 | 132 | 38 | 30 | Q | - | - | - | - | - | - | - | - | - | |
| Endosulfan I | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Endosulfan II | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Endosulfan sulfate | ug/L | 0 | 0.05 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Endrin | ug/L | 0 | 0.03 | - | 92 | - | 64 | - | 43 | 134 | 36 | 30 | Q | - | - | - | - | - | - | - | - | - | |
| Endrin aldehyde | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Heptachlor epoxide | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| Heptachlor | ug/L | 0 | 0.03 | - | 106 | - | 68 | - | 45 | 128 | 43 | 30 | Q | - | - | - | - | - | - | - | - | - | |
| Methoxychlor | ug/L | 0 | 0.05 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, alpha isomer | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| alpha-Chlordane | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, beta isomer | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, delta isomer | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| BHC, gamma isomer (Lindane) | ug/L | 0 | 0.03 | - | 115 | - | 74 | - | 73 | 125 | 43 | 30 | Q | - | - | - | - | - | - | - | - | - | |
| gamma-Chlordane | ug/L | 0 | 0.03 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| [Decachlorobiphenyl] | Percent | 98 | - | - | 90 | - | 60 | - | 34 | 133 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [Tetrachloro-meta-xylene] | Percent | 72 | - | - | 104 | - | 65 | - | 45 | 125 | - | - | - | - | - | - | - | - | - | - | - | - | |

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| AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | |
| Batch: BNA*97207 Method: 8270B - GC/MS for Semivolatile Organics, Capillary column | | | | | | | | | | | | | | | | | | | | | | | |
| 1,2,4-Trichlorobenzene | ug/L | 0 | 10 | - | 89 | - | 85 | - | 44 | 142 | 5 | 20 | - | - | - | - | - | - | - | - | - | - | |
| 1,2-Dichlorobenzene | ug/L | 0 | 10 | - | 96 | - | 91 | - | 30 | 120 | 5 | 35 | - | - | - | - | - | - | - | - | - | - | |
| 1,3-Dichlorobenzene | ug/L | 0 | 10 | - | 94 | - | 87 | - | 28 | 114 | 7 | 34 | - | - | - | - | - | - | - | - | - | - | |
| 1,4-Dichlorobenzene | ug/L | 0 | 10 | - | 92 | - | 87 | - | 30 | 125 | 5 | 20 | - | - | - | - | - | - | - | - | - | - | |
| 2,4,5-Trichlorophenol | ug/L | 0 | 10 | - | 101 | - | 100 | - | 49 | 143 | 1 | 26 | - | - | - | - | - | - | - | - | - | - | |
| 2,4,6-Trichlorophenol | ug/L | 0 | 10 | - | 100 | - | 97 | - | 50 | 134 | 2 | 30 | - | - | - | - | - | - | - | - | - | - | |
| 2,4-Dichlorophenol | ug/L | 0 | 10 | - | 87 | - | 87 | - | 43 | 124 | 1 | 22 | - | - | - | - | - | - | - | - | - | - | |
| 2,4-Dimethylphenol | ug/L | 0 | 10 | - | 87 | - | 86 | - | 43 | 107 | 1 | 33 | - | - | - | - | - | - | - | - | - | - | |
| 2,4-Dinitrophenol | ug/L | 0 | 25 | - | 122 | - | 119 | - | 22 | 174 | 2 | 41 | - | - | - | - | - | - | - | - | - | - | |
| 2,4-Dinitrotoluene | ug/L | 0 | 10 | - | 104 | - | 98 | - | 39 | 139 | 6 | 20 | - | - | - | - | - | - | - | - | - | - | |
| 2,6-Dinitrotoluene | ug/L | 0 | 10 | - | 102 | - | 95 | - | 53 | 129 | 7 | 36 | - | - | - | - | - | - | - | - | - | - | |
| 2-Chloronaphthalene | ug/L | 0 | 10 | - | 83 | - | 77 | - | 36 | 97 | 7 | 38 | - | - | - | - | - | - | - | - | - | - | |
| 2-Chlorophenol | ug/L | 0 | 10 | - | 91 | - | 89 | - | 41 | 125 | 2 | 20 | - | - | - | - | - | - | - | - | - | - | |
| 2-Methyl-4,6-dinitrophenol | ug/L | 0 | 25 | - | 126 | - | 122 | - | 38 | 147 | 3 | 47 | - | - | - | - | - | - | - | - | - | - | |
| 2-Methylnaphthalene | ug/L | 0 | 10 | - | 87 | - | 83 | - | 36 | 124 | 5 | 36 | - | - | - | - | - | - | - | - | - | - | |
| 2-Methylphenol (o-Cresol) | ug/L | 0 | 10 | - | 84 | - | 81 | - | 36 | 116 | 4 | 33 | - | - | - | - | - | - | - | - | - | - | |
| 2-Nitroaniline | ug/L | 0 | 10 | - | 111 | - | 103 | - | 54 | 133 | 7 | 33 | - | - | - | - | - | - | - | - | - | - | |
| 2-Nitrophenol | ug/L | 0 | 10 | - | 104 | - | 104 | - | 43 | 122 | 0 | 28 | - | - | - | - | - | - | - | - | - | - | |
| 3,3'-Dichlorobenzidine | ug/L | 0 | 10 | - | 43 | - | 40 | - | 1 | 262 | 6 | 42 | - | - | - | - | - | - | - | - | - | - | |
| 3-Nitroaniline | ug/L | 0 | 10 | - | 112 | - | 105 | - | 54 | 134 | 6 | 50 | - | - | - | - | - | - | - | - | - | - | |
| 4-Bromophenylphenylether | ug/L | 0 | 10 | - | 93 | - | 88 | - | 43 | 142 | 6 | 32 | - | - | - | - | - | - | - | - | - | - | |
| 4-Chloro-3-methylphenol | ug/L | 0 | 10 | - | 90 | - | 90 | - | 44 | 125 | 0 | 20 | - | - | - | - | - | - | - | - | - | - | |
| 4-Chloroaniline | ug/L | 0 | 10 | - | 95 | - | 89 | - | 46 | 126 | 7 | 50 | - | - | - | - | - | - | - | - | - | - | |
| 4-Chlorophenylphenylether | ug/L | 0 | 10 | - | 93 | - | 89 | - | 49 | 134 | 5 | 32 | - | - | - | - | - | - | - | - | - | - | |
| 4-Methylphenol (p-Cresol) | ug/L | 0 | 10 | - | 81 | - | 76 | - | 46 | 109 | 6 | 44 | - | - | - | - | - | - | - | - | - | - | |
| 4-Nitroaniline | ug/L | 0 | 10 | - | 97 | - | 99 | - | 40 | 166 | 1 | 50 | - | - | - | - | - | - | - | - | - | - | |
| 4-Nitrophenol | ug/L | 0 | 25 | - | 42 | - | 33 | - | 25 | 131 | 25 | 20 | Q | - | - | - | - | - | - | - | - | - | |
| Acenaphthene | ug/L | 0 | 10 | - | 88 | - | 83 | - | 49 | 125 | 6 | 20 | - | - | - | - | - | - | - | - | - | - | |
| Acenaphthylene | ug/L | 0 | 10 | - | 93 | - | 87 | - | 56 | 131 | 7 | 50 | - | - | - | - | - | - | - | - | - | - | |
| Anthracene | ug/L | 0 | 10 | - | 90 | - | 83 | - | 54 | 117 | 8 | 25 | - | - | - | - | - | - | - | - | - | - | |
| Benzo(a)anthracene | ug/L | 0 | 10 | - | 86 | - | 80 | - | 55 | 132 | 7 | 26 | - | - | - | - | - | - | - | - | - | - | |
| Benzo(a)pyrene | ug/L | 0 | 10 | - | 105 | - | 98 | - | 51 | 141 | 7 | 40 | - | - | - | - | - | - | - | - | - | - | |
| Benzo(b)fluoranthene | ug/L | 0 | 10 | - | 101 | - | 99 | - | 43 | 135 | 2 | 29 | - | - | - | - | - | - | - | - | - | - | |
| Benzo(g,h,i)perylene | ug/L | 0 | 10 | - | 116 | - | 108 | - | 36 | 157 | 7 | 39 | - | - | - | - | - | - | - | - | - | - | |
| Benzo(k)fluoranthene | ug/L | 0 | 10 | - | 95 | - | 91 | - | 57 | 137 | 4 | 36 | - | - | - | - | - | - | - | - | - | - | |
| Butylbenzylphthalate | ug/L | 0 | 10 | - | 96 | - | 94 | - | 50 | 139 | 2 | 36 | - | - | - | - | - | - | - | - | - | - | |
| Chrysene | ug/L | 0 | 10 | - | 89 | - | 82 | - | 55 | 134 | 8 | 25 | - | - | - | - | - | - | - | - | - | - | |

