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1202 Kettner Boulevard
San Diego, California 92101

Oil/Water Separator Site 672A
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. SW6814 – September 16, 1999

Site Assessment Report

Appendix A - Tentative Reuse Parcel Location of OWS Site 672A; Appendix B - JEG RFA Information; Appendix C - TCE in Groundwater; Appendix D - Remedial Activities, Selected Soil Vapor Analytical Data; Appendix E - Excerpts from Law/Crandall Report for OWS Site 672A; Appendix F - Station Drawing; Appendix G - Site Photographs; Appendix H - Site Inspection Log; Appendix I - Geophysical Survey Data; Appendix J - Laboratory Analytical Reports; Appendix K - Field Soil Boring Logs; Appendix L - Land Survey Data; Appendix M - OWS Contents Waste Manifest

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Teresa,

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Site Assessment Report

Oil/Water Separator Site 672A
Marine Corps Air Station
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SWDIV Contract No. N68711-93-D-1459, Delivery Order No. 0070
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Acronyms and Abbreviations

bgs	below ground surface
BRAC	Base Realignment and Closure Act
BTEX	benzene, toluene, ethylbenzene and total xylenes
CA LUFT	California Leaking Underground Fuel Tank
CDM	Camp, Dresser & McKee, Inc.
DCN	Document Control Number
DO	Delivery Order
EPA	U.S. Environmental Protection Agency
ft	foot
ft/ft	feet per foot
gpm	gallons per minute
GPR	ground penetrating radar
JEG	Jacobs Engineering Group Inc.
MCAS	Marine Corps Air Station
mg/kg	milligrams per kilogram
mg/L	milligrams per liter
msl	mean sea level
MTBE	methyl tert-butyl ether
OHM	OHM Remediation Services Corp.
OWS	oil / water separator
ROICC	Resident Officer In Charge of Construction
Station	Marine Corps Air Station El Toro
SWDIV	Southwest Division Naval Facilities Engineering Command
SWMU	solid waste management unit
TPH	total petroleum hydrocarbons
UST	underground storage tank
VOC	volatile organic compound
µg/kg	micrograms per kilogram
µg/L	micrograms per liter

Section 1
Introduction

This report describes the site verification and in-place closure activities conducted for oil/water separator (OWS) 672A at the Marine Corps Air Station El Toro, California (herein after referred to as the Station). OHM Remediation Services Corp. (OHM) performed the work under Delivery Order (DO) 0112 for the Southwest Division Naval Facilities Engineering Command (SWDIV) under Remedial Action Contract No. N68711-93-D-1459.

OHM conducted verification drilling and sampling activities in the vicinity of OWS Site 672A, to evaluate the subsurface conditions and to ascertain whether or not a release had occurred. OWS 672A had been out of service for approximately a year, and was not in service during field verification activities. Based on the close proximity of the underground utilities, it was decided to close OWS 672A in place. As part of the closure in-place activities, the OWS contents were sampled, analyzed, and identified as non-hazardous. Consequently, the OWS contents were removed, the separator rinsed, and the contents and rinsate disposed offsite. Following removal and disposal of the contents, the OWS 672A separator chambers were filled with cement slurry. As a result of these activities, no further action is recommended for OWS 672A.

The Station is located in Orange County, California, approximately 45 miles southeast of the City of Los Angeles, and 1 mile north of the intersection of Interstate 5 (Santa Ana Freeway) and Interstate 405 (San Diego Freeway). The City of Lake Forest is less than 2 miles southeast, and East Irvine is approximately 1 mile to the northwest. The Station covers approximately 4,700 acres. The location of the Station is shown on Figure 1-1, Facility Location Map.

The Station officially closed on July 2, 1999 in accordance with the Base Closure and Realignment Act of 1993 (BRAC III). According to the El Toro Community Reuse Plan (County of Orange, 1997), OWS Site 672A is located within an area tentatively identified for Cargo. The County of Orange issued the Airport and Open Space Plan Year 2020 (also known as Concept C) in August 1998; and that plan also identified the OWS 672A location within a Cargo area. The El Toro Community Reuse Plan working maps are provided in Appendix A, Tentative Reuse Parcel Location of OWS Site 672A.

1.1 Site Description and Background

The OWS 672A is located in the southwest quadrant of the Station, southeast of the Bee Canyon Wash, and northeast of Agua Chinon Wash. The OWS is located approximately 250 feet northeast of South Marine Way and 200 feet west of the wash rack associated with Building 672, as shown on Figure 1-2, Location Map.

The OWS 672A was a steel and concrete separator with an estimated total capacity of 400 gallons and an estimated flow capacity of 40 gallons per minute (gpm). The OWS collected

wash water from fuel truck washing associated with Building 672A, separated oil and grease from the wash water, and then discharged the water to the sanitary sewer.

No underground storage tank is associated with OWS 672A. Nearby USTs 672A and 672B, associated with Building 672, were removed by OHM in January 1997; and closure of these USTs was approved by California Regional Water Quality Control Board on April 12, 1999.

1.2 RCRA Facility Assessment

In 1991, Jacobs Engineering Group Inc. (JEG) performed an initial Preliminary Review (PR) and a Visual Site Inspection (VSI) of 307 solid waste management units (SWMUs) within the Station as part of the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA). JEG also conducted a site visit to observe the current conditions of the SWMUs and performed limited site sampling where required.

JEG identified SWMU 173 as OWS 671. SWMU 173 actually corresponds to the location of OWS 672A as identified and maintained by the Station's Facility Maintenance Department (SWDIV, 1999). At the SWMU 173 site, JEG reported that OWS 672A appeared sound; however, the actual condition was difficult to assess and suggested a sampling visit (JEG, 1993). As part of the RFA sampling visit, JEG advanced one boring (173SB1) on the east side of OWS 672A and collected soil samples at depths five, ten, fifteen, twenty, and twenty five below ground surface (bgs). A total of six samples (including one duplicate) were collected and analyzed for Total Petroleum Hydrocarbons (TPH) and Volatile Organic Compounds (VOCs). TPH analysis was performed by EPA method 418.1.

The laboratory analyses of the soil samples indicated a maximum TPH concentration of 11,006 milligrams per kilogram (mg/kg) in a sample collected 25 feet below ground surface. JEG recommended additional borings at the site to evaluate subsurface conditions. A copy of the site SWMU 173 VSI evaluation form, a figure showing the boring location, and a table showing the analytical results are enclosed in Appendix B, JEG RFA Information.

1.3 Summary of Remedial Activities

The OWS Site 672A is located above the Volatile Organic Compound (VOC) Plume in the shallow aquifer and is adjacent to the Installation Restoration Program (IRP) Site 24 (VOC Source Area). As part of the Remedial Investigation of IRP Site 24 (Phase I and II), a significant amount of information was collected to delineate the extent of groundwater contamination and to ascertain the source. The presence of trichloroethylene (TCE) and other chlorinated solvents in the IRP Site 24 groundwater plume is associated with sources not related to OWS Site 672A. Groundwater conditions in the vicinity of the OWS Site 672A will be addressed as part of the Record of Decision (ROD) of the IRP Site 24. Groundwater level data, laboratory analytical results, and groundwater plume maps are presented in the Groundwater Monitoring Report (Camp Dresser & McKee, Inc. [CDM] Federal Programs, 1997). An isoconcentration map of the current chlorinated solvent concentrations in groundwater at IRP Site 24 (Bechtel, 1999), along

with the location of the OWS Site 672A, is presented in Appendix C, TCE in Shallow Groundwater.

Soil vapor extraction (SVE) system installation, soil gas survey, and system testing activities were conducted at IRP Site 24 from December 1998 through February 1999, and are summarized in Technical Memorandum, Progress Report, Phase I Vadose Zone Remediation Activities (OHM, 1999). The preliminary soil gas sampling data, collected as part of the system start up activities, indicates that OWS Site 672A is located within the southern part of the IRP Site 24 TCE plume. Review of the analytical data from nearby locations 24SG 137, and 24SG 138 indicated only trace concentrations (less than 0.1 micrograms per liter [μg/L]) of ethylbenzene, toluene, and xylenes were detected as vapor in the vadose zone from 48 to 97 feet depth (OHM, 1999). Benzene was not detected in these borings. The analytical results from borings 24SG 137 and 24SG 138 are presented in Appendix D, Remedial Activities, Selected Soil Vapor Analytical Data.

Section 2
Environmental Setting

This section summarizes the general area surrounding the Station and the environmental setting in the vicinity of OWS Site 672A.

The Station is located on the southeastern edge of the Tustin Plain and extends into the Santa Ana Mountains. The Tustin Plain slopes gently toward the west-southwest with land surface elevations ranging from approximately 215 feet above mean sea level (msl) at the western corner to approximately 410 feet msl at the eastern edge of the Plain. Elevations within the portion of the Station in the Santa Ana Mountains extend upward to 800 feet msl near the northeast corner of the Station. The topography in the area of OWS Site 672A is relatively flat.

2.1 Geology

The Station is situated on alluvial materials derived mainly from the Santa Ana Mountains. These Holocene materials consist of coarse-grained stream channel deposits and fine-grained overbank deposits that are up to 300 feet thick (Herndon and Reilly, 1989).

The Holocene alluvial materials conformably overlie Pleistocene sediments predominantly composed of interlayered fine-grained lagoonal and near-shore marine deposits. These materials become increasingly mixed with beach sands, terrace deposits, and stream channel deposits in the eastern portion of the Tustin Plain and along the eastern plain edges. The Quaternary deposits form a heterogeneous mixture of silts and clays, with interbedded sands and fine gravels up to 500 feet thick in the western portion of the Tustin Plain (Singer, 1973).

2.2 Hydrogeology

The Station is situated within the Irvine Groundwater Subbasin. The Irvine Subbasin is located within the southeast segment of the Main Orange County Groundwater Basin. Regional groundwater flow in the Subbasin has been to the west and northwest since the 1940s and is controlled locally by large groundwater withdrawal depressions. From 1969 to 1982, an average gradient of 0.0046 feet per foot (ft/ft) to the northwest was reported in the principal aquifer zone of the Irvine area (Banks, 1984). Phase I remedial investigation data indicated a similar groundwater flow direction in the shallower groundwater zone, with a slightly higher gradient of 0.008 ft/ft (JEG, 1993).

The depth to groundwater beneath the Station ranges from approximately 45 feet below ground surface (bgs) in the foothills to 240 feet bgs in the deepest portion of the Irvine Subbasin. The depth to groundwater in the vicinity of OWS Site 672A is estimated to be approximately 90 feet bgs, based on available water-level data from nearby well 08_UGMW29 (150 feet to the southwest) and from wells 07_DBMW100 and, 08_DGMW74. These data are presented in the

Groundwater Monitoring Report. (CDM, 1997), and summarized in Table 2-1. These well locations are shown in Figure 1-2.

Analyses of groundwater samples collected from these wells did not indicate the presence of TPH extractable or purgable constituents, or of the volatile organic compounds (VOCs) benzene, toluene, ethylbenzene, or total xylenes (BTEX). However, chlorinated VOCs, TCE and PCE, were detected which are related to the IRP Site 24 VOC plume and will be addressed in the ROD, as discussed in Section 1.3.