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| AQUEOUS SAMPLES | | METHOD BLANK | | | LAB CONTROL | | | | | | | | | MATRIX QC | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | LCS | | LCSD | | | | | RPD | RPD | MS | | MSD | | | | | RPD | RPD | |
| | UNITS | RESULT | RL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | %REC | FLG | %REC | FLG | LCL | UCL | RPD | UCL | FLG | |
| Batch: BNA*97207 Method: 8270B - GC/MS for Semivolatile Organics, Capillary column, con't | | | | | | | | | | | | | | | | | | | | | | | |
| Di-n-octylphthalate | ug/L | 0.38 | 10 | - | 110 | - | 108 | - | 41 | 145 | 2 | 39 | - | - | - | - | - | - | - | - | - | - | |
| Dibenzo(a,h)anthracene | ug/L | 0 | 10 | - | 112 | - | 105 | - | 41 | 144 | 6 | 41 | - | - | - | - | - | - | - | - | - | - | |
| Dibenzofuran | ug/L | 0 | 10 | - | 92 | - | 87 | - | 53 | 129 | 5 | 27 | - | - | - | - | - | - | - | - | - | - | |
| Dibutylphthalate | ug/L | 10 | 10 | - | 104 | - | 103 | - | 50 | 129 | 1 | 26 | - | - | - | - | - | - | - | - | - | - | |
| Diethylphthalate | ug/L | 0.51 | 10 | - | 92 | - | 88 | - | 49 | 137 | 5 | 24 | - | - | - | - | - | - | - | - | - | - | |
| Dimethylphthalate | ug/L | 0 | 10 | - | 96 | - | 91 | - | 55 | 134 | 5 | 27 | - | - | - | - | - | - | - | - | - | - | |
| Fluoranthene | ug/L | 0.15 | 10 | - | 92 | - | 87 | - | 52 | 128 | 6 | 27 | - | - | - | - | - | - | - | - | - | - | |
| Fluorene | ug/L | 0 | 10 | - | 91 | - | 86 | - | 55 | 126 | 6 | 20 | - | - | - | - | - | - | - | - | - | - | |
| Hexachlorobenzene | ug/L | 0 | 10 | - | 94 | - | 88 | - | 50 | 136 | 6 | 35 | - | - | - | - | - | - | - | - | - | - | |
| Hexachlorobutadiene | ug/L | 0 | 10 | - | 94 | - | 90 | - | 16 | 136 | 5 | 39 | - | - | - | - | - | - | - | - | - | - | |
| Hexachlorocyclopentadiene | ug/L | 0 | 10 | - | 144 | - | 127 | - | 6 | 209 | 13 | 32 | - | - | - | - | - | - | - | - | - | - | |
| Hexachloroethane | ug/L | 0 | 10 | - | 93 | - | 89 | - | 24 | 119 | 5 | 36 | - | - | - | - | - | - | - | - | - | - | |
| Indeno(1,2,3-c,d)pyrene | ug/L | 0 | 10 | - | 116 | - | 103 | - | 30 | 172 | 12 | 49 | - | - | - | - | - | - | - | - | - | - | |
| N-Nitrosodiphenylamine | ug/L | 0 | 10 | - | 77 | - | 72 | - | 36 | 103 | 7 | 50 | - | - | - | - | - | - | - | - | - | - | |
| N-Nitrosodi-n-propylamine | ug/L | 0 | 10 | - | 95 | - | 90 | - | 37 | 125 | 6 | 20 | - | - | - | - | - | - | - | - | - | - | |
| Nitrobenzene | ug/L | 0 | 10 | - | 97 | - | 91 | - | 44 | 118 | 6 | 39 | - | - | - | - | - | - | - | - | - | - | |
| Naphthalene | ug/L | 0 | 10 | - | 87 | - | 84 | - | 40 | 110 | 4 | 25 | - | - | - | - | - | - | - | - | - | - | |
| Phenanthrene | ug/L | 0 | 10 | - | 93 | - | 86 | - | 54 | 128 | 7 | 29 | - | - | - | - | - | - | - | - | - | - | |
| Phenol | ug/L | 0 | 10 | - | 51 | - | 44 | - | 25 | 125 | 16 | 20 | - | - | - | - | - | - | - | - | - | - | |
| Pentachlorophenol | ug/L | 0 | 20 | - | 83 | - | 75 | - | 28 | 136 | 10 | 20 | - | - | - | - | - | - | - | - | - | - | |
| Pyrene | ug/L | 0.14 | 10 | - | 87 | - | 82 | - | 47 | 136 | 5 | 20 | - | - | - | - | - | - | - | - | - | - | |
| Bis(2-chloroethoxy)methane | ug/L | 0 | 10 | - | 99 | - | 94 | - | 32 | 127 | 5 | 31 | - | - | - | - | - | - | - | - | - | - | |
| Bis(2-chloroethyl)ether | ug/L | 0 | 10 | - | 100 | - | 95 | - | 48 | 117 | 5 | 31 | - | - | - | - | - | - | - | - | - | - | |
| Bis(2-chloroisopropyl)ether | ug/L | 0 | 10 | - | 101 | - | 96 | - | 39 | 155 | 5 | 35 | - | - | - | - | - | - | - | - | - | - | |
| Bis(2-ethylhexyl)phthalate | ug/L | 2.8 | 10 | - | 92 | - | 90 | - | 15 | 176 | 2 | 25 | - | - | - | - | - | - | - | - | - | - | |
| [2-Fluorobiphenyl] | Percent | 101 | - | - | 99 | - | 98 | - | 43 | 125 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [2-Fluorophenol] | Percent | 72 | - | - | 76 | - | 67 | - | 25 | 125 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [2,4,6-Tribromophenol] | Percent | 100 | - | - | 97 | - | 96 | - | 25 | 134 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [Nitrobenzene-d5] | Percent | 100 | - | - | 99 | - | 99 | - | 32 | 125 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [Phenol-d5] | Percent | 52 | - | - | 57 | - | 49 | - | 25 | 125 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [Terphenyl-d14] | Percent | 93 | - | - | 89 | - | 89 | - | 42 | 126 | - | - | - | - | - | - | - | - | - | - | - | - | |
| Batch: DIESEL*97234 Method: 8015M - Modified 8015 | | | | | | | | | | | | | | | | | | | | | | | |
| TPH (Diesel Range) | mg/L | 0 | 0.5 | - | 101 | - | 105 | - | 61 | 143 | 4 | 30 | - | - | - | - | - | - | - | - | - | - | |
| JP-5 | mg/L | 0 | 0.5 | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | - | |
| [Naphthalene] | Percent | 85 | - | - | 82 | - | 67 | - | 55 | 127 | - | - | - | - | - | - | - | - | - | - | - | - | |
| [o-Terphenyl] | Percent | 98 | - | - | 129 | - | 127 | | 57 | 132 | - | - | - | - | - | - | - | - | - | - | - | - | |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:31:33 22 NOV 1997 - P. 1 :

000102

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 71 9*1 | | | | | | | | | |
| 081 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 9.01 | 8.81 | 102 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 10.10 | 8.81 | 115 | | 25 | 143 |
| 081 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 9.01 | 8.81 | 102 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 10.10 | 8.81 | 115 | | 25 | 143 |
| 70B | 2-Fluorophenol | 97212 | 10/27/97 | 1500 | 2600 | 57 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 1820 | 2600 | 69 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1221 | 1770 | 69 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1370 | 1770 | 77 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97212 | 10/27/97 | 2870 | 2600 | 108 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1600 | 1770 | 90 | | 32 | 136 |
| 15M | Naphthalene | 97236 | 10/23/97 | 1.69 | 2.12 | 80 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/23/97 | 2.01 | 2.12 | 95 | | 47 | 142 |
| 15M | a,a,a-Trifluorotoluene Re | 9787069 | 10/23/97 | 0.0525 | 0.0529 | 99 | | 71 | 131 |
| 70.SIM | 2-Fluorobiphenyl | 97212 | 10/27/97 | 810 | 1770 | 46 | | 34 | 135 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1000 | 1770 | 57 | | 32 | 136 |
| 60A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 44.4 | 52.9 | 84 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 60.1 | 52.9 | 114 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 50.4 | 52.9 | 95 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 52.7 | 52.9 | 100 | | 65 | 135 |
| 81 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 21 | 8.81 | 240 | Q | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 9.67 | 8.81 | 110 | | 25 | 143 |
| 10389*2 | | | | | | | | | |
| 31 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 8.78 | 8.60 | 102 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 11.3 | 8.60 | 131 | | 25 | 143 |
| 31 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 8.78 | 8.60 | 102 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 11.3 | 8.60 | 131 | | 25 | 143 |
| 70B | 2-Fluorophenol | 97212 | 10/27/97 | 1940 | 2600 | 75 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 2276 | 2600 | 88 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1530 | 1730 | 89 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1610 | 1730 | 93 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97212 | 10/27/97 | 2600 | 2600 | 101 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1440 | 1730 | 83 | | 32 | 136 |
| 5M | Naphthalene | 97236 | 10/24/97 | 1.79 | 2.07 | 87 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/24/97 | 2.21 | 2.07 | 107 | | 47 | 142 |
| 5M | a,a,a-Trifluorotoluene Re | 9787069 | 10/23/97 | 0.0544 | 0.0516 | 105 | | 71 | 131 |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 45.0 | 51.7 | 87 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 58.5 | 51.7 | 113 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 50.6 | 51.7 | 98 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 50.6 | 51.7 | 98 | | 65 | 135 |
| 0.SIM | 2-Fluorobiphenyl | 97212 | 10/27/97 | 924 | 1730 | 54 | | 34 | 135 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 933 | 1730 | 54 | | 32 | 136 |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 7.57 | 8.60 | 88 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 8.81 | 8.60 | 102 | | 25 | 143 |
| 0389*3 | | | | | | | | | |
| 0B | 2-Fluorophenol | 97207 | 10/25/97 | 46.6 | 75.0 | 62 | | 25 | 125 |
| | Phenol-d5 | 97207 | 10/25/97 | 38.7 | 75.0 | 52 | | 25 | 125 |
| | Nitrobenzene-d5 | 97207 | 10/25/97 | 42.1 | 50.0 | 84 | | 32 | 125 |
| | 2-Fluorobiphenyl | 97207 | 10/25/97 | 46.0 | 50.0 | 92 | | 43 | 125 |
| | 2,4,6-Tribromophenol Rep. | 97207 | 10/25/97 | 77.4 | 75.0 | 103 | | 25 | 134 |
| | Terphenyl-d14 | 97207 | 10/25/97 | 47.9 | 50.0 | 96 | | 42 | 126 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:31:45 22 NOV 1997 - P. 2 :

| HOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 5M | Naphthalene | 97234 | 10/22/97 | 0.0422 | 0.0500 | 84 | | 55 | 127 |
| | o-Terphenyl | 97234 | 10/22/97 | 0.0532 | 0.0500 | 106 | | 57 | 132 |
| 5M | a,a,a-Trifluorotoluene Re | 975143 | 10/22/97 | 0.0480 | 0.0500 | 96 | | 76 | 126 |
| 0A | 1,2-Dichloroethane-d4 Rep | 971169 | 10/21/97 | 49.6 | 50.0 | 99 | | 62 | 139 |
| | Dibromofluoromethane Rep. | 971169 | 10/21/97 | 44.3 | 50.0 | 89 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/21/97 | 45.4 | 50.0 | 91 | | 75 | 125 |
| | 4-Bromofluorobenzene Rep. | 971169 | 10/21/97 | 43.1 | 50.0 | 86 | | 75 | 125 |
| 1 | Tetrachloro-meta-xylene R | 97195 | 10/22/97 | 0.149 | 0.250 | 60 | | 45 | 125 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.248 | 0.250 | 99 | | 34 | 133 |
| 1 | Tetrachloro-meta-xylene R | 97195 | 10/22/97 | 0.149 | 0.250 | 60 | | 45 | 125 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.248 | 0.250 | 99 | | 34 | 133 |
| 1 | Tetrachloro-meta-xylene R | 97195 | 10/22/97 | 0.124 | 0.250 | 50 | | 45 | 125 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.215 | 0.250 | 86 | | 34 | 133 |
| )389*4 | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene Re | 975143 | 10/22/97 | 0.0456 | 0.0500 | 91 | | 76 | 126 |
| )A | 1,2-Dichloroethane-d4 Rep | 971169 | 10/21/97 | 47.5 | 50.0 | 95 | | 62 | 139 |
| | Dibromofluoromethane Rep. | 971169 | 10/21/97 | 45.4 | 50.0 | 91 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/21/97 | 43.5 | 50.0 | 87 | | 75 | 125 |
| | 4-Bromofluorobenzene Rep. | 971169 | 10/21/97 | 41.4 | 50.0 | 83 | | 75 | 125 |
| )389*5 | | | | | | | | | |
| )A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 52.5 | 60.2 | 87 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 67.2 | 60.2 | 112 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 57.1 | 60.2 | 95 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 58.6 | 60.2 | 97 | | 65 | 135 |
| 389*6 | | | | | | | | | |
| A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/24/97 | 42.0 | 52.9 | 79 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/24/97 | 57.0 | 52.9 | 108 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/24/97 | 51.7 | 52.9 | 98 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/24/97 | 51.7 | 52.9 | 98 | | 65 | 135 |

URROGATE RECOVERIES DRY WEIGHT CORRECTED :
C ANALYTICAL : GLEN LAB : 11:37:13 22 NOV 1997 - P. 1 :

| HOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 0 | 1*S1 | | | | | | | | |
| 5M | Naphthalene | 97236 | 10/23/97 | 1.57 | 2.12 | 74 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/23/97 | 2.77 | 2.12 | 131 | | 47 | 142 |
| 5M | a,a,a-Trifluorotoluene Re | 9787069 | 10/23/97 | 0.0573 | 0.0529 | 108 | | 71 | 131 |
| ).SIM | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1240 | 1770 | 70 | | 34 | 135 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1124 | 1770 | 64 | | 32 | 136 |
| )B | 2-Fluorophenol | 97212 | 10/27/97 | 2000 | 2600 | 76 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 2370 | 2600 | 90 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1615 | 1770 | 91 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1700 | 1770 | 96 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97212 | 10/27/97 | 2790 | 2600 | 106 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1570 | 1770 | 89 | | 32 | 136 |
| )A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 45.7 | 52.9 | 86 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 58.1 | 52.9 | 110 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 49.6 | 52.9 | 94 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 51.6 | 52.9 | 98 | | 65 | 135 |
| 1212*1*MB | | | | | | | | | |
| M | Naphthalene | 97234 | 10/21/97 | 0.0423 | 0.0500 | 85 | | 55 | 127 |
| | o-Terphenyl | 97234 | 10/21/97 | 0.0488 | 0.0500 | 98 | | 57 | 132 |
| 2330*1*LC | | | | | | | | | |
| M | Naphthalene | 97234 | 10/22/97 | 0.0410 | 0.0500 | 82 | | 55 | 127 |
| | -Terphenyl | 97234 | 10/22/97 | 0.0643 | 0.0500 | 129 | | 57 | 132 |
| 2331*1*LC | | | | | | | | | |
| 4 | Naphthalene | 97234 | 10/22/97 | 0.0336 | 0.0500 | 67 | | 55 | 127 |
| | o-Terphenyl | 97234 | 10/22/97 | 0.0637 | 0.0500 | 127 | | 57 | 132 |
| 215*1*MB | | | | | | | | | |
| 4 | Naphthalene | 97236 | 10/22/97 | 1.74 | 2.00 | 87 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/22/97 | 1.93 | 2.00 | 97 | | 47 | 142 |
| 336*1*LC | | | | | | | | | |
| | Naphthalene | 97236 | 10/23/97 | 2.04 | 2.00 | 102 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/23/97 | 2.59 | 2.00 | 130 | | 47 | 142 |
| 337*1*LC | | | | | | | | | |
| | Naphthalene | 97236 | 10/23/97 | 1.69 | 2.00 | 85 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/23/97 | 2.59 | 2.00 | 130 | | 47 | 142 |
| 1*1*R1 | | | | | | | | | |
| | a,a,a-Trifluorotoluene Re | 975143 | 10/21/97 | 0.0453 | 0.0500 | 91 | | 76 | 126 |
| 1 | S1 | | | | | | | | |
| | a,a,a-Trifluorotoluene Re | 975143 | 10/21/97 | 0.0522 | 0.0500 | 104 | | 76 | 126 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:37:18 22 NOV 1997 - P. 2 :

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 08781*1*S2 | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re975143 | 10/21/97 | 0.0529 | 0.0500 | 106 | | 76 | 126 |
| 101294*1*MB | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re975143 | 10/21/97 | 0.0559 | 0.0500 | 112 | | 76 | 126 |
| 102493*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re975143 | 10/21/97 | 0.0496 | 0.0500 | 99 | | 76 | 126 |
| 101500*1*MB | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0542 | 0.0500 | 108 | | 71 | 131 |
| 102900*1*LC | | | | | | | | | |
| 15M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0522 | 0.0500 | 104 | | 71 | 131 |
| 102901*1*LC | | | | | | | | | |
| 5M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0529 | 0.0500 | 106 | | 71 | 131 |
| 01149*1*MB | | | | | | | | | |
| 0 | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.180 | 0.250 | 72 | | 20 | 142 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.246 | 0.250 | 98 | | 20 | 147 |
| 01150*1*MB | | | | | | | | | |
| 0 | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.180 | 0.250 | 72 | | 20 | 142 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.246 | 0.250 | 98 | | 20 | 147 |
| 02208*1*LC | | | | | | | | | |
| 0 | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.260 | 0.250 | 104 | | 20 | 142 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.226 | 0.250 | 90 | | 20 | 147 |
| 02209*1*LC | | | | | | | | | |
| 0 | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.162 | 0.250 | 65 | | 20 | 142 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.150 | 0.250 | 60 | | 20 | 147 |
| 2210*1*LC | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.192 | 0.250 | 77 | | 20 | 142 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.187 | 0.250 | 75 | | 20 | 147 |
| 2211*1*LC | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.205 | 0.250 | 82 | | 20 | 142 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.179 | 0.250 | 72 | | 20 | 147 |
| 88*1*S1 | | | | | | | | | |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
3C ANALYTICAL : GLEN LAB : 11:37:21 22 NOV 1997 - P. 3 :

| HOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 31 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 8.59 | 9.36 | 92 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 11.00 | 9.36 | 118 | | 25 | 143 |
| 31 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 8.25 | 9.36 | 88 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 10.10 | 9.36 | 109 | | 25 | 143 |
| 0388*1*S2 | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 8.95 | 9.36 | 96 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 12.5 | 9.36 | 133 | | 25 | 143 |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 8.74 | 9.36 | 93 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 11.00 | 9.36 | 118 | | 25 | 143 |
| 0389*1*S2 | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 7.72 | 8.81 | 88 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 9.21 | 8.81 | 104 | | 25 | 143 |
| 5M | Naphthalene | 97236 | 10/23/97 | 1.61 | 2.12 | 76 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/23/97 | 2.78 | 2.12 | 132 | | 47 | 142 |
| 5M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0577 | 0.0529 | 109 | | 71 | 131 |
| 0.SIM | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1450 | 1770 | 82 | | 34 | 135 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1290 | 1770 | 73 | | 32 | 136 |
| 0B | 2-Fluorophenol | 97212 | 10/27/97 | 2320 | 2600 | 88 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 2630 | 2600 | 100 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1830 | 1770 | 104 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1870 | 1770 | 106 | | 34 | 135 |
| | 2,4,6-Tribromophenol | Rep.97212 | 10/27/97 | 3050 | 2600 | 115 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1700 | 1770 | 96 | | 32 | 136 |
| 0A | 1,2-Dichloroethane-d4 | Rep9787063 | 10/20/97 | 41.3 | 52.9 | 78 | | 52 | 149 |
| | Dibromofluoromethane | Rep.9787063 | 10/20/97 | 53.8 | 52.9 | 102 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 48.4 | 52.9 | 91 | | 65 | 135 |
| | 4-Bromofluorobenzene | Rep.9787063 | 10/20/97 | 49.2 | 52.9 | 93 | | 65 | 135 |
| 663*1*MB | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97194 | 10/23/97 | 7.10 | 8.33 | 85 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/23/97 | 10.2 | 8.33 | 122 | | 25 | 143 |
| 1298*1*MB | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97194 | 10/23/97 | 6.66 | 8.33 | 80 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/23/97 | 8.51 | 8.33 | 102 | | 25 | 143 |
| 1299*1*MB | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97194 | 10/23/97 | 6.66 | 8.33 | 80 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/23/97 | 8.51 | 8.33 | 102 | | 25 | 143 |
| 502*1*LC | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97194 | 10/23/97 | 8.01 | 8.33 | 96 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/23/97 | 9.29 | 8.33 | 112 | | 25 | 143 |
| 5 *LC | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 7.39 | 8.33 | 89 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 8.07 | 8.33 | 97 | | 25 | 143 |