Section 3
Record Search

OHM reviewed available background documents and drawings pertaining to OWS Site 672A prior to starting fieldwork.

The Base Realignment and Closure (BRAC) Cleanup Plan (SWDIV, 1998) and the *Oil/Water Separator Survey Report* (Law/Crandall, Inc., 1993) contained information regarding OWS Site 672A. The BRAC Cleanup Plan listed OWS 672A as an active, apparently sound, 400-gallon capacity steel OWS installed in 1982, not associated with an UST.

The OWS Separator Survey (Law/Crandall, June 1993) reported that OWS 672A is a concrete and steel separator of unknown design, with an estimated total capacity of approximately 400 gallons, and an estimated flow capacity of 40 gallons per minute (gpm). A waste oil level alarm was observed. A manual gate valve to divert run on to the storm drain was reported, but no automatic shutoff/diversion valves or controls were reported. The OWS Separator Survey reported that an UST was associated with OWS 672A; however, none is shown on the drawings attached to the Survey, and no UST was observed in subsequent OHM field visits.

The separator received wash water from the fuel truck washing operations, separated oil and grease from the wash water, and discharged the water into the sanitary sewer. The OWS construction appeared sound during the 1993 survey and was listed in active service. Excerpts from the Law/Crandall report pertaining to OWS 672A are included in Appendix E, Excerpts from Law/Crandall Report for OWS Site 672A.

OHM obtained information from the Station's Resident Officer In Charge of Construction (ROICC) regarding construction as-built drawings of OWS Site 672A. ROICC provided Drawing number 6147724 C-5. A copy of this drawing is included in Appendix F, Station Drawing.

Section 4
Field Activities

OHM performed field activities at OWS Site 672A to assess whether a possible petroleum hydrocarbon release had occurred from use of the OWS, and to implement an in-place closure of the OWS. Field activities included a site inspection; a geophysical survey; sampling, removal, and disposal of the OWS contents; collection and analyses of soil samples from two verification soil borings; a land survey; and filling the OWS with cement slurry. Photographs of the field activities are included in Appendix G, Site Photographs.

Fieldwork was performed in accordance with the following approved Preliminary Draft DO 0024 documents: Work Plan, Contractor Quality Control Plan Addendum, Waste Management Plan, Chemical Data Acquisition Plan (OHM, 1995a), and Site-Specific Health and Safety Plan (OHM, 1995b).

4.1 Site Inspection

OHM personnel conducted a site inspection on March 10, 1999, to identify the location of OWS 672A using as-built drawings. No evidence of releases or spills near the OWS area was observed. Based on the existing landmarks, OHM proposed the location of the soil borings in the vicinity of the OWS. A copy of the Site Inspection Log is included in Appendix H, Site Inspection Log.

4.2 Utility Clearance and Geophysical Survey

The utility clearance consisted of reviewing site-specific utility maps obtained from the Station, reviewing the site inspection log, performing a geophysical survey of the site, and notifying Underground Service Alert of the intent to drill.

On March 10, 1999, Spectrum Geophysical conducted a geophysical survey of OWS 672A using a utility locator and ground-penetrating radar (GPR), to locate the presence of underground utilities in the vicinity of proposed drilling areas. The results of the analog utility locator and GPR surveys indicated the presence of electrical lines and sewer lines. A copy of the geophysical survey data is included in Appendix I, Geophysical Survey Data.

4.3 OWS Gauging and Contents Sampling

On March 18, 1999, OHM inspected OWS 672A and observed the separator contents to be a clear liquid with a slight odor and sheen. An OWS liquid content sample (18609-2099) was collected from the primary chamber of the separator using a Teflon™ bailer. The content sample was submitted for laboratory analysis of petroleum hydrocarbons (CA LUFT 8015M); metals

(EPA 6010A, EPA 1311/6010A, and EPA 7470A); pesticides (EPA 8081) and volatile organic compounds (EPA 8260A).

The analytical results of the OWS content sample indicated that the liquid could be classified as non-hazardous waste. The results of the analyses are presented in Table 4-1. Laboratory analytical reports are provided in Appendix J, Laboratory Analytical Reports.

4.4 Verification Drilling Activities

On March 31, 1999, OHM advanced two soil borings in the vicinity of the OWS Site 672A (672A SB-01 to a depth of 30 feet bgs and 672A SB-02 to a depth of 50 feet bgs). The soil boring locations were selected based on a review of as-built drawings and the geophysical survey. BC^2 Environmental Corporation (an OHM subcontractor) advanced these borings with a limited-access track-mounted CME 75 drilling rig using hollow-stem auger techniques. The soil boring locations are shown on Figure 4-1, Site Plan.

A total of seven soil samples (including a duplicate sample) were collected from two soil borings using a California-modified split-spoon sampler. Samples were collected at nominal depth intervals approximately 10, 20, and 30 feet bgs, except in the case of boring SB02 where samples were collected at 20, 30, and 50 feet bgs. Selected soil samples collected from the borings were submitted for laboratory analyses. Following the completion of sampling activities, the soil borings were backfilled with cement-bentonite grout to the surface.

The field boring logs describing soil lithology are presented in Appendix K, Field Soil Boring Logs. These boring logs indicate that the subsurface soil in the vicinity of the OWS Site 672A is predominantly composed of silty sand, clayey sand, and sandy clay.

Sampling, including sample handling and packaging, was conducted in accordance with the procedures described in the approved Draft Work Plan (OHM, 1995a). The soil samples were analyzed for total petroleum hydrocarbons (TPH) extractable and TPH purgeable using California Leaking Underground Fuel Tank (CA LUFT) Manual Method 8015 modified; and for volatile organic compounds (VOCs), including methyl tert-butyl ether (MTBE), using U.S. Environmental Protection Agency Method 8260A. Synthetic precipitation leaching procedure (SPLP) was performed on sample 18609-2169 using EPA method 1312/CA LUFT 8015M.

Concentrations of TPH and VOC analytes (including MTBE) were not detected at or above laboratory reporting limits in the soil samples from boring 672A SB-01. However, analyses of samples (18609-2167 and 18609-2169) from boring 672A SB-02 detected TPH as diesel at 30.5 feet bgs (76 mg/kg) and 50.5 feet bgs (1,200 mg/kg), and TPH as gasoline at 30.5 feet bgs (7 mg/kg) and at 50.5 feet bgs (20 mg/kg). SPLP analysis of the 50.5 feet bgs sample

(18609-2169), detected only 1.7 mg/L of TPH as diesel in the leachate, indicating that the petroleum hydrocarbons are not readily available for leaching. The analytical results of the soil samples collected from the verification borings are presented in Table 4-2 and summarized in Figure 4-1. Laboratory analytical reports are provided in Appendix J.

Soil cuttings generated during drilling operations were drummed, labeled, and stored at the Station's Central Treatment Facility (CTF) compound, operated by OHM, pending analytical results. Analyses of the boring samples indicated that the soils were non-hazardous. The drummed soils were placed in the clean soil stockpile at the CTF.

4.5 Land Surveying

After completing the verification drilling, the soil boring locations were surveyed on April 12, 1999 by Cal Vada Surveying, Inc., a California-registered land surveyor. The surveyed locations were measured to ± 0.01 foot per foot horizontally and tied to the California State Plane Coordinate Systems, North American Datum 1983. The surveyed elevations were measured to ±0.01 feet vertically and tied to mean sea level datum. The surveyed plan for the former OWS Site 672A is presented as Appendix L, Land Survey Plan.

4.6 Closure In-Place Activities

OHM implemented closure-in-place activities for OWS 672A, which included removal of OWS contents, rinsing out the separator, and filling the OWS with cement slurry.

On May 13, 1999, OHM removed and disposed of the OWS contents, indicated by the laboratory results to be non-hazardous. After removal of the OWS liquid contents, the inside of the separator was rinsed with clean water. Approximately 1,000 gallons of OWS 672A liquid contents and rinse water were removed by vacuum truck, supplied by Ecology Control Industries (ECI) under subcontract to OHM. The liquid waste was combined with approximately 4,000 gallons of non-hazardous liquid contents and rinsate from OWS 896 and 744. ECI transported the combined liquid contents offsite to the Crosby & Overton treatment and disposal facility in Long Beach, California. A copy of the Waste Manifest is provided in Appendix M, OWS Contents Waste Manifest.

On May 14, 1999, OWS 672A was partly filled with an initial batch of 2-sack cement slurry. The slurry was pumped into the OWS to a level high enough to cover the influent/effluent piping, but not enough to allow flow through the piping. After the initial slurry batch was allowed to set over the weekend, the remainder of the OWS was filled with additional slurry on May 17. A total of approximately 15.5 cubic yards of cement slurry was pumped to fill OWS 672A.

Section 5
Conclusions and Recommendations

The following conclusions are based upon information from surveys, existing records, field OWS closure activities and OHM soil sampling data from verification soil borings:

- OWS 672A was used to separate oil and grease from wastewater prior to discharge to the sanitary sewer. Oil and grease have relatively limited mobility in the vadose zone when compared with gasoline.
- During the 1991 RFA, petroleum hydrocarbons were detected in the shallow soil adjacent to OWS 672A. Consequently, the RFA recommended additional borings at the site.
- The OWS was inspected by Law/Crandall during the 1993 survey and reported to be in apparently sound condition.
- The depth to groundwater is estimated to be approximately 90 feet below ground surface based on historical data from nearby monitoring wells 07_DBMW100, 08_DGMW74, and 08_UGMW29.
- A sample of the OWS separator contents was collected and analyzed. Analyses of this sample indicated that the liquid contained in the OWS was non-hazardous.
- In 1999, OWS 672A was evaluated further for a potential release of petroleum hydrocarbons. Two verification soil borings were advanced at the site, and seven soil samples were collected. TPH extractable and TPH purgeable analytes were detected in two of the soil samples. Benzene and MTBE analytes were not detected in any of the soil samples.
- Laboratory analysis of sample 18609-2169 indicated a TPH-D concentration of 1, 200 mg/kg; however, SPLP analysis of that sample indicated only 1.7 mg/L TPH-D in the leachate, or approximately 0.1 percent of the soil concentration. These results indicate that the petroleum hydrocarbons are not readily available for leaching, suggesting that there is minimal threat to groundwater quality from the residual petroleum hydrocarbons in the soil.
- OWS Site 672A overlies the IRP Site 24 TCE Plume. During monitoring for IRP 24 TCE Plume, TCE was detected in the nearby well 08_UGMW29; however, no TPH or BTEX constituents were detected. Groundwater quality concerns are dealt with under the IRP Site 24 ROD.
- OWS 672A was not in service for approximately a year prior to being closed in place. As part of the closure in-place activities, the contents were removed, the separator was rinsed, and the OWS contents and rinse water were disposed offsite. The OWS was then filled with approximately 15.5 cubic yards of cement slurry.

Based on the information provided in this report, there is possible evidence of a past release of petroleum hydrocarbons to the vadose zone under OWS Site 672A. However, evaluation of SPLP data indicates that the residual petroleum hydrocarbons are not readily available for leaching and the threat to groundwater quality from the residual petroleum hydrocarbons is minimal. The separator has been out of service for approximately a year, the contents were removed and disposed offsite, and the separator was filled with cement slurry as part of the closure in-place activities.

On behalf of the Station, OHM recommends that this report be submitted to the California Regional Water Quality Control Board, Santa Ana Region, and that "No Further Action" status be requested for OWS Site 672A (also known as SWMU 173).

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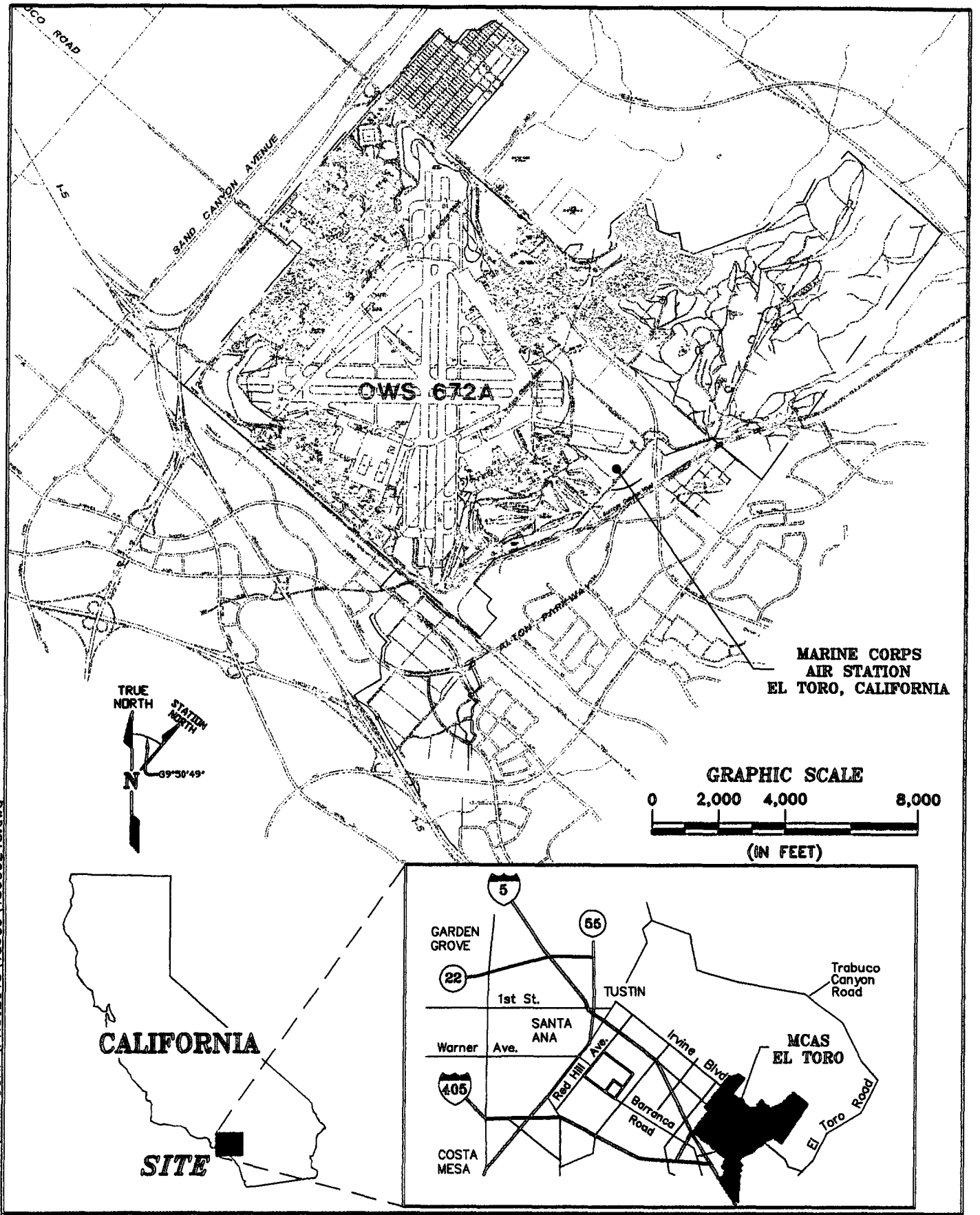
SWDIV. See Southwest Division Naval Facilities Engineering Command.

Figures



OHM Remediation Services Corp.
A Subsidiary of OHM Corporation
SAN DIEGO, CA

DRAWN BY R. PIRMORADIAN	DATE 09/14/99	FACILITY LOCATION MAP OWS 672A	
CHECKED BY DR	DATE 9/14/99		
APPROVED BY	DATE		
PROJECT MANAGER	DATE 9/16/99	MARINE CORPS AIR STATION EL TORO, CALIFORNIA	

CONTRACT NAME: SWDIV

AUTOCAD FILE No.	PLOT SCALE	SHEET	OF	SCALE	DOCUMENT CONTROL No.	OHM PROJECT No.	FIGURE No.	REVISION
18609248.DWG	1=1	1	1	1"=4,000'	SW6814	18609	FIG 1-1	0

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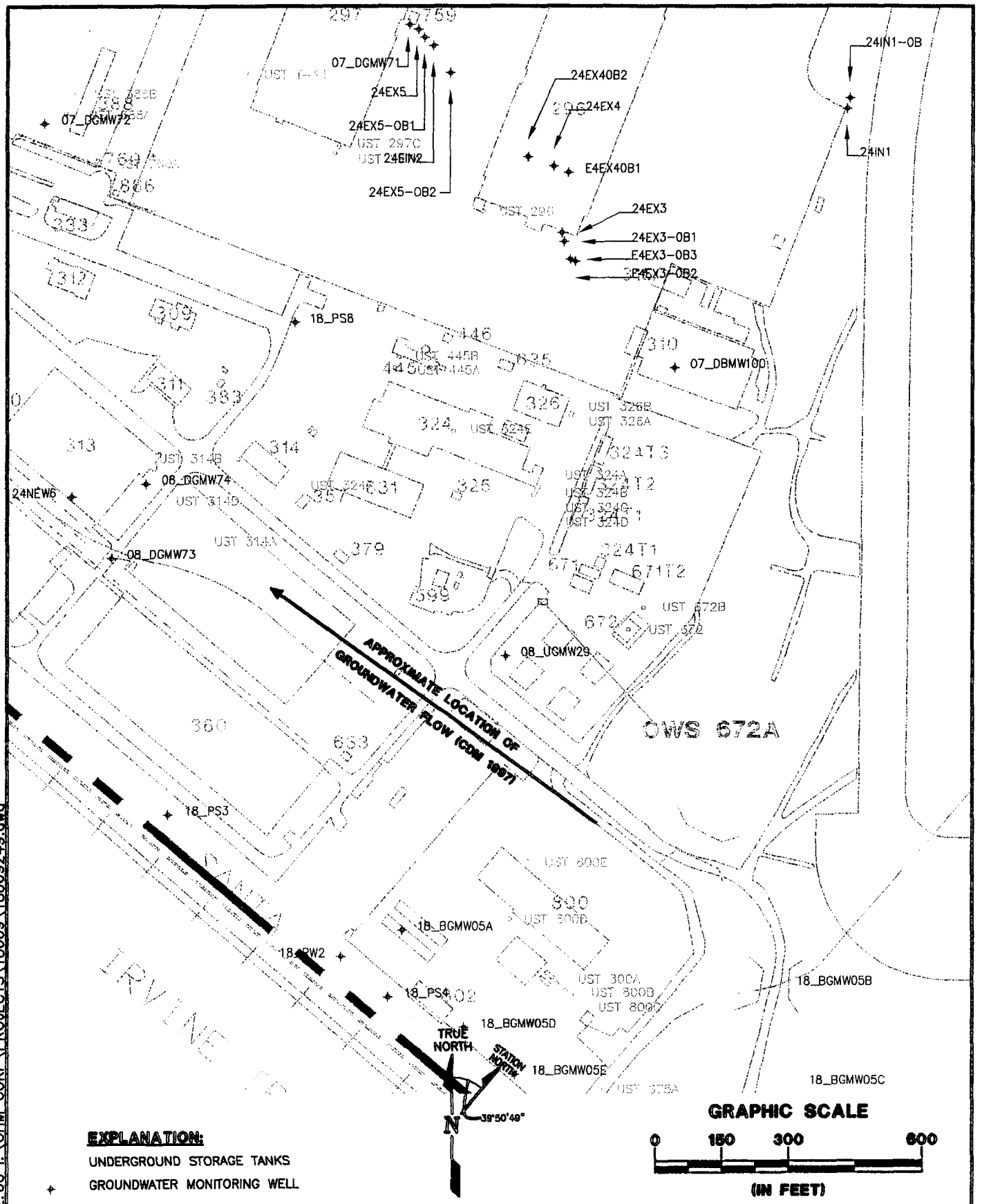

EXPLANATION:

UNDERGROUND STORAGE TANKS

GROUNDWATER MONITORING WELL

OHM Remediation Services Corp. A Subsidiary of OHM Corporation SAN DIEGO, CA	DRAWN BY R. PIRMORADIAN	DATE 09/14/99	LOCATION MAP OWS 672A
	CHECKED BY DR	DATE 9/14/99	
	APPROVED BY	DATE	
CONTRACT NAME SWDIV	PROJECT MANAGER	DATE 9/16/99	MARINE CORPS AIR STATION EL TORO, CALIFORNIA

AUTOCAD FILE No.	PLOT SCALE	SHEET	OF	SCALE	DOCUMENT CONTROL No.	OHM PROJECT No.	FIGURE No.	REVISION
18609249.DWG	1=1	1	1	1"=300'	SW6814	18609	FIG 1-2	0

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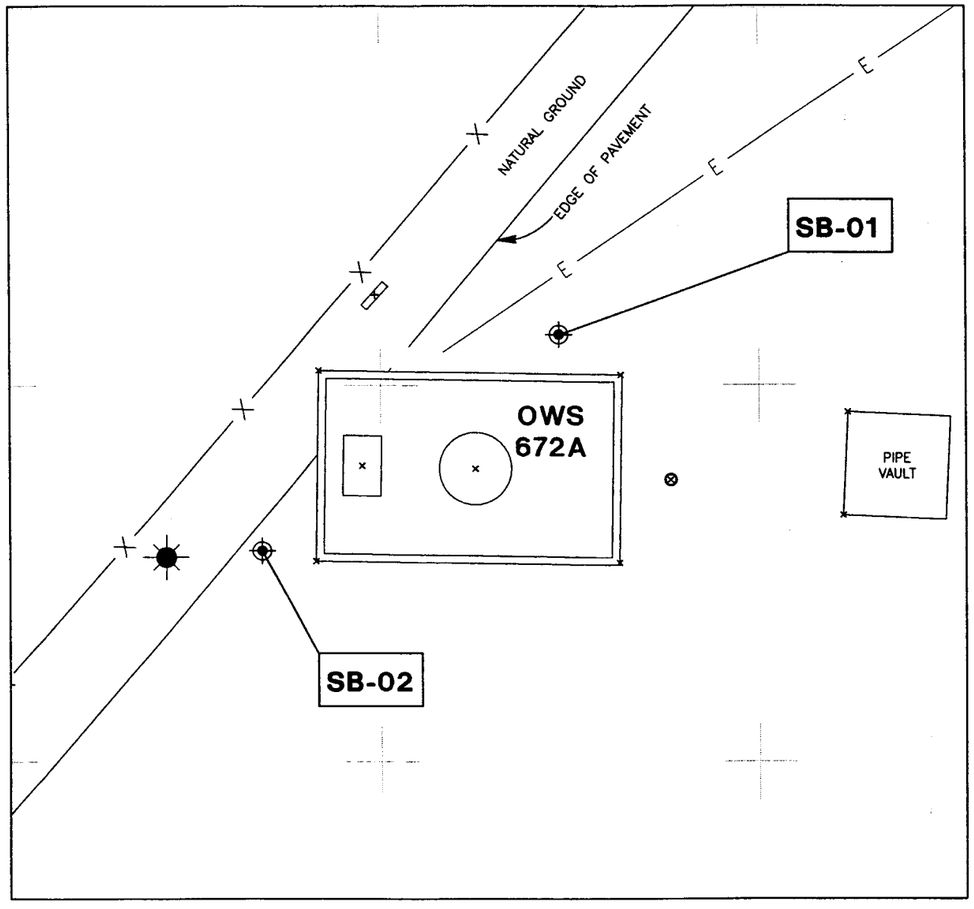