URROGATE RECOVERIES DRY WEIGHT CORRECTED :
C ANALYTICAL : GLEN LAB : 11:37:27 22 NOV 1997 - P. 4 :

| HOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 03046*1*LC | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/23/97 | 8.41 | 8.33 | 101 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/23/97 | 9.23 | 8.33 | 111 | | 25 | 143 |
| 03144*1*LC | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 7.37 | 8.33 | 88 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 8.43 | 8.33 | 101 | | 25 | 143 |
| 11302*1*LC | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/23/97 | 6.83 | 8.33 | 82 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/23/97 | 9.08 | 8.33 | 109 | | 25 | 143 |
| 11303*1*LC | | | | | | | | | |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/23/97 | 7.78 | 8.33 | 93 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/23/97 | 9.62 | 8.33 | 115 | | 25 | 143 |
| 878*1*MB | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.159 | 0.250 | 64 | | 45 | 125 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.252 | 0.250 | 101 | | 34 | 133 |
| 1698*1*LC | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.146 | 0.250 | 58 | | 45 | 125 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.146 | 0.250 | 58 | | 34 | 133 |
| 1699*1*LC | | | | | | | | | |
| | Tetrachloro-meta-xylene | R97195 | 10/22/97 | 0.233 | 0.250 | 93 | | 45 | 125 |
| | Decachlorobiphenyl | 97195 | 10/22/97 | 0.218 | 0.250 | 87 | | 34 | 133 |
| 376*1*R1 | | | | | | | | | |
| 1 | Dibromofluoromethane | Rep.971169 | 10/20/97 | 43.1 | 50.0 | 86 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/20/97 | 44.1 | 50.0 | 88 | | 75 | 125 |
| | 4-Bromofluorobenzene | Rep.971169 | 10/20/97 | 41.4 | 50.0 | 83 | | 75 | 125 |
| 76*1*S1 | | | | | | | | | |
| | Dibromofluoromethane | Rep.971169 | 10/20/97 | 43.0 | 50.0 | 86 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/20/97 | 43.9 | 50.0 | 88 | | 75 | 125 |
| | 4-Bromofluorobenzene | Rep.971169 | 10/20/97 | 41.3 | 50.0 | 83 | | 75 | 125 |
| 76*1*S2 | | | | | | | | | |
| | Dibromofluoromethane | Rep.971169 | 10/20/97 | 41.4 | 50.0 | 83 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/20/97 | 44.7 | 50.0 | 89 | | 75 | 125 |
| | 4-Bromofluorobenzene | Rep.971169 | 10/20/97 | 41.4 | 50.0 | 83 | | 75 | 125 |
| 36*1*MB | | | | | | | | | |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:37:34 22 NOV 1997 - P. 5 :

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 6 | 1,2-Dichloroethane-d4 Rep | 971169 | 10/20/97 | 46.1 | 50.0 | 92 | | 62 | 139 |
| | Dibromofluoromethane Rep. | 971169 | 10/20/97 | 45.2 | 50.0 | 90 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/20/97 | 45.3 | 50.0 | 91 | | 75 | 125 |
| | 4-Bromofluorobenzene Rep. | 971169 | 10/20/97 | 41.6 | 50.0 | 83 | | 75 | 125 |
| 102540*1*LC | | | | | | | | | |
| 50A | 1,2-Dichloroethane-d4 Rep | 971169 | 10/20/97 | 48.0 | 50.0 | 96 | | 62 | 139 |
| | Dibromofluoromethane Rep. | 971169 | 10/20/97 | 43.3 | 50.0 | 87 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/20/97 | 43.2 | 50.0 | 86 | | 75 | 125 |
| | 4-Bromofluorobenzene Rep. | 971169 | 10/20/97 | 44.2 | 50.0 | 88 | | 75 | 125 |
| 102541*1*LC | | | | | | | | | |
| 50A | 1,2-Dichloroethane-d4 Rep | 971169 | 10/21/97 | 44.6 | 50.0 | 89 | | 62 | 139 |
| | Dibromofluoromethane Rep. | 971169 | 10/21/97 | 42.6 | 50.0 | 85 | | 75 | 125 |
| | Toluene-d8 | 971169 | 10/21/97 | 44.6 | 50.0 | 89 | | 75 | 125 |
| | 4-Bromofluorobenzene Rep. | 971169 | 10/21/97 | 44.3 | 50.0 | 89 | | 75 | 125 |
| 01533*1*MB | | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 45.9 | 50.0 | 92 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 56.3 | 50.0 | 113 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 47.6 | 50.0 | 95 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 48.0 | 50.0 | 96 | | 65 | 135 |
| 0 | *1*LC | | | | | | | | |
| 0A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 47.2 | 50.0 | 94 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 54.3 | 50.0 | 109 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 50.2 | 50.0 | 100 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 49.3 | 50.0 | 99 | | 65 | 135 |
| 2492*1*LC | | | | | | | | | |
| A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 43.0 | 50.0 | 86 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 50.3 | 50.0 | 101 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 46.1 | 50.0 | 92 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 45.4 | 50.0 | 91 | | 65 | 135 |
| 2963*1*LC | | | | | | | | | |
| A | 1,2-Dichloroethane-d4 Rep | 9787063 | 10/20/97 | 43.0 | 50.0 | 86 | | 52 | 149 |
| | Dibromofluoromethane Rep. | 9787063 | 10/20/97 | 50.3 | 50.0 | 101 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 46.1 | 50.0 | 92 | | 65 | 135 |
| | 4-Bromofluorobenzene Rep. | 9787063 | 10/20/97 | 45.4 | 50.0 | 91 | | 65 | 135 |
| 201*1*MB | | | | | | | | | |
| | 2-Fluorophenol | 97207 | 10/21/97 | 54.1 | 75.0 | 72 | | 21 | 100 |
| | Phenol-d5 | 97207 | 10/21/97 | 39.2 | 75.0 | 52 | | 10 | 94 |
| | Nitrobenzene-d5 | 97207 | 10/21/97 | 50.2 | 50.0 | 100 | | 35 | 114 |
| | -Fluorobiphenyl | 97207 | 10/21/97 | 50.7 | 50.0 | 101 | | 43 | 116 |
| | 2,4,6-Tribromophenol Rep. | 97207 | 10/21/97 | 75.0 | 75.0 | 100 | | 10 | 123 |
| | Terphenyl-d14 | 97207 | 10/21/97 | 46.3 | 50.0 | 93 | | 33 | 141 |

SURROGATE RECOVERIES DRY WEIGHT CORRECTED :
BC ANALYTICAL : GLEN LAB : 11:37:44 22 NOV 1997 - P. 6 :

| THOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 102308*1*LC | | | | | | | | | |
| 70 | 2-Fluorophenol | 97207 | 10/21/97 | 56.8 | 75.0 | 76 | | 21 | 100 |
| | Phenol-d5 | 97207 | 10/21/97 | 42.8 | 75.0 | 57 | | 10 | 93 |
| | Nitrobenzene-d5 | 97207 | 10/21/97 | 49.4 | 50.0 | 99 | | 37 | 114 |
| | 2-Fluorobiphenyl | 97207 | 10/21/97 | 49.6 | 50.0 | 99 | | 43 | 116 |
| | 2,4,6-Tribromophenol Rep. | 97207 | 10/21/97 | 72.4 | 75.0 | 97 | | 40 | 123 |
| | Terphenyl-d14 | 97207 | 10/21/97 | 44.4 | 50.0 | 89 | | 33 | 141 |
| 102309*1*LC | | | | | | | | | |
| 70 | 2-Fluorophenol | 97207 | 10/21/97 | 50.2 | 75.0 | 67 | | 21 | 100 |
| | Phenol-d5 | 97207 | 10/21/97 | 36.4 | 75.0 | 49 | | 10 | 93 |
| | Nitrobenzene-d5 | 97207 | 10/21/97 | 49.7 | 50.0 | 99 | | 37 | 114 |
| | 2-Fluorobiphenyl | 97207 | 10/21/97 | 49.1 | 50.0 | 98 | | 43 | 116 |
| | 2,4,6-Tribromophenol Rep. | 97207 | 10/21/97 | 72.0 | 75.0 | 96 | | 40 | 123 |
| | Terphenyl-d14 | 97207 | 10/21/97 | 44.4 | 50.0 | 89 | | 33 | 141 |
| 01647*1*MB | | | | | | | | | |
| 0B | 2-Fluorophenol | 97212 | 10/27/97 | 1790 | 2500 | 72 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 2049 | 2500 | 82 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1380 | 1670 | 83 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1460 | 1670 | 87 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97212 | 10/27/97 | 1350 | 2500 | 54 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1360 | 1670 | 81 | | 32 | 136 |
| 03173*1*LC | | | | | | | | | |
| 0B | 2-Fluorophenol | 97212 | 10/27/97 | 1280 | 2500 | 51 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 1540 | 2500 | 62 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1056 | 1670 | 63 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1140 | 1670 | 68 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97212 | 10/27/97 | 1860 | 2500 | 74 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1093 | 1670 | 65 | | 32 | 136 |
| 3174*1*LC | | | | | | | | | |
| B | 2-Fluorophenol | 97212 | 10/27/97 | 2011 | 2500 | 80 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 2250 | 2500 | 90 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1580 | 1670 | 95 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1680 | 1670 | 101 | | 34 | 135 |
| | 2,4,6-Tribromophenol Rep. | 97212 | 10/27/97 | 2700 | 2500 | 108 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1460 | 1670 | 87 | | 32 | 136 |
| 88*1*R1 | | | | | | | | | |
| | Tetrachloro-meta-xylene R | 97194 | 10/24/97 | 7.81 | 9.36 | 83 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 11.3 | 9.36 | 121 | | 25 | 143 |
| | Tetrachloro-meta-xylene R | 97194 | 10/24/97 | 7.81 | 9.36 | 83 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 11.3 | 9.36 | 121 | | 25 | 143 |
| | Tetrachloro-meta-xylene R | 97194 | 10/24/97 | 7.82 | 9.36 | 84 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 10.60 | 9.36 | 113 | | 25 | 143 |
| 89*1*R1 | | | | | | | | | |

| HOD | ANALYTE | BATCH | ANALYZED | REPORTED | TRUE | %REC | FLAG | LCL | UCL |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 9.01 | 8.81 | 102 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 10.10 | 8.81 | 115 | | 25 | 143 |
| 1 | Tetrachloro-meta-xylene | R97194 | 10/24/97 | 9.01 | 8.81 | 102 | | 35 | 135 |
| | Decachlorobiphenyl | 97194 | 10/24/97 | 10.10 | 8.81 | 115 | | 25 | 143 |
| 5M | Naphthalene | 97236 | 10/23/97 | 1.69 | 2.12 | 80 | | 52 | 145 |
| | o-Terphenyl | 97236 | 10/23/97 | 2.01 | 2.12 | 95 | | 47 | 142 |
| 5M | a,a,a-Trifluorotoluene | Re9787069 | 10/23/97 | 0.0525 | 0.0529 | 99 | | 71 | 131 |
| 0.SIM | 2-Fluorobiphenyl | 97212 | 10/27/97 | 810 | 1770 | 46 | | 34 | 135 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1000 | 1770 | 57 | | 32 | 136 |
| OB | 2-Fluorophenol | 97212 | 10/27/97 | 1500 | 2600 | 57 | | 25 | 135 |
| | Phenol-d5 | 97212 | 10/27/97 | 1820 | 2600 | 69 | | 25 | 135 |
| | Nitrobenzene-d5 | 97212 | 10/27/97 | 1221 | 1770 | 69 | | 25 | 135 |
| | 2-Fluorobiphenyl | 97212 | 10/27/97 | 1370 | 1770 | 77 | | 34 | 135 |
| | 2,4,6-Tribromophenol | Rep.97212 | 10/27/97 | 2870 | 2600 | 108 | | 25 | 144 |
| | Terphenyl-d14 | 97212 | 10/27/97 | 1600 | 1770 | 90 | | 32 | 136 |
| OA | 1,2-Dichloroethane-d4 | Rep9787063 | 10/20/97 | 44.4 | 52.9 | 84 | | 52 | 149 |
| | Dibromofluoromethane | Rep.9787063 | 10/20/97 | 60.1 | 52.9 | 114 | | 65 | 135 |
| | Toluene-d8 | 9787063 | 10/20/97 | 50.4 | 52.9 | 95 | | 65 | 135 |
| | 4-Bromofluorobenzene | Rep.9787063 | 10/20/97 | 52.7 | 52.9 | 100 | | 65 | 135 |

# *Appendix H*
# *LDC Data Validation Report*

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** October 17, 1997

**LDC Report Date:** June 30, 1998

**Matrix:** Soil

**Parameters:** Total Petroleum Hydrocarbons as Gasoline

**Validation Level:** NFESC Level C & D

**Laboratory:** VOC Analytical Laboratories, Inc.

**Sample Delivery Group (SDG):** G9710409

**Sample Identification**

18609-643
18609-645
18609-647
18609-649**
18609-651
18609-653
18609-655
18609-657
18609-659
18609-661
18609-663
18609-665
18609-667
18609-659MS
18609-659MSD

**Indicates sample underwent NFESC Level D review

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. Calibration

### a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ($r^2$) was greater than or equal to 0.990 .

### b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

## III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Analysis Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| Meth.Blk.9787066 | 10/23/97 | TPH as gasoline | 0.0087 mg/Kg | 18609-643<br>18609-645<br>18609-647 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater ( >5X blank contaminants) than the concentrations found in the associated method blanks.

## IV. Accuracy and Precision Data

### a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

### b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each

## Introduction

This data review covers 15 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

### c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## V. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VII. System Performance

The system performance was within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro**
**Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG G9710409**

No Sample Data Qualified in this SDG

**MCAS El Toro**
**Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG G9710409**

No Sample Data Qualified in this SDG

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** October 17, 1997

**LDC Report Date:** June 29, 1998

**Matrix:** Soil

**Parameters:** Total Petroleum Hydrocarbons as Extractables

**Validation Level:** NFESC Level C & D

**Laboratory:** VOC Analytical Laboratories, Inc.

**Sample Delivery Group (SDG):** G9710409

**Sample Identification**

18609-643
18609-645
18609-647
18609-649**
18609-651
18609-653
18609-655
18609-657
18609-659
18609-661
18609-663
18609-665
18609-667
18609-667MS
18609-667MSD

**Indicates sample underwent NFESC Level D review

## Introduction

This data review covers 15 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Extractables.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. Calibration

### a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ($r^2$) was greater than or equal to 0.990 .

### b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

## III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as extractable contaminants were found in the method blanks.

## IV. Accuracy and Precision Data

### a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

### b. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

### c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## V. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples

reviewed by Level C criteria.

## VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VII. System Performance

The system performance was within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Field Blanks

No field blanks were identified in this SDG.

**MCAS** El Toro
**Total** Petroleum Hydrocarbons as Extractables - Data Qualification Summary - SDG G9710409

No Sample Data Qualified in this SDG

**MCAS** El Toro
**Total** Petroleum Hydrocarbons as Extractables - Laboratory Blank Data Qualification Summary - SDG G9710409

No Sample Data Qualified in this SDG

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** October 17, 1997

**LDC Report Date:** June 29, 1998

**Matrix:** Soil

**Parameters:** Volatiles

**Validation Level:** NFESC Level C & D

**Laboratory:** VOC Analytical Laboratories, Inc.

**Sample Delivery Group (SDG):** G9710409

**Sample Identification**

| | |
|---|---|
| 18609-643 | 18609-658 |
| 18609-645 | 18609-660 |
| 18609-647 | 18609-662 |
| 18609-649** | 18609-664 |
| 18609-651 | 18609-666 |
| 18609-653 | 18609-668 |
| 18609-655 | 18609-667MS |
| 18609-657 | 18609-667MSD |
| 18609-659 | 18609-668MS |
| 18609-661 | 18609-668MSD |
| 18609-663 | |
| 18609-665 | |
| 18609-667 | |
| 18609-644 | |
| 18609-646 | |
| 18609-648 | |
| 18609-650 | |
| 18609-652 | |
| 18609-654 | |
| 18609-656 | |

**Indicates sample underwent NFESC Level D review

## Introduction

This data review covers 30 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8260A for Volatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

The samples were analyzed after the BFB tuning. The instrument performance check could not be verified at the 12 hour interval.

All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all volatile target compounds and system monitoring compounds were within validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 10/22/97 | Acetone | 0.032 (≥0.05) | All samples in SDG G9710409 | J (all detects)<br>R (all non-detects) | A |
| | Vinyl acetate | 0.030 (≥0.05) | | J (all detects)<br>R (all non-detects) | |

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 25.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds with the following exceptions:

| Date | Compound | %D (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 10/24/97 | Acetone | 100 (≤50) | 18609-644<br>18609-646<br>18609-648<br>18609-650<br>18609-652<br>18609-654<br>18609-656<br>18609-658<br>18609-660<br>18609-662<br>18609-664<br>18609-666<br>18609-668<br>18609-668MS<br>18609-668MSD<br>B71016321 | J | A |

All of the continuing calibration RRF values were within validation criteria with the following exceptions:

| Date | Compound | RRF (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 10/24/97 | Vinyl acetate<br><br>2-Butanone | 0.028 (≥0.05)<br><br>0.046 (≥0.05) | 18609-644<br>18609-646<br>18609-648<br>18609-650<br>18609-652<br>18609-654<br>18609-656<br>18609-658<br>18609-660<br>18609-662<br>18609-664<br>18609-666<br>18609-668<br>18609-668MS<br>18609-668MSD<br>B71016321 | J (all detects)<br>R (all non-detects) | A |
| 10/25/97 | Acetone<br>Vinyl acetate<br>2-Butanone | 0.020 (≥0.05)<br>0.025 (≥0.05)<br>0.029 (≥0.05) | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667<br>18609-667MS<br>18609-667MSD<br>B71016391 | J (all detects)<br>R (all non-detects) | A |

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No volatile contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Analysis Date | Compound TIC (RT in minutes) | Concentration | Associated Samples |
|---|---|---|---|---|
| B71016391 | 10/25/97 | Acetone | 6.2 ug/Kg | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667 |
| B71016321 | 10/24/97 | Methyl isobutyl ketone<br>Acetone<br>2-Hexanone<br>Methyl ethyl ketone | 0.82 ug/Kg<br>97 ug/Kg<br>1.4 ug/Kg<br>1.9 ug/Kg | 18609-644<br>18609-646<br>18609-648<br>18609-650<br>18609-652<br>18609-654<br>18609-656<br>18609-658<br>18609-660<br>18609-662<br>18609-664<br>18609-666<br>18609-668 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found in the associated method blanks with the following exceptions:

| Sample | Compound TIC (RT in minutes) | Reported Concentration | Modified Final Concentration |
|---|---|---|---|
| 18609-652 | Acetone | 25 ug/Kg | 55U ug/Kg |

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each

matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable with the following exceptions:

| Sample | Compound | Finding | Criteria | Flag | A or P |
|---|---|---|---|---|---|
| All samples in SDG G9710409 | All TCL compounds | The LCS was analyzed as a continuing calibration standard. | The LCS should be analyzed independently from the calibration. | None | P |

Percent recoveries (%R) were within QC limits.