Sample Location and Data Summary

Boring Number	Location Northing (NAD 83)	Easting (NAD 83)	Elevation (ft amsl)	Sample Number	Depth (ft bgs)	CA LUFT 8015M TPH: as Diesel mg/kg	as Gasoline mg/kg	Motor Oil mg/kg	EPA 1312/CA LUFT 8015M TPH: as Diesel mg/L	as Gasoline mg/L	Motor Oil mg/L	EPA 8260A VOCs: Benzene µg/kg	Ethylbenzene µg/kg	Methyl tert-butyl ether µg/kg	Toluene µg/kg	Xylenes (total) µg/kg
OWS-672-SB01																
	2187428.38	6110211.85	276.96	18609-2161	9.5	11 U	1.1 U	11 U	NA	NA	NA	5.7 U	5.7 U	11 U	5.7 U	5.7 U
				18609-2162	20.5	12 U	1.2 U	12 U	NA	NA	NA	5.9 U	5.9 U	12 U	5.9 U	5.9 U
				18609-2163	21.0	11 U	0.07 J	11 U	NA	NA	NA	5.5 U	5.5 U	11 U	5.5 U	5.5 U
				18609-2165	30.5	12 U	0.2 J	12 U	NA	NA	NA	6.1 U	6.1 U	12 U	6.1 U	6.1 U
OWS-672-SB02																
	2187414.03	6110192.16	276.07	18609-2166	21.0	1 J	0.1 J	11 U	NA	NA	NA	5.4 U	5.4 U	11 U	5.4 U	5.4 U
				18609-2167	30.5	76	7	12 U	NA	NA	NA	6.2 U	2 J	12 U	6.2 U	6.2 U
				18609-2169	50.5	1200	20	110 U	1.7	NA	0.5	56 U	260	110 U	56 U	56 U

NAD 83 - North American Datum, 1983.
ft amsl - Feet above mean sea level datum.
ft bgs - Feet below ground surface.
CA LUFT - California leaking underground fuel tank.
EPA - US Environmental Protection Agency.
J - Estimated value.
mg/kg - Milligrams per kilogram.
NA - Not analyzed.
TPH - Total petroleum hydrocarbons.
U - Not detected at or above the stated reporting limit.
µg/kg - Micrograms per kilogram.

EXPLANATION:

- SAMPLE POINTS
- CHAIN LINK FENCE
- UNDERGROUND ELECTRIC UTILITIES
- CONTROL PANEL
- VALVE
- LIGHT STANDARD

DATE OF SURVEY: 4-14-99
8-20-99

N

GRAPHIC SCALE
0 5 10 20
(IN FEET)

REVISIONS			
REV. No.	DESCRIPTION	DATE	APPROVED
01	97102-126A.DWG BY CALVADA SURVEYING, INC.	4/14/99	
		8/20/99	

CONTRACT NAME: SWDIV

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

DRAWN BY: R. PIRMORADIAN DATE: 09/14/99
CHECKED BY: DJ DATE: 9/16/99
APPROVED BY: DATE:
PROJECT MANAGER: W Sellek DATE: 9/16/99
AUTOCAD FILE No.: 18609247.DWG

SITE PLAN
OWS 672A

MARINE CORPS AIR STATION
EL TORO, CALIFORNIA

SCALE	SHEET	OF	DOCUMENT CONTROL No.	OHM PROJECT No.	DRAWING No.
1"=10'	1	1	SW6814	18609	FIG 4-1

Sept 14, 1999 - 15:47:43 I:\OHM CORP\PROJECTS\18609\18609247.dwg

Tables

Table 2-1
Monitoring Well Data Summary – Former OWS Site 672A Vicinity

Monitoring Well Identification Number	Approximate Distance from UST site 79 (feet)	Direction from UST site 79	Surface Elevation (feet, msl)	Screened Interval Top (feet, bgs)	Screened Interval Base (feet, msl)	Well Total Depth (feet, bgs)	Depth to Groundwater (feet, bgs)
08_UGMW29	150	Southwest	271.94	95	135	140	85.89
07_DBMW100	600	North-northeast	286.44	131	171	176	103.26
08_DGMW74	950	West-northwest	264.75	90	130	135	84.73

Explanation:
bgs - below ground surface
msl - mean sea level
UST - underground storage tank

Table 4 - 1
Analytical Results for Tank Contents Sample — OWS 672A

Sample Identification		18609-2099
Location Code		OWS-672A Tnk Content
Date Sampled		03/18/99
	Unit	
CA LUFT 8015M		
TPH as Diesel	mg/L	4.7
TPH as Gasoline	mg/L	1.21
TPH as Motor Oil	mg/L	0.4 J
EPA 6010A		
Antimony	µg/L	1.5 U
Arsenic	µg/L	1.2 U
Barium	µg/L	38.4
Beryllium	µg/L	0.11 U
Cadmium	µg/L	10.5
Chromium	µg/L	3.3 J
Cobalt	µg/L	10.0
Copper	µg/L	8.7 J
Lead	µg/L	6.0
Molybdenum	µg/L	0.44 U
Nickel	µg/L	22.0
Selenium	µg/L	2.9 U
Silver	µg/L	0.80 U
Thallium	µg/L	12.4
Vanadium	µg/L	0.55 U
Zinc	µg/L	914
EPA 7470A		
Mercury	µg/L	0.24 J
EPA 8081		
4,4'-DDD	µg/L	0.1 U
4,4'-DDE	µg/L	0.1 U
4,4'-DDT	µg/L	0.1 U
Aldrin	µg/L	0.05 U
alpha-BHC	µg/L	0.05 U
alpha-Chlordane	µg/L	0.05 U
Aroclor-1016	µg/L	2 U
Aroclor-1221	µg/L	5 U
Aroclor-1232	µg/L	2 U
Aroclor-1242	µg/L	2 U

Table 4 - 1
Analytical Results for Tank Contents Sample — OWS 672A

Sample Identification		18609-2099
Location Code		OWS-672A Tnk Content
Date Sampled		03/18/99
	Unit	
Aroclor-1248	µg/L	2 U
Aroclor-1254	µg/L	1 U
Aroclor-1260	µg/L	1 U
Beta-BHC	µg/L	0.05 U
Delta-BHC	µg/L	0.05 U
Dieldrin	µg/L	0.1 U
Endosulfan I	µg/L	0.05 U
Endosulfan II	µg/L	0.1 U
Endosulfan sulfate	µg/L	0.5 U
Endrin	µg/L	0.1 U
Endrin aldehyde	µg/L	0.1 U
Endrin ketone	µg/L	0.1 U
gamma-BHC	µg/L	0.05 U
gamma-Chlordane	µg/L	0.05 U
Heptachlor	µg/L	0.05 U
Heptachlor epoxide	µg/L	0.05 U
Methoxychlor	µg/L	2 U
Toxaphene	µg/L	5 U
EPA 8260A		
1,1,1,2-Tetrachloroethane	µg/L	5 U
1,1,1-Trichloroethane	µg/L	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U
1,1,2-Trichloroethane	µg/L	5 U
1,1-Dichloroethane	µg/L	5 U
1,1-Dichloroethene	µg/L	5 U
1,1-Dichloropropene	µg/L	5 U
1,2,3-Trichlorobenzene	µg/L	5 U
1,2,3-Trichloropropane	µg/L	5 U
1,2,4-Trichlorobenzene	µg/L	5 U
1,2,4-Trimethylbenzene	µg/L	5 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5 U
1,2-Dibromoethane (EDB)	µg/L	5 U
1,2-Dichlorobenzene	µg/L	5 U
1,2-Dichloroethane	µg/L	5 U

Table 4 - 1
Analytical Results for Tank Contents Sample — OWS 672A

Sample Identification		18609-2099
Location Code		OWS-672A Tnk Content
Date Sampled		03/18/99
	Unit	
1,2-Dichloropropane	µg/L	5 U
1,3,5-Trimethylbenzene	µg/L	5 U
1,3-Dichlorobenzene	µg/L	5 U
1,3-Dichloropropane	µg/L	5 U
1,4-Dichlorobenzene	µg/L	5 U
2,2-Dichloropropane	µg/L	5 U
2-Butanone (MEK)	µg/L	100 U
2-Chlorotoluene	µg/L	5 U
4-Chlorotoluene	µg/L	5 U
4-Methyl-2-pentanone (MIBK)	µg/L	7 J
Acetone	µg/L	100 U
Benzene	µg/L	5 U
Bromobenzene	µg/L	5 U
Bromochloromethane	µg/L	5 U
Bromodichloromethane	µg/L	5 U
Bromoform	µg/L	5 U
Bromomethane	µg/L	5 U
Carbon disulfide	µg/L	5 U
Carbon tetrachloride	µg/L	5 U
Chlorobenzene	µg/L	5 U
Chloroethane	µg/L	5 U
Chloroform	µg/L	5 U
Chloromethane	µg/L	5 U
cis-1,2-Dichloroethene	µg/L	5 U
cis-1,3-Dichloropropene	µg/L	5 U
Dibromochloromethane	µg/L	5 U
Dibromomethane	µg/L	5 U
Dichlorodifluoromethane	µg/L	5 U
Ethylbenzene	µg/L	5 U
Hexachlorobutadiene	µg/L	5 U
Isopropylbenzene (Cumene)	µg/L	5 U
Methyl tert-butyl ether (MTBE)	µg/L	10 U
Methylene chloride	µg/L	5 U
N-Butylbenzene	µg/L	5 U

Table 4 - 1
Analytical Results for Tank Contents Sample — OWS 672A

Sample Identification		18609-2099
Location Code		OWS-672A Tnk Content
Date Sampled		03/18/99
	Unit	
N-Propylbenzene	µg/L	5 U
Naphthalene	µg/L	5 U
p-Isopropyltoluene	µg/L	5 U
sec-Butylbenzene	µg/L	5 U
Styrene	µg/L	5 U
tert-Butylbenzene	µg/L	5 U
Tetrachloroethene	µg/L	5 U
Toluene	µg/L	5 U
trans-1,2-Dichloroethene	µg/L	5 U
trans-1,3-Dichloropropene	µg/L	5 U
Trichloroethene	µg/L	5 U
Trichlorofluoromethane	µg/L	5 U
Vinyl chloride	µg/L	5 U
Xylenes (total)	µg/L	15 U

Table 4 - 1
Analytical Results for Tank Contents Sample — OWS 672A

CA LUFT - California leaking underground fuel tank
EPA - US Environmental Protection Agency
J - estimated value
M - modified
mg/L - milligrams per liter
OHM - OHM Remediation Services Corp.
OWS - Oil Water Separator
TPH - total petroleum hydrocarbons
U - not detected at or above the stated reporting limit
µg/L - micrograms per liter

Table 4 - 2
Analytical Results for Soil Boring Samples — OWS 672A

Sample Identification		18609-2161	18609-2162	18609-2163	18609-2165	18609-2166	18609-2167	18609-2169
Location Code		OWS-672A-SB01	OWS-672A-SB01	OWS-672A-SB01 (DUP)	OWS-672A-SB01	OWS-672A-SB02	OWS-672A-SB02	OWS-672A-SB02
Date Sampled		03/31/99	03/31/99	03/31/99	03/31/99	03/31/99	03/31/99	03/31/99
Depth (feet below ground surface)		9.5	20.5	21.0	30.5	21.0	30.5	50.5
	Unit							
CA LUFT 8015M								
TPH as Diesel	mg/kg	11 U	12 U	11 U	12 U	1 J	76	1200
TPH as Gasoline	mg/kg	1.1 U	1.2 U	0.07 J	0.2 J	0.1 J	7	20
TPH as Motor Oil	mg/kg	11 U	12 U	11 U	12 U	11 U	12 U	110 U
EPA 1312/CA LUFT 8015M								
TPH as Diesel	mg/L	NA	NA	NA	NA	NA	NA	1.7
TPH as Gasoline	mg/L	NA	NA	NA	NA	NA	NA	NA
TPH as Motor Oil	mg/L	NA	NA	NA	NA	NA	NA	0.5 U
EPA 8260A								
1,1,1,2-Tetrachloroethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,1,1-Trichloroethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,1,2,2-Tetrachloroethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,1,2-Trichloroethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,1-Dichloroethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,1-Dichloroethene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,1-Dichloropropene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2,3-Trichlorobenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2,3-Trichloropropane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2,4-Trichlorobenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2,4-Trimethylbenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	3 J	6.2 U	42 J
1,2-Dibromo-3-chloropropane (DBCP)	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2-Dibromoethane (EDB)	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2-Dichlorobenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2-Dichloroethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,2-Dichloropropane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,3,5-Trimethylbenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,3-Dichlorobenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,3-Dichloropropane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
1,4-Dichlorobenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
2,2-Dichloropropane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
2-Butanone (MEK)	µg/kg	110 U	120 U	110 U	120 U	110 U	120 U	1100 U
2-Chlorotoluene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
4-Chlorotoluene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U

Table 4 - 2
Analytical Results for Soil Boring Samples — OWS 672A

Sample Identification		18609-2161	18609-2162	18609-2163	18609-2165	18609-2166	18609-2167	18609-2169
Location Code		OWS-672A-SB01	OWS-672A-SB01	OWS-672A-SB01 (DUP)	OWS-672A-SB01	OWS-672A-SB02	OWS-672A-SB02	OWS-672A-SB02
Date Sampled		03/31/99	03/31/99	03/31/99	03/31/99	03/31/99	03/31/99	03/31/99
Depth (feet below ground surface)		9.5	20.5	21.0	30.5	21.0	30.5	50.5
	Unit							
4-Methyl-2-pentanone (MIBK)	µg/kg	57 U	59 U	55 U	61 U	54 U	62 U	560 U
Acetone	µg/kg	110 U	120 U	110 U	120 U	110 U	120 U	1100 U
Benzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Bromobenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Bromochloromethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Bromodichloromethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Bromoform	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Bromomethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Carbon disulfide	µg/kg	2 J	5.9 U	5.5 U	6.1 U	5.4 U	3 J	56 U
Carbon tetrachloride	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Chlorobenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Chloroethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Chloroform	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Chloromethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
cis-1,2-Dichloroethene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
cis-1,3-Dichloropropene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Dibromochloromethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Dibromomethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Dichlorodifluoromethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Ethylbenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	2 J	260
Hexachlorobutadiene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Isopropylbenzene (Cumene)	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	3 J	220
Methyl tert-butyl ether (MTBE)	µg/kg	11 U	12 U	11 U	12 U	11 U	12 U	110 U
Methylene chloride	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
N-Butylbenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	1000
N-Propylbenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	5 J	490
Naphthalene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	6	4 J	6220
p-Isopropyltoluene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	130
sec-Butylbenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	13	550
Styrene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
tert-Butylbenzene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Tetrachloroethene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Toluene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U

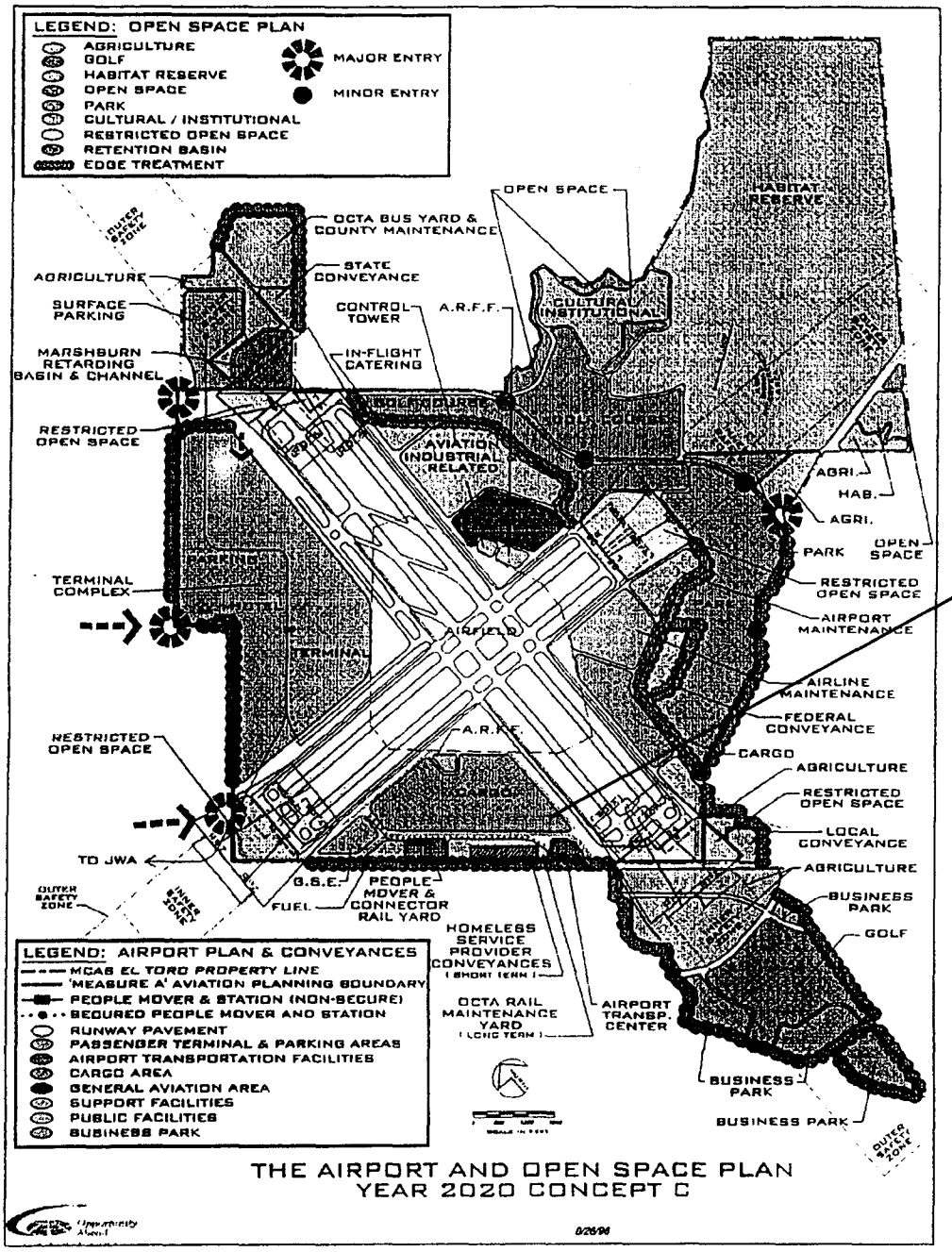
Table 4 - 2
Analytical Results for Soil Boring Samples — OWS 672A

Sample Identification		18609-2161	18609-2162	18609-2163	18609-2165	18609-2166	18609-2167	18609-2169
Location Code		OWS-672A-SB01	OWS-672A-SB01	OWS-672A-SB01 (DUP)	OWS-672A-SB01	OWS-672A-SB02	OWS-672A-SB02	OWS-672A-SB02
Date Sampled		03/31/99	03/31/99	03/31/99	03/31/99	03/31/99	03/31/99	03/31/99
Depth (feet below ground surface)		9.5	20.5	21.0	30.5	21.0	30.5	50.5
	Unit							
trans-1,2-Dichloroethene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
trans-1,3-Dichloropropene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Trichloroethene	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Trichlorofluoromethane	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Vinyl chloride	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U
Xylenes (total)	µg/kg	5.7 U	5.9 U	5.5 U	6.1 U	5.4 U	6.2 U	56 U