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

## XIV. System Performance

The system performance was within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XV. Overall Assessment of Data

Data flags have been summarized at the end of the report.

## XVI. Field Duplicates

No field duplicates were identified in this SDG.

## XVII. Field Blanks

No field blanks were identified in this SDG.

## MCAS El Toro
## Volatiles - Data Qualification Summary - SDG G9710409

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667<br>18609-644<br>18609-646<br>18609-648<br>18609-650<br>18609-652<br>18609-654<br>18609-656<br>18609-658<br>18609-660<br>18609-662<br>18609-664<br>18609-666<br>18609-668 | Acetone<br>Vinyl acetate | J ~~(all detects)~~<br>~~R (all non-detects)~~ | A | Initial calibration (RRF) |
| G9710409 | 18609-644<br>18609-646<br>18609-648<br>18609-650<br>18609-652<br>18609-654<br>18609-656<br>18609-658<br>18609-660<br>18609-662<br>18609-664<br>18609-666<br>18609-668 | Acetone | J | A | Continuing calibration (%D) |
| G9710409 | 18609-644<br>18609-646<br>18609-648<br>18609-650<br>18609-652<br>18609-654<br>18609-656<br>18609-658<br>18609-660<br>18609-662<br>18609-664<br>18609-666<br>18609-668 | Vinyl acetate<br><br>2-Butanone | J ~~(all detects)~~<br>~~R (all non-detects)~~<br>J ~~(all detects)~~<br>~~R (all non-detects)~~ | A | Continuing calibration (RRF) |

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667 | Acetone<br>Vinyl acetate<br>2-Butanone | J (all detects)<br>R (all non-detects) | A | Continuing calibration (RRF) |
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667<br>18609-644<br>18609-646<br>18609-648<br>18609-650<br>18609-652<br>18609-654<br>18609-656<br>18609-658<br>18609-660<br>18609-662<br>18609-664<br>18609-666<br>18609-668 | All TCL compounds | None | P | Laboratory control samples |

## MCAS El Toro
## Volatiles - Laboratory Blank Data Qualification Summary - SDG G9710409

| SDG | Sample | Compound TIC (RT in minutes) | Modified Final Concentration | A or P |
|---|---|---|---|---|
| G9740409 | 18609-652 | Acetone | 55U ug/Kg | A |

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** October 17, 1997

**LDC Report Date:** June 30, 1998

**Matrix:** Soil

**Parameters:** Semivolatiles

**Validation Level:** NFESC Level C & D

**Laboratory:** VOC Analytical Laboratories, Inc.

**Sample Delivery Group (SDG):** G9710409

**Sample Identification**

18609-643
18609-645
18609-647
18609-649**
18609-651
18609-653
18609-655
18609-657
18609-659
18609-661
18609-663
18609-665
18609-667

**Indicates sample underwent NFESC Level D review

## Introduction

This data review covers 13 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270B for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

The samples were analyzed after the DFTPP tuning. The instrument performance check could not be verified at the 12 hour interval.

All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required.

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 20.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Extraction Date | Compound TIC (RT in minutes) | Concentration | Associated Samples |
|---|---|---|---|---|
| B7101781*1*MB | 10/21/97 | Di-n-butylphthalate | 150 ug/Kg | All samples in SDG G9710409 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater (>10X for common contaminants, >5X for other contaminants) than the concentrations found

in the associated method blanks with the following exceptions:

| Sample | Compound TIC (RT in minutes) | Reported Concentration | Modified Final Concentration |
|---|---|---|---|
| 18609-643 | Di-n-butylphthalate | 150 ug/Kg | 380U ug/Kg |
| 18609-645 | Di-n-butylphthalate | 290 ug/Kg | 380U ug/Kg |
| 18609-647 | Di-n-butylphthalate | 200 ug/Kg | 370U ug/Kg |
| 18609-649** | Di-n-butylphthalate | 230 ug/Kg | 380U ug/Kg |
| 18609-651 | Di-n-butylphthalate | 190 ug/Kg | 380U ug/Kg |
| 18609-653 | Di-n-butylphthalate | 150 ug/Kg | 370U ug/Kg |
| 18609-655 | Di-n-butylphthalate | 170 ug/Kg | 380U ug/Kg |
| 18609-657 | Di-n-butylphthalate | 220 ug/Kg | 370U ug/Kg |
| 18609-659 | Di-n-butylphthalate | 210 ug/Kg | 370U ug/Kg |
| 18609-661 | Di-n-butylphthalate | 220 ug/Kg | 380U ug/Kg |
| 18609-663 | Di-n-butylphthalate | 170 ug/Kg | 360U ug/Kg |
| 18609-665 | Di-n-butylphthalate | 160 ug/Kg | 370U ug/Kg |

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) were within QC limits.

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

All internal standard areas and retention times were within QC limits.

## XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

## XIV. System Performance

The system performance was within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XV. Overall Assessment

Data flags have been summarized at the end of the report.

## XVI. Field Duplicates

No field duplicates were identified in this SDG.

## XVII. Field Blanks

No field blanks were identified in this SDG.

## MCAS El Toro
## Semivolatiles - Data Qualification Summary - SDG G9710409

No Sample Data Qualified in this SDG

## MCAS El Toro
## Semivolatiles - Laboratory Blank Data Qualification Summary - SDG G9710409

| SDG | Sample | Compound TIC (RT in minutes) | Modified Final Concentration | A or P |
|---|---|---|---|---|
| G9710409 | 18609-643 | Di-n-butylphthalate | 380U ug/Kg | A |
| G9710409 | 18609-645 | Di-n-butylphthalate | 380U ug/Kg | A |
| G9710409 | 18609-647 | Di-n-butylphthalate | 370U ug/Kg | A |
| G9710409 | 18609-649** | Di-n-butylphthalate | 380U ug/Kg | A |
| G9710409 | 18609-651 | Di-n-butylphthalate | 380U ug/Kg | A |
| G9710409 | 18609-653 | Di-n-butylphthalate | 370U ug/Kg | A |
| G9710409 | 18609-655 | Di-n-butylphthalate | 380U ug/Kg | A |
| G9710409 | 18609-657 | Di-n-butylphthalate | 370U ug/Kg | A |
| G9710409 | 18609-659 | Di-n-butylphthalate | 370U ug/Kg | A |
| G9710409 | 18609-661 | Di-n-butylphthalate | 380U ug/Kg | A |
| G9710409 | 18609-663 | Di-n-butylphthalate | 360U ug/Kg | A |
| G9710409 | 18609-665 | Di-n-butylphthalate | 370U ug/Kg | A |

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** October 17, 1997

**LDC Report Date:** June 29, 1998

**Matrix:** Soil

**Parameters:** Semivolatiles

**Validation Level:** NFESC Level C & D

**Laboratory:** VOC Analytical Laboratories, Inc.

**Sample Delivery Group (SDG):** G9710409

**Sample Identification**

18609-643
18609-645
18609-647
18609-649**
18609-651
18609-653
18609-655
18609-657
18609-659
18609-661
18609-663
18609-665
18609-667

**Indicates sample underwent NFESC Level D review

## Introduction

This data review covers 13 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8270-SIM for Semivolatiles.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XVI.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/MS Instrument Performance Check

The samples were analyzed after the DFTPP tuning. The instrument performance check could not be verified at the 12 hour interval.

All ion abundance requirements were met.

## III. Initial Calibration

Initial calibration was performed using required standard concentrations.

Percent relative standard deviations (%RSD) were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

Average relative response factors (RRF) for all semivolatile target compounds and system monitoring compounds were greater than or equal to 0.05 as required.

## IV. Continuing Calibration

Continuing calibration was performed at the required frequencies.

All of the continuing calibration percent differences (%D) between the initial calibration RRF and the continuing calibration RRF were less than or equal to 30.0% for all calibration check compounds and less than or equal to 50.0% for all other compounds.

All of the continuing calibration RRF values were greater than or equal to 0.05 .

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No semivolatile contaminants were found in the method blanks.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were

within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| LCS ID (Associated Samples) | Compound | LCS %R (Limits) | LCSD %R (Limits) | RPD (Limits) | Flag | A or P |
|---|---|---|---|---|---|---|
| 97209LCS/D (All samples in SDG G9710409) | N-Nitroso-di-n-propylamine<br>Pentachlorophenol | - | 136 (27-135)<br>187 (38-146) | -<br>50 (≤30) | J (all detects)<br>J | A |

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Internal Standards

Internal standard data were not provided and therefore not reviewed.

## XI. Target Compound Identifications

All target compound identifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XII. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XIII. Tentatively Identified Compounds (TICs)

Tentatively identified compounds were not reported by the laboratory.

## XIV. System Performance

The system performance was within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XV. Overall Assessment

Data flags have been summarized at the end of the report.

## XVI. Field Duplicates

No field duplicates were identified in this SDG.