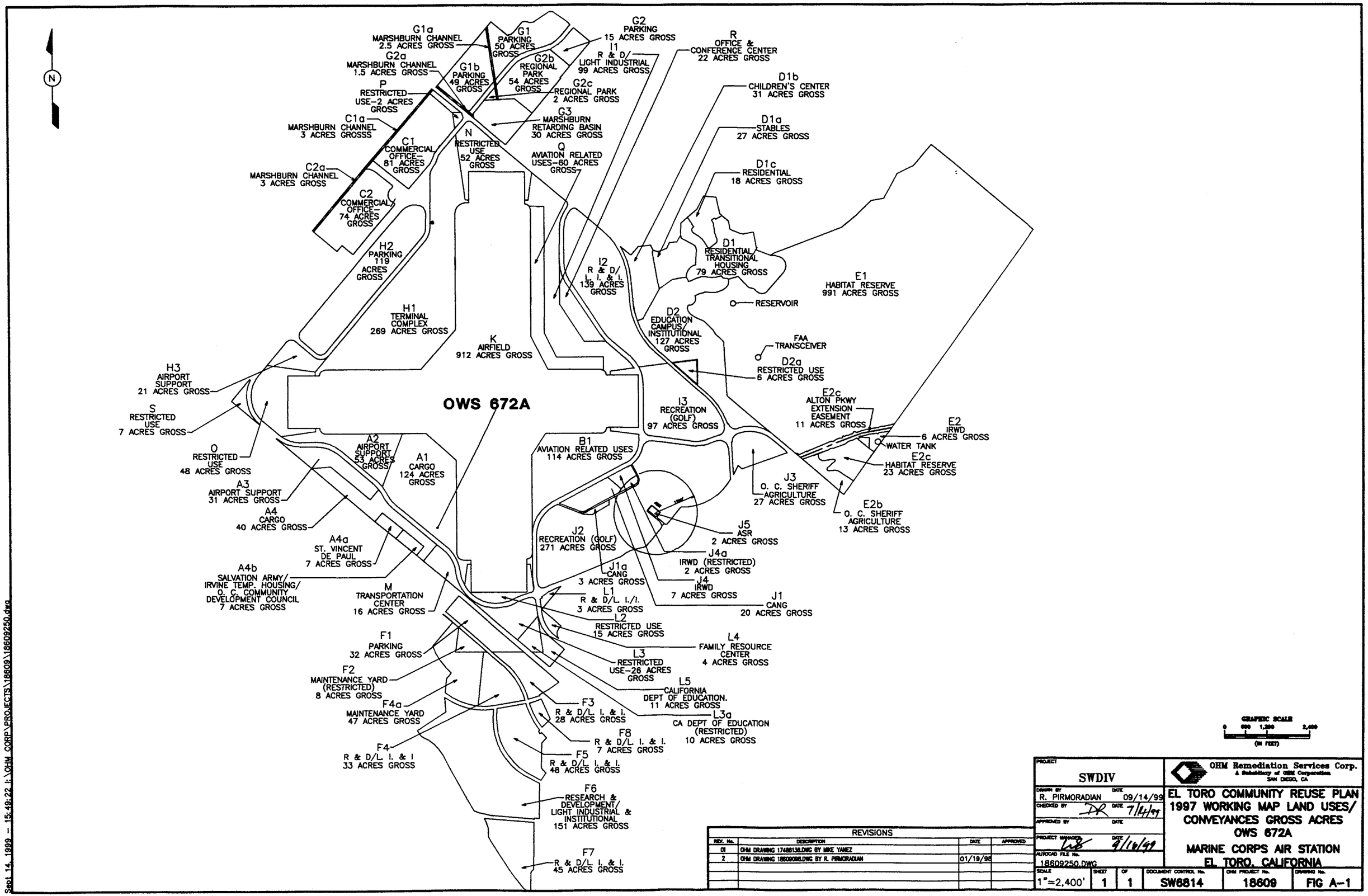
Table 4 - 2
Analytical Results for Soil Boring Samples — OWS 672A

CA LUFT - California leaking underground fuel tank
EPA - US Environmental Protection Agency
J - estimated value
M - modified
mg/kg - milligrams per kilogram
mg/L - milligrams per liter
NA - not analyzed
OHM - OHM Remediation Services Corp.
OWS - Oil Water Separator
TPH - total petroleum hydrocarbons
SB - soil boring
U - not detected at or above the stated reporting limit
µg/kg - micrograms per kilogram

Appendix A
Tentative Reuse Parcel Location of OWS Site 672A


LEGEND: OPEN SPACE PLAN
AGRICULTURE
GOLF
HABITAT RESERVE
OPEN SPACE
PARK
CULTURAL / INSTITUTIONAL
RESTRICTED OPEN SPACE
RETENTION BASIN
EDGE TREATMENT
MAJOR ENTRY
MINOR ENTRY
OUTER SAFETY ZONE
OCTA BUS YARD & COUNTY MAINTENANCE
STATE CONVEYANCE
AGRICULTURE
SURFACE PARKING
CONTROL TOWER
A.R.F.F.
IN-FLIGHT CATERING
MARSHBURN RETARDING BASIN & CHANNEL
RESTRICTED OPEN SPACE
AVIATION INDUSTRIAL RELATED
PARKING
TERMINAL COMPLEX
TERMINAL
AIRFIELD
A.R.F.F.
RESTRICTED OPEN SPACE
TO JWA
OUTER SAFETY ZONE
INNER SAFETY ZONE
G.S.E.
FUEL
PEOPLE MOVER & CONNECTOR RAIL YARD
HOMELESS SERVICE PROVIDER CONVEYANCES (SHORT TERM)
OCTA RAIL MAINTENANCE YARD (LONG TERM)
AIRPORT TRANSP. CENTER
OPEN SPACE
HABITAT RESERVE
CULTURAL INSTITUTIONAL
AGRI.
HAB.
AGRI.
PARK
OPEN SPACE
RESTRICTED OPEN SPACE
AIRPORT MAINTENANCE
AIRLINE MAINTENANCE
FEDERAL CONVEYANCE
CARGO
AGRICULTURE
RESTRICTED OPEN SPACE
LOCAL CONVEYANCE
AGRICULTURE
BUSINESS PARK
GOLF
BUSINESS PARK
BUSINESS PARK
OUTER SAFETY ZONE
LEGEND: AIRPORT PLAN & CONVEYANCES
MCAS EL TORO PROPERTY LINE
'MEASURE A' AVIATION PLANNING BOUNDARY
PEOPLE MOVER & STATION (NON-SECURE)
SECURED PEOPLE MOVER AND STATION
RUNWAY PAVEMENT
PASSENGER TERMINAL & PARKING AREAS
AIRPORT TRANSPORTATION FACILITIES
CARGO AREA
GENERAL AVIATION AREA
SUPPORT FACILITIES
PUBLIC FACILITIES
BUSINESS PARK
THE AIRPORT AND OPEN SPACE PLAN
YEAR 2020 CONCEPT C
Opportunity Agoura
0/26/96

OWS 672A



REVISIONS			
REV. No.	DESCRIPTION	DATE	APPROVED
01	OHM DRAWING 17488136.DWG BY MIKE YANEZ		
2	OHM DRAWING 18609086.DWG BY R. PIRMORADIAN	01/19/98	

PROJECT	SWDIV
DRAWN BY	R. PIRMORADIAN — DATE 09/14/99
CHECKED BY	DR — DATE 7/14/99
APPROVED BY	DATE
PROJECT MANAGER	DATE 9/16/99
AUTOCAD FILE No.	18609250.DWG

OHM Remediation Services Corp.
A Subsidiary of OHM Corporation
SAN DIEGO, CA

EL TORO COMMUNITY REUSE PLAN
1997 WORKING MAP LAND USES/ CONVEYANCES GROSS ACRES
OWS 672A
MARINE CORPS AIR STATION
EL TORO, CALIFORNIA

SCALE	SHEET	OF	DOCUMENT CONTROL No.	OHM PROJECT No.	DRAWING No.
1"=2,400'	1	1	SW6814	18609	FIG A–1

Sept 14, 1999 – 15:49:22 I:\OHM_CORP\PROJECTS\18609\18609250.dwg

Appendix B
JEG RFA 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. — Date
CLEAN Project Manager
CH2M HILL, Inc.

Raoul Portillo 15 July 1993

Raoul Portillo — Date
CLEAN Technical Reviewer
Jacobs Engineering Group Inc.

1002073B.SCO\93\MA

MCAS EL TORO RCRA FACILITY ASSESSMENT – SAMPLING VISIT RESULTS													
				ANALYTICAL TEST RESULTS								RECOMMENDATIONS	
SWMU/AOC NUMBER	SWMU/AOC TYPE (FIGURE)	BORING NUMBER	SAMPLE DEPTH (FEET)	TPH (mg/kg)	TFH (mg/kg) Gasoline	TFH (mg/kg) Diesel	VOCs (ug/kg)	SVOCs (ug/kg)	PESTICIDES/PCBs (ug/kg)	METALS (mg/kg)	Action	Rationale
173	Oil/Water Separator (54)	B1	5	ND	NA	NA	Methylene Chloride-9 BJ * Acetone-12 *	NA	NA	NA	Additional borings.	Petroleum hydrocarbon contamination, unknown extent. TPH/TFH > 1000 ppm VOCs < ETM & PRG
			10	496	NA	NA	Methylene Chloride-25 BJ * Acetone-68 *	NA	NA	NA		
			15	8341	NA	NA	Methylene Chloride-15 BJ * Acetone-65 B * Xylene-460 Ethylbenzene-270	NA	NA	NA		
			15 (Duplicate)	2153	NA	NA	Methylene Chloride-1900 BJ * Acetone-2200 BJ *	NA	NA	NA		
			20	1606	NA	NA	Methylene Chloride-15 BJ * Acetone-120 B * Ethylbenzene-470	NA	NA	NA		
			25	11008	NA	NA	Methylene Chloride-18 BJ * Acetone-75 B * Xylene-22000 D Benzene-37 J Ethylbenzene-7400 D	NA	NA	NA		

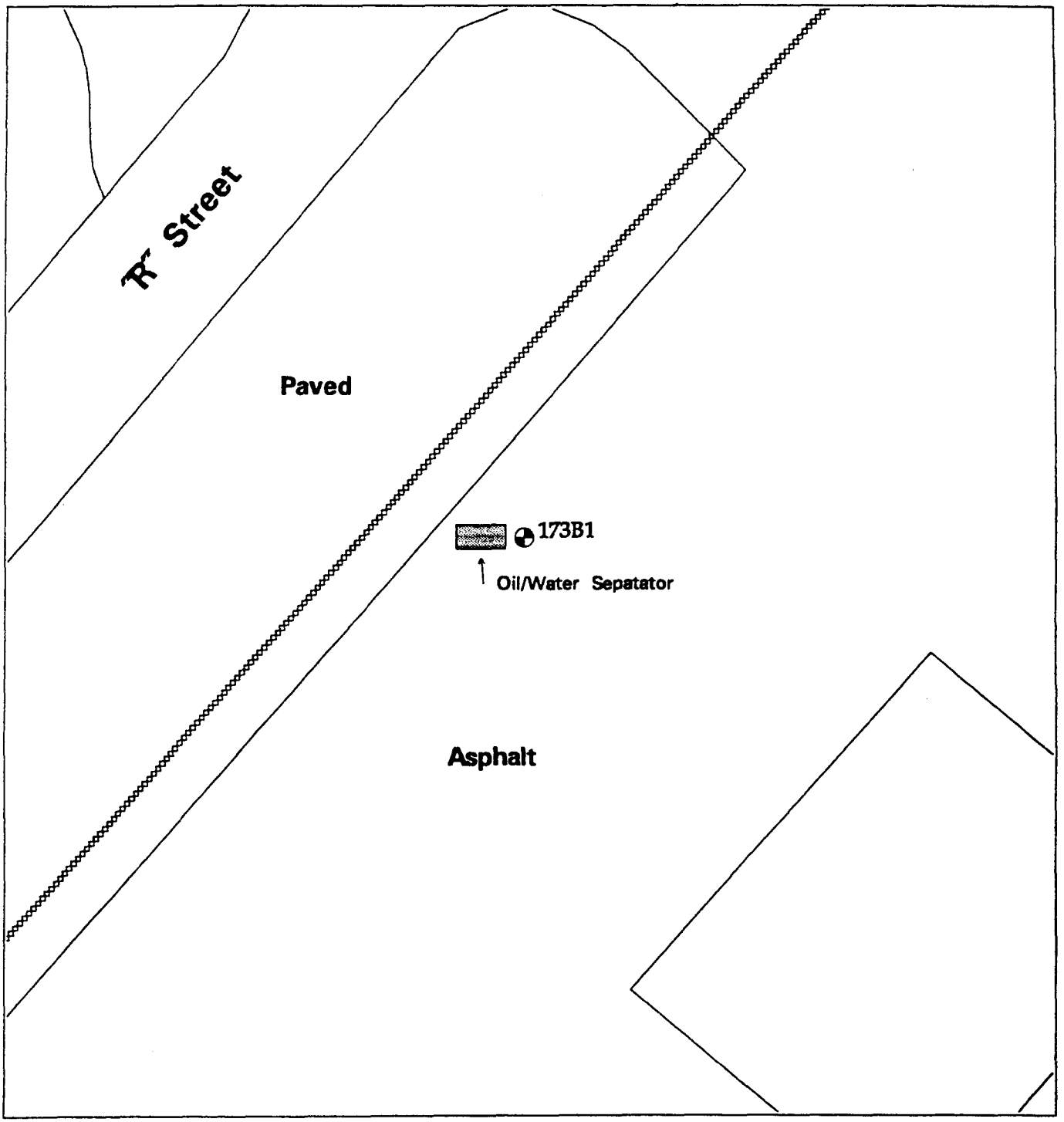


Figure 54 Sample Location Map

SWMU/AOC Number and Type:
173 - Oil/Water Separator

Boring Location and Number:

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

Features:

- Building
- Concrete
- Fence
- Railroad

Scale

0 10 20 40 Feet

MCAS El Toro
RCRA Facility Assessment

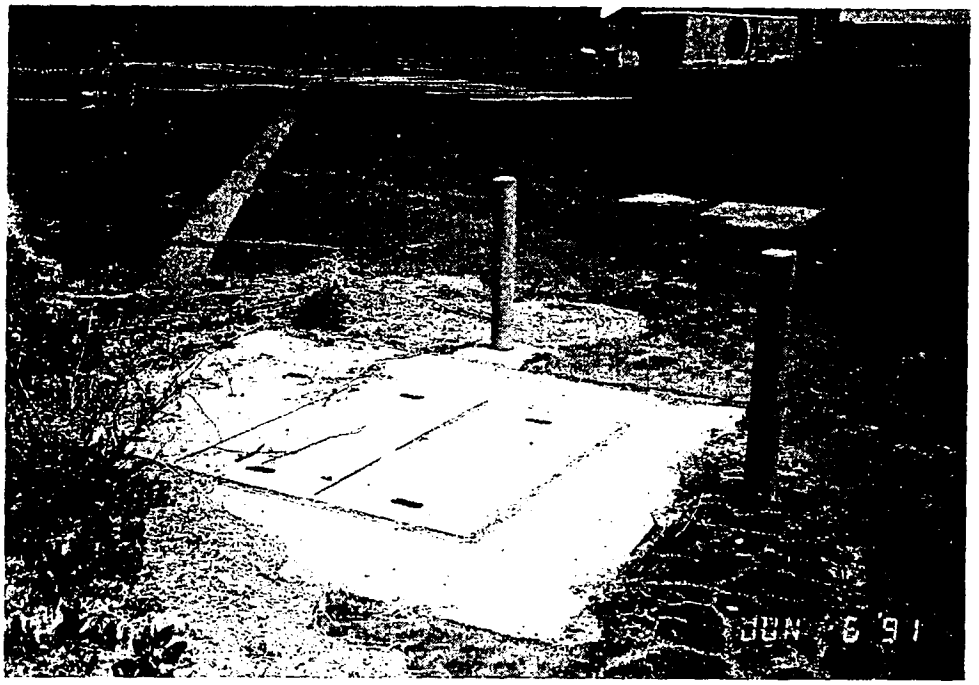
Evaluation Form
SWMU/Area of Concern
Number 173

Name: Oil/Water Separator 671

Location: West of Building 672

Size: Unknown

Date of Site Visit: 25 April 1991



Period of Operation

Unknown

Evaluation Form
SWMU/Area of Concern
Number 173

Unit Characteristics

Oil/water Separator 671 is located adjacent to the northwestern facility boundary fence and 5 ft to 10 ft west of the Stations's main gate. The location of the oil/water separator is identified by a three-piece galvanized steel cover. The entire cover measures about 5 x 10 ft. The cover protects the vents and discharge pipes associated with the oil/water separator. The steel cover is outlined by a 1-ft concrete surface, which is bordered by asphalt. Because the oil/water separator is located underground, its physical condition could not be observed.

A cluster of three 9-in.-diameter steel covers are located about 25 ft east of the oil/water separator. Two of the covers are labeled as being fill boxes. The covers are free of staining and appear as though they have not been lifted for awhile.

Waste Characteristics

Oily water

Possible Migration Pathways

Subsurface soil

Evidence of Release

None observed

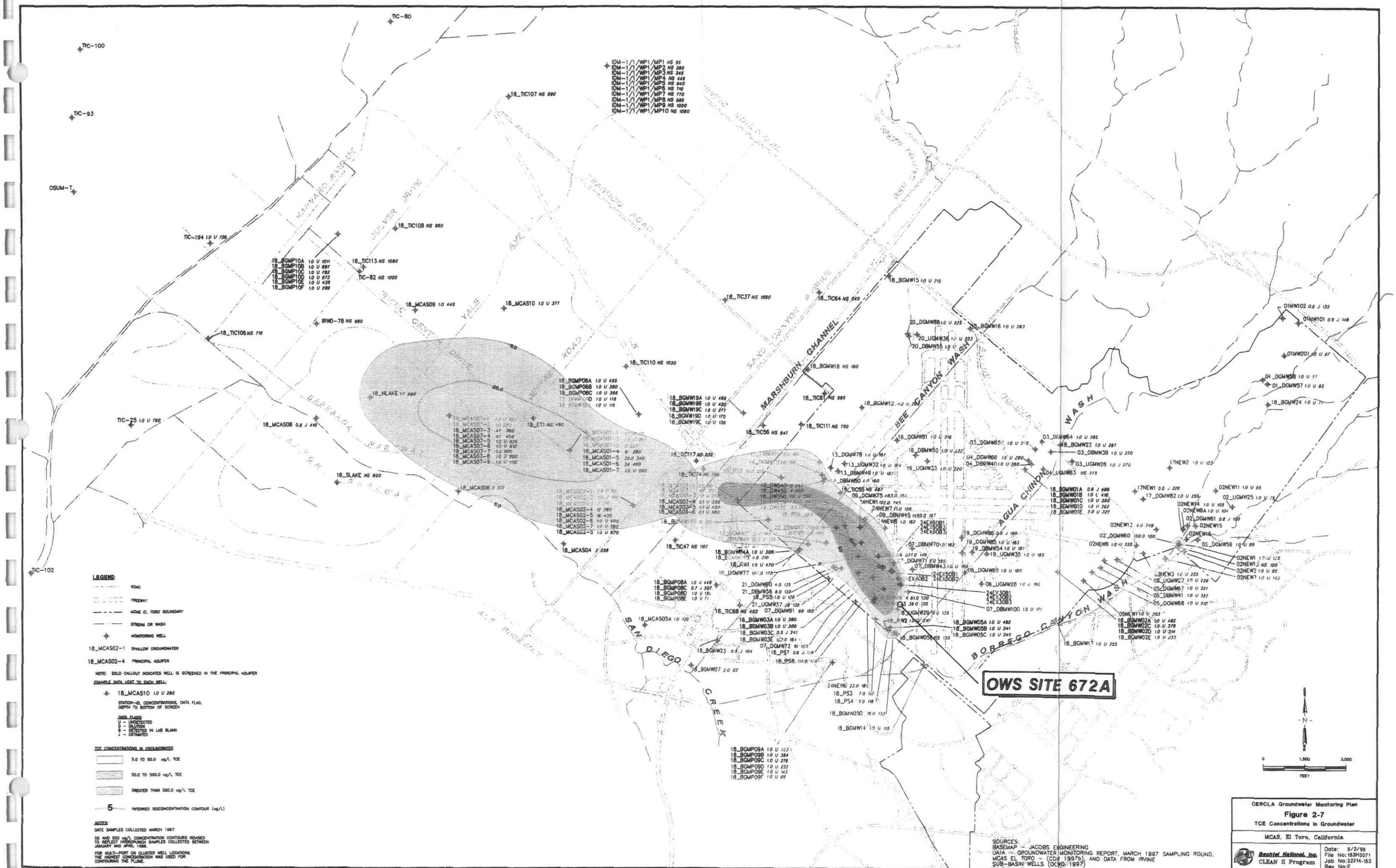
Exposure Potential

On-Station personnel

Recommendations

This UST has not been tank tested. Although no evidence of a release was indicated from the records review or the VSI, it is difficult to assess the potential for release from this underground SWMU/AOC. For this reason, a sampling visit is suggested for this UST.