## XVII. Field Blanks

No field blanks were identified in this SDG.

## MCAS El Toro
## Semivolatiles - Data Qualification Summary - SDG G9710409

| SDG | Sample | Compound | Flag | A or P | Reason |
|---|---|---|---|---|---|
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667 | N-Nitroso-di-n-propylamine<br>Pentachlorophenol | J (~~all detects~~)<br>J | A | Laboratory control samples (%R)(RPD) |

## MCAS El Toro
## Semivolatiles - Laboratory Blank Data Qualification Summary - SDG G9710409

No Sample Data Qualified in this SDG

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** October 17, 1997

**LDC Report Date:** June 30, 1998

**Matrix:** Soil

**Parameters:** Chlorinated Pesticides & PCBs

**Validation Level:** NFESC Level C & D

**Laboratory:** VOC Analytical Laboratories, Inc.

**Sample Delivery Group (SDG):** G9710409

**Sample Identification**

18609-643
18609-645
18609-647
18609-649**
18609-651
18609-653
18609-655
18609-657
18609-659
18609-661
18609-663
18609-665
18609-667
18609-647MS
18609-647MSD

**Indicates sample underwent NFESC Level D review.

## Introduction

This data review covers 15 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8081 for Chlorinated Pesticides and PCBs.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section V.

Field duplicates are summarized in Section XIV.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. GC/ECD Instrument Performance Check

Instrument performance was acceptable unless noted otherwise under initial calibration and continuing calibration sections.

## III. Initial Calibration

Initial calibration of single and multicomponent compounds was performed for the primary (quantitation) column and confirmation column as required by this method.

A curve fit, based on the initial calibration, was established for quantitation. The coefficient of determination ($r^2$) was greater than or equal to 0.990 .

Retention time windows were not provided and therefore not reviewed.

## IV. Continuing Calibration

Continuing calibration was performed at required frequencies for all other samples.

The percent differences (%D) of calibration factors in continuing standard mixtures were within the 15.0% QC limits.

Retention time windows were not provided and therefore not reviewed.

The individual 4,4'-DDT and Endrin breakdowns were less than or equal to 20.0% .

## V. Blanks

Method blanks were reviewed for each matrix as applicable. No chlorinated pesticide or PCB contaminants were found in the method blanks with the following exceptions:

| Method Blank ID | Extraction Date | Compound | Concentration | Associated Samples |
|---|---|---|---|---|
| B711838-1-MB | 10/22/97 | Aldrin | 0.17 ug/Kg | All samples in SDG G9710409 |

Sample concentrations were compared to concentrations detected in the method blanks. The sample concentrations were either not detected or were significantly greater ( >5X blank contaminants) than the concentrations found in the associated method blanks.

## VI. Surrogate Spikes

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

## VII. Matrix Spike/Matrix Spike Duplicates

Matrix spike (MS) and matrix spike duplicate (MSD) samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## IX. Regional Quality Assurance and Quality Control

Not applicable.

## X. Pesticide Cleanup Checks

### a. Florisil Cartridge Check

Florisil cleanup was not required and therefore not performed in this SDG.

### b. GPC Calibration

GPC cleanup was not required and therefore not performed in this SDG.

## XI. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XII. Compound Quantitation and Reported CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which an NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XIII. Overall Assessment of Data

Data flags are summarized at the end of this report.

## XIV. Field Duplicates

No field duplicates were identified in this SDG.

## XV. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro**
**Chlorinated Pesticides & PCBs - Data Qualification Summary - SDG G9710409**

No Sample Data Qualified in this SDG

**MCAS El Toro**
**Chlorinated Pesticides & PCBs - Laboratory Blank Data Qualification Summary - SDG G9710409**

No Sample Data Qualified in this SDG

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** October 17, 1997

**LDC Report Date:** June 30, 1998

**Matrix:** Soil

**Parameters:** Metals & Cyanide

**Validation Level:** NFESC Level C & D

**Laboratory:** VOC Analytical Laboratories, Inc.

**Sample Delivery Group (SDG):** G9710409

**Sample Identification**

18609-643
18609-645
18609-647
18609-649**
18609-651
18609-653
18609-655
18609-657
18609-659
18609-661
18609-663
18609-665
18609-667
18609-647MS
18609-647MSD
18609-643MS
18609-643MSD

**Indicates sample underwent NFESC Level D review

## Introduction

This data review covers 17 soil samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Methods 6010 and 7000 for Metals and EPA SW 846 Method 9010A for Cyanide. The metals analyzed were Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Vanadium, and Zinc.

The review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review (February 1994) as there are no current guidelines for the methods stated above.

A table summarizing all data qualification flags is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from specified protocols or is of technical advisory nature.

Blanks are summarized in Section III.

Field duplicates are summarized in Section XIII.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. Calibration

An initial calibration was performed.

The frequency and analysis criteria of the initial calibration verification (ICV) and continuing calibration verification (CCV) were met with the following exceptions:

| Sample | Analyte | Finding | Criteria | Flag | A or P |
|---|---|---|---|---|---|
| All samples in SDG G9710409 | Cyanide | Calibration verification not performed at the required frequencies. | Calibration verification should be performed immediately following initial calibration and once every ten samples. | None | P |

## III. Blanks

Method blanks were reviewed for each matrix as applicable.

Data qualification by the initial, continuing and preparation blanks (ICB/CCB/PBs) was based on the maximum contaminant concentration in the ICB/CCB/PBs in the analysis of each analyte. No contaminant concentrations were found above the reporting limit in the initial, continuing and preparation blanks.

## IV. ICP Interference Check Sample (ICS) Analysis

The frequency of analysis was met.

The criteria for analysis were met.

## V. Matrix Spike Analysis

Matrix spike (MS) and matrix spike duplicate (MSD) analyses were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits with the following exceptions:

| Spike ID (Associated Samples) | Analyte | MS (%R) (Limits) | MSD (%R) (Limits) | RPD (Limits) | Flag | A or P |
|---|---|---|---|---|---|---|
| 18609-643MS/MSD (All samples in SDG G9710409) | Selenium | 13 (73-122) | 21 (73-122) | - | J (all detects)<br>R (all non-detects) | A |
| | Antimony | 29 (80-120) | 31 (80-120) | - | J (all detects)<br>R (all non-detects) | |
| 18609-598MS/MSD (All samples in SDG G9710409) | Arsenic | 67 (74-120) | 71 (74-120) | - | J | A |
| | Copper | - | 76 (80-120) | - | J | |
| | Zinc | - | 72 (80-120) | - | J | |
| | Aluminum | 147 (80-120) | - | - | J (all detects) | |
| | Barium | 125 (80-120) | - | - | J (all detects) | |

## VI. Duplicate Sample Analysis

Duplicate (DUP) sample analyses were reviewed for each matrix as applicable.

## VII. Laboratory Control Samples (LCS)

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## VIII. Internal Standards

ICP-MS was not utilized in this SDG.

## IX. Furnace Atomic Absorption QC

All graphite furnace atomic absorption QC were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for samples reviewed by Level C criteria.

## X. ICP Serial Dilution

Although ICP serial dilution analysis was not required by the method, it was performed by the laboratory. The analysis criteria were met with the following exceptions:

| Diluted Sample | Analyte | %D (Limits) | Associated Samples | Flag | A or P |
|---|---|---|---|---|---|
| 18609-643L | Zinc | 51.6 (≤10) | All samples in SDG G9710409 | J | A |

## XI. Sample Result Verification

All sample result verifications met validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## XII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

## XIII. Field Duplicates

No field duplicates were identified in this SDG.

## XIV. Field Blanks

No field blanks were identified in this SDG.

## MCAS El Toro -
## Metals - Data Qualification Summary - SDG G9710409

| SDG | Sample | Analyte | Flag | A or P | Reason |
|---|---|---|---|---|---|
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667 | Cyanide | None | P | Calibration |
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667 | Selenium<br><br>Antimony | J (all detects)<br>R (all non-detects)<br>J (all detects)<br>R (all non-detects) | A | Matrix spike analysis (%R) |
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667 | Arsenic<br>Copper<br>Zinc<br>Aluminum<br>Barium | J<br>J<br>J<br>J (all detects)<br>J (all detects) | A | Matrix spike analysis (%R) |
| G9710409 | 18609-643<br>18609-645<br>18609-647<br>18609-649**<br>18609-651<br>18609-653<br>18609-655<br>18609-657<br>18609-659<br>18609-661<br>18609-663<br>18609-665<br>18609-667 | Zinc | J | A | ICP serial dilution (%D) |

**MCAS El Toro**
**Metals - Laboratory Blank Data Qualification Summary - SDG G9710409**

No Sample Data Qualified in this SDG

# Laboratory Data Consultants, Inc.
# Data Validation Report

**Project/Site Name:** MCAS El Toro

**Collection Date:** August 12, 1998

**LDC Report Date:** December 22, 1998

**Matrix:** Water

**Parameters:** Total Petroleum Hydrocarbons as Gasoline

**Validation Level:** NFESC Level C & D

**Laboratory:** EMAX Laboratories, Inc.

**Sample Delivery Group (SDG):** 98H049

**Sample Identification**

18609-965
18609-966**

**Indicates sample underwent NFESC Level D review

## Introduction

This data review covers 2 water samples listed on the cover sheet including dilutions and reanalysis as applicable. The analyses were per EPA SW 846 Method 8015 modified for Total Petroleum Hydrocarbons (TPH) as Gasoline.

This review follows a modified outline of the USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review (February 1994) as there are no current guidelines for the method stated above.

A table summarizing all data qualification is provided at the end of this report. Flags are classified as P (protocol) or A (advisory) to indicate whether the flag is due to a laboratory deviation from a specified protocol or is of technical advisory nature.

Blank results are summarized in Section III.

Field duplicates are summarized in Section IX.

Samples indicated by a double asterisk on the front cover underwent a NFESC Level D review. A NFESC Level C review was performed on all of the other samples. Raw data were not evaluated for the samples reviewed by Level C criteria since this review is based on QC data.

The following are definitions of the data qualifiers:

U Indicates the compound or analyte was analyzed for but not detected at or above the stated limit.

J Indicates an estimated value.

R Quality control indicates the data is not usable.

N Presumptive evidence of presence of the constituent.

UJ Indicates the compound or analyte was analyzed for but not detected. The sample detection limit is an estimated value.

A Indicates the finding is based upon technical validation criteria.

P Indicates the finding is related to a protocol/contractual deviation.

None Indicates the data was not significantly impacted by the finding, therefore qualification was not required.

## I. Technical Holding Times

All technical holding time requirements were met.

The chain-of-custodies were reviewed for documentation of cooler temperatures. All cooler temperatures met validation criteria.

## II. Calibration

### a. Initial Calibration

Initial calibration of compounds was performed as required by the method.

The percent relative standard deviations (%RSD) of calibration factors for compounds were less than or equal to 20.0% .

### b. Calibration Verification

Calibration verification was performed at required frequencies. The percent differences (%D) of amounts in continuing standard mixtures were within the 15.0% QC limits.

## III. Blanks

Method blanks were reviewed for each matrix as applicable. No total petroleum hydrocarbons as gasoline contaminants were found in the method blanks.

## IV. Accuracy and Precision Data

### a. Surrogate Recovery

Surrogates were added to all samples and blanks as required by the method. All surrogate recoveries (%R) were within QC limits.

### b. Matrix Spike/Matrix Spike Duplicates

The laboratory has indicated that there were no matrix spike (MS) and matrix spike duplicate (MSD) analyses specified for the samples in this SDG, and therefore matrix spike and matrix spike duplicate analyses were not performed for this SDG.

### c. Laboratory Control Samples

Laboratory control samples were reviewed for each matrix as applicable. Percent recoveries (%R) and relative percent differences (RPD) were within QC limits.

## V. Target Compound Identification

All target compound identifications were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VI. Compound Quantitation and CRQLs

All compound quantitation and CRQLs were within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VII. System Performance

The system performance was within validation criteria for samples on which a NFESC Level D review was performed. Raw data were not evaluated for the samples reviewed by Level C criteria.

## VIII. Overall Assessment of Data

Data flags have been summarized at the end of this report.

## IX. Field Duplicates

No field duplicates were identified in this SDG.

## X. Field Blanks

No field blanks were identified in this SDG.

**MCAS El Toro**
**Total Petroleum Hydrocarbons as Gasoline - Data Qualification Summary - SDG 98H049**

No Sample Data Qualified in this SDG

**MCAS El Toro**
**Total Petroleum Hydrocarbons as Gasoline - Laboratory Blank Data Qualification Summary - SDG 98H049**

No Sample Data Qualified in this SDG

LDC #: 3416D7 **VALIDATION COMPLETENESS WORKSHEET** Date: 12-15-98

SDG #: 98H049 ____EPA Level III/IV _X_NFESC Level C/D Page: 1 of 1

Laboratory: EMAX Laboratories, Inc. Reviewer: Z. Pan

2nd Reviewer: μ

**METHOD:** GC CDOHS LUFT/EPA SW 846 Method 8015 Modified-Gasoline

The samples listed below were reviewed for each of the following validation areas. Validation findings are noted in attached validation findings worksheets.

| | Validation Area | | Comments |
|---|---|---|---|
| I. | Technical holding times | A | Sampling dates: 8-12-98 |
| IIa. | Initial calibration | A | %RSD < 20% |
| IIb. | Calibration verification | A | %D < 15% |
| III. | Blanks | A | |
| IVa. | Surrogate recovery | A | |
| IVb. | Matrix spike/Matrix spike duplicates | N | Client Specified |
| IVc. | Laboratory control samples | A | LCS/LCSD |
| V. | Target compound identification | A | Not reviewed for Level III/C validation. |
| VI. | Compound Quantitation and CRQLs | A | Not reviewed for Level III/C validation. |
| VII. | System Performance | A | Not reviewed for Level III/C validation. |
| VIII. | Overall assessment of data | A | |
| IX. | Field duplicates | N | |
| X. | Field blanks | N | |

Note: A = Acceptable; N = Not provided/applicable; SW = See worksheet; ND = No compounds detected; R = Rinsate; FB = Field blank; D = Duplicate; TB = Trip blank; EB = Equipment blank

Validated Samples: ** Indicates sample underwent Level IV/D validation

| | | | | | |
|---|---|---|---|---|---|
| 1 | 18609-965 Water | 11 | | 21 | |
| 2 | 18609-966** ↓ | 12 | | 22 | |
| 3 | VAH0839B (BLK) water | 13 | | 23 | |
| 4 | | 14 | | 24 | |
| 5 | | 15 | | 25 | |
| 6 | | 16 | | 26 | |
| 7 | | 17 | | 27 | |
| 8 | | 18 | | 28 | |
| 9 | | 19 | | 29 | |
| 10 | | 20 | | 30 | |

Notes:

LDC #: 3416D7
SDG #: 98H049

# VALIDATION FINDINGS WORKSHEET
## Technical Holding Times

Page: 1 of 1
Reviewer: Z. Pan
2nd Reviewer: [illegible]

All circled dates have exceeded the technical holding times.
(Y) N N/A Were all cooler temperatures within validation criteria?

METHOD : GC ✓ TFH Volatiles (Gasoline) ___ TFH Extractables (Diesel) ___ CDOHS LUFT ✓ EPA SW 846 Method 8015 Modified.

| Sample ID | Matrix | Preserved | Sampling Date | Extraction date | Analysis date | Total # of Days | Qualifier |
|---|---|---|---|---|---|---|---|
| 2 | Water | N | 8-12-98 | N/A | 8-13-98 | N | None |

TECHNICAL HOLDING TIME CRITERIA

Gasoline
- Water unpreserved: Analyzed within 7 days of sample collection.
- Water preserved: Analyzed within 14 days of sample collection.
- Soil: Analyzed within 14 days of sample collection.

Diesel
- Water: Extracted within 14 days, analyzed within 40 days.
- Soil: Extracted within 14 days, analyzed within 40 days.

LDC #: 3416D7
SDG #: 98H049

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration


Reviewer: Z. Pan
2nd Reviewer: [illegible]

**METHOD:** GC ✓ TFH Volatiles (Gasoline)___TFH Extractables (Diesel)___CDOHS LUFT ✓ EPA SW 846 Method 8015 Modified.

Please see qualifications for all questions answered "N". Not applicable questions are identified as N/A.

(Y) N N/A Was at least a ~~3 point /~~ 5 point calibration curve performed as specified by the method?
(Y) N N/A Was a linear fit used for evaluation? If yes, the acceptance criteria used is %RSD less than or equal to 20.0%.
Y (N) N/A Was a curve fit used for evaluation? If yes, what was the acceptance criteria used for evaluation?___
(Y) N N/A Did the initial calibration meet the acceptance criteria?
(Y) N N/A Was initial calibration performed at the required frequency?

**Level IV/D Only**

(Y) N N/A Were the required concentrations run for the initial calibration?
(Y) N N/A Were the linearity or curve results recalculated? (Please see the Initial Calibration calculation verification worksheet.)
(Y) N N/A Were the linearity or curve reported results within 10.0% of the recalculated results?

| # | Date | Standard ID | Compound | %RSD (Limits ≤ 20.0%) | Associated Samples | Qualifications |
|---|---|---|---|---|---|---|
| | | | | | | |

A. Gasoline
B. Diesel

Comments:

LDC #: 3416D7
SDG #: 98H049

# VALIDATION FINDINGS WORKSHEET
## Initial Calibration Calculation Verification

Page: 1 of 1
Reviewer: Z. Pan
2nd Reviewer: [illegible]

METHOD: GC ✓ TFH Volatiles (Gasoline) ___ TFH Extractables (Diesel) ___ CDOHS LUFT ✓ EPA SW 846 Method 8015 Modified.

The calibration factors (CF) and relative standard deviation (%RSD) were recalculated for _____ Gas / Diesel _____ using the following calculations:

CF = Area / Stand. Conc.
%RSD = 100 * (S/X)

Where: S = Standard deviation of calibration factors
X = Mean of calibration factors

Injection volume ____ ul or ____ ml

| Calibration Date | Column | Compound | Standard | Standard concentration ( ppb ) | Area | Recalculated Calibration Factor (CF) | Recalculated %RSD | Reported Calibration Factor (CF) | Reported %RSD |
|---|---|---|---|---|---|---|---|---|---|
| 7-17-98 | DB5-30M | Gasoline | Point 1 | 50 | 604050 | 12081 | 5.389% | 12081 | 5.4% |
| | | | Point 2 | 500 | 6317452 | 12634.9 | | 12635 | |
| | | | Point 3 | 1000 | 13442899 | 13443 | | 13443 | |
| | | | Point 4 | 5000 | 64133156 | 12827 | | 12827 | |
| | | | Point 5 | 10000 | 116975621 | 11698 | | 11698 | |
| | | | Mean calibration factor | | | 12537 | | 12537 | |
| | | | Point 1 | | | | | | |
| | | | Point 2 | | | | | | |
| | | | Point 3 | | | | | | |
| | | | Point 4 | | | | | | |
| | | | Point 5 | | | | | | |
| | | | Mean calibration factor | | | | | | |

Comments: Refer to Initial Calibration findings worksheet for list of qualifications and associated samples when reported results do not agree within 10.0% of the recalculated results.