Appendix C
TCE in Groundwater


TIC-80
TIC-100
TIC-93
OSUM-T
TIC-194 1.0 U 726
18_TIC107 NS 890
18_TIC108 NS 960
18_TIC113 NS 1080
TIC-82 NS 1002
18_BGMP10A 1.0 U 1011
18_BGMP10B 1.0 U 897
18_BGMP10C 1.0 U 782
18_BGMP10D 1.0 U 573
18_BGMP10E 1.0 U 439
18_BGMP10F 1.0 U 299
18_MCAS09 1.0 U 445
18_MCAS10 1.0 U 377
IRWD-78 NS 680
18_TIC106 NS 715
16_TIC37 NS 1980
18_TIC64 NS 540
18_BGMW15 1.0 U 215
20_DGMW88 1.0 U 223
20_UGMW36 1.0 U 223
20_DBMW55 1.0 U
18_BGMW16 1.0 U 263
18_TIC110 NS 1030
18_BGMW18 NS 180
18_TIC67 NS 695
18_TIC111 NS 750
18_TIC56 NS 647
18_BGMW12
18_NLAKE 17 890
18_BGMP06A 1.0 U 455
18_BGMP06B 1.0 U 390
18_BGMP06C 1.0 U 305
18_BGMP06D 1.0 U 118
18_BGMP06E 1.0 U 115
18_BGMW19A 1.0 U 466
18_BGMW19B 1.0 U 430
18_BGMW19C 1.0 U 377
18_BGMW19D 1.0 U 170
18_BGMW19E 1.0 U 138
TIC-25 1.0 U 760
18_MCAS08 0.8 J 410
18_ET1 NS 490
18_TIC117 NS 832
18_TIC74 NS 726
18_SLAKE NS 800
18_MCAS06 3 272
18_MCAS04 2 238
18_TIC47 NS 1107
TIC-102
18_BGMP04A 1.0 U 306
18_RW1 1.0 U 470
18_DGMW77 10.0 170
18_BGMP08A 1.0 U 449
18_BGMP08C 0.7 J 307
18_BGMP08D 1.0 U 131
18_BGMP08E 1.0 U 71
21_DGMW90 4.0 135
21_DBMW56 8.0 132
18_PS5 1.0 U 126
21_UGMW37 28 130
18_TIC68 NS 403
07_DGMW91 88 150
18_MCAS05A 1.0 U 130
18_BGMW03A 1.0 U 390
18_BGMW03B 1.0 U 300
18_BGMW03C 0.5 J 243
18_BGMW03E 2.0 U 164
07_DGMW72 91 130
18_PS7 0.6 J 118
18_PS8 114.0 135
18_BGMW23 0.5 J 104
18_BGMW07 3.0 65
18_BGMP09A 1.0 U 153
18_BGMP09B 1.0 U 384
18_BGMP09C 1.0 U 278
18_BGMP09D 1.0 U 233
18_BGMP09E 1.0 U 143
18_BGMP09F 1.0 U 69
24NEW6 23.0 185
18_PS3 7.0 103
18_PS4 5.0 118
18_BGMW050 15.0 133
18_BGMW14 1.0 U 115
MARSHBURN CHANNEL
SAND CANYON WASH
BEE CANYON WASH
AGUA CHINON WASH
BORREGO CANYON WASH
SAN DIEGO CREEK
BARBARA
MARINE AVENUE
CULVER DRIVE
BAMBOO ROAD
YALE
BYRNE DRIVE
ROAD
DRIVE
16_DGMW81 1.0 U 216
16_DBMW52 1.0 U 222
16_UGMW33 1.0 U 220
13_DGMW78 1.0 U 167
13_UGMW32 1.0 U 164
13_DBMW49 1.0 U 187
14_DBMW50 4.0 160
18_TIC55 NS 297
09_DGMW75 48.0 154
14NEW1 155.0 245
24NEW7 11.0 158
09_DBMW45 145.0 187
14NEW8 1.0 162
24EX60B1
24EX60B2
24EX60B3
24EX60B4
19_DGMW86 0.9 J 198
19_DGMW85 1.0 U 183
19_DBMW54 1.0 U 181
19_UGMW35 1.0 U 185
07_DBMW70 0.0 183
07_DGMW71 5.0 155
07_DBMW43 1.0 U 190
06_DGMW69 1.0 U 190
24EX50B1
24EX50B2
EX10B2
06_UGMW28 1.0 U 180
24EX30B1
24EX30B2
24EX30B3
07_DBMW100 1.0 U 171
08_UGMW29 5.0 125
18_RW2 1.0 U 240
18_BGMW05A 1.0 U 482
18_BGMW05B 1.0 U 341
18_BGMW05C 1.0 U 245
18_BGMW05D 115 130
03_DGMW65 1.0 U 270
04_DGMW66 1.0 U 290
04_DBMW40 1.0 U 260
03_DGMW64 1.0 U 285
18_BGMW22 1.0 U 287
03_DBMW39 1.0 U 270
03_UGMW26 1.0 U 270
04_UGMW63 115 315
18_BGMW01A 0.8 J 486
18_BGMW01B 1.0 U 416
18_BGMW01C 1.0 U 350
18_BGMW01D 1.0 U 262
18_BGMW01E 3.0 U 225
17NEW2 1.0 U 103
17NEW1 0.6 J 226
17_DGMW82 1.0 U 255
02NEW11 1.0 U 65
02_UGMW25 1.0 U 75
02NEW14 1.0 U 105
02NEW8A 1.0 U 104
02_DGMW61 0.8 J 100
02NEW15
02NEW16
02NEW12 4.0 249
02_DGMW60 150.0 100
02NEW6 1.0 U 225
02_DGMW59 1.0 U 89
02NEW1 1.0 U 125
02NEW13 115 100
02NEW2 1.0 U 95
02NEW7 1.0 U 133
02NEW3 1.0 U 225
05_UGMW27 1.0 U 238
05_DGMW67 1.0 U 221
05_DBMW41 1.0 U 222
05_DGMW68 1.0 U 210
05MW11 1.0 U 203
18_BGMW02A 1.0 U 482
18_BGMW02C 1.0 U 378
18_BGMW02D 1.0 U 314
18_BGMW02E 1.0 U 233
18_BGMW17 1.0 U 255
01MW102 0.8 J 135
01MW101 0.9 J 148
01MW201 1.0 U 57
01_DGMW58 1.0 U 77
01_DGMW57 1.0 U 83
18_BGMW24 1.0 U 71
OWS SITE 672A
LEGEND
ROAD
FREEWAY
MCAS EL TORO BOUNDARY
STREAM OR WASH
MONITORING WELL
18_MCAS02-1 SHALLOW GROUNDWATER
18_MCAS02-4 PRINCIPAL AQUIFER
NOTE: BOLD CALLOUT INDICATES WELL IS SCREENED IN THE PRINCIPAL AQUIFER
EXAMPLE DATA NEXT TO EACH WELL:
18_MCAS10 1.0 U 285
STATION-ID, CONCENTRATIONS, DATA FLAG, DEPTH TO BOTTOM OF SCREEN
DATA FLAGS:
U - UNDETECTED
D - DILUTION
B - DETECTED IN LAB BLANK
J - ESTIMATED
TCE CONCENTRATIONS IN GROUNDWATER
5.0 TO 50.0 ug/L TCE
50.0 TO 500.0 ug/L TCE
GREATER THAN 500.0 ug/L TCE
5 INFERRED ISOCONCENTRATION CONTOUR (ug/L)
NOTES:
DATE SAMPLES COLLECTED MARCH 1997
50 AND 500 ug/L CONCENTRATION CONTOURS REVISED TO REFLECT HYDROPUNCH SAMPLES COLLECTED BETWEEN JANUARY AND APRIL 1998.
FOR MULTI-PORT OR CLUSTER WELL LOCATIONS THE HIGHEST CONCENTRATION WAS USED FOR CONTOURING THE PLUME.
SOURCES:
BASEMAP - JACOBS ENGINEERING
DATA - GROUNDWATER MONITORING REPORT, MARCH 1997 SAMPLING ROUND, MCAS EL TORO - (CDM 1997b), AND DATA FROM IRVINE SUB-BASIN WELLS (OCWD, 1997)
N
0
1,500
3,000
FEET
CERCLA Groundwater Monitoring Plan
Figure 2-7
TCE Concentrations in Groundwater
MCAS, El Toro, California
Bechtel National, Inc.
CLEAN II Program
Date: 6/2/99
File No: 153H3071
Job No: 22214-153
Rev No: F

Appendix D
Remedial Activities, Selected Soil Vapor Analytical Data

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Val	Y/N	D.F.	RDL	MDL
18708-851	24SG137	2/17/99	08:30	REG	AIR	M9B170222002	UG/L	EPA TO-14	1634-04-4	Methyl tert-butyl ether (MTBE)	2/18/99	0.036	U		Yes	1	0.036	0.01
									75-09-2	Methylene chloride	2/18/99	0.012			Yes	1	.0069	0.002
									100-42-5	Styrene	2/18/99	0.0085	U		Yes	1	.0085	0.002
									127-18-4	Tetrachloroethene	2/18/99	0.014	U		Yes	1	0.014	0.003
									108-88-3	Toluene	2/18/99	0.019	U		Yes	1	0.019	0.001
									156-60-5	trans-1,2-Dichloroethene	2/18/99	0.0079	U		Yes	1	.0079	0.002
									10061-02-6	trans-1,3-Dichloropropene	2/18/99	0.0091	U		Yes	1	.0091	0.003
									79-01-6	Trichloroethene	2/18/99	0.011	U		Yes	1	0.011	0.002
									75-69-4	Trichlorofluoromethane	2/18/99	0.011	U		Yes	1	0.011	0.002
									108-05-4	Vinyl acetate	2/18/99	0.035	U		Yes	1	0.035	0.007
									75-01-4	Vinyl chloride	2/18/99	0.0051	U		Yes	1	.0051	0.002
									1330-20-7	Xylenes (total)	2/18/99	0.021			Yes	1	.0087	0.003
18708-852	24SG137	2/17/99	08:50	REG	AIR	M9B170222003	UG/L	EPA TO-14	71-55-6	1,1,1-Trichloroethane	2/17/99	0.011	U		Yes	1	0.011	0.002
									79-34-5	1,1,2,2-Tetrachloroethane	2/17/99	0.014	U		Yes	1	0.014	0.003
									76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2/17/99	0.015	U		Yes	1	0.015	0.003
									79-00-5	1,1,2-Trichloroethane	2/17/99	0.011	U		Yes	1	0.011	0.002
									75-34-3	1,1-Dichloroethane	2/17/99	0.0081	U		Yes	1	.0081	0.002
									75-35-4	1,1-Dichloroethene	2/17/99	0.0079	U		Yes	1	.0079	0.002
									120-82-1	1,2,4-Trichlorobenzene	2/17/99	0.15	U		Yes	1	0.15	0.02
									95-63-6	1,2,4-Trimethylbenzene	2/17/99	0.0098	U		Yes	1	.0098	0.002
									106-93-4	1,2-Dibromoethane (EDB)	2/17/99	0.015	U		Yes	1	0.015	0.003
									95-50-1	1,2-Dichlorobenzene	2/17/99	0.012	U		Yes	1	0.012	0.004
									107-06-2	1,2-Dichloroethane	2/17/99	0.0081	U		Yes	1	.0081	0.003
									78-87-5	1,2-Dichloropropane	2/17/99	0.0092	U		Yes	1	.0092	0.003
									108-67-8	1,3,5-Trimethylbenzene	2/17/99	0.0098	U		Yes	1	.0098	0.003
									541-73-1	1,3-Dichlorobenzene	2/17/99	0.017			Yes	1	0.012	0.003
									106-46-7	1,4-Dichlorobenzene	2/17/99	0.012	U		Yes	1	0.012	0.004
									78-93-3	2-Butanone (MEK)	2/17/99	0.029	U		Yes	1	0.029	0.005
									591-78-6	2-Hexanone	2/17/99	0.12	U		Yes	1	0.12	0.01
									622-96-8	4-Ethyltoluene	2/17/99	0.0098	U		Yes	1	.0098	0.002
									108-10-1	4-Methyl-2-pentanone (MIBK)	2/17/99	0.041	U		Yes	1	0.041	0.008
									67-64-1	Acetone	2/17/99	0.024	U		Yes	1	0.024	0.004
									71-43-2	Benzene	2/17/99	0.0064	U		Yes	1	.0064	0.002
									100-44-7	Benzyl chloride	2/17/99	0.052	U		Yes	1	0.052	0.004
									75-27-4	Bromodichloromethane	2/17/99	0.013	U		Yes	1	0.013	0.005
									75-25-2	Bromoform	2/17/99	0.021	U		Yes	1	0.021	0.005
									74-83-9	Bromomethane	2/17/99	0.0078	U		Yes	1	.0078	0.003
									75-15-0	Carbon disulfide	2/17/99	0.031	U		Yes	1	0.031	0.006
									56-23-5	Carbon tetrachloride	2/17/99	0.013	U		Yes	1	0.013	0.0031
									108-90-7	Chlorobenzene	2/17/99	0.0092	U		Yes	1	.0092	0.0023
									75-00-3	Chloroethane	2/17/99	0.011	U		Yes	1	0.011	0.0021
									67-66-3	Chloroform	2/17/99	0.0097	U		Yes	1	.0097	0.0039

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Val	Y/N	D.F.	RDL	MDL
									74-87-3	Chloromethane	2/17/99	0.0082	U		Yes	1	.0082	0.0021
									156-59-2	cis-1,2-Dichloroethene	2/17/99	0.0079	U		Yes	1	.0079	0.0032
									10061-01-5	cis-1,3-Dichloropropene	2/17/99	0.0091	U		Yes	1	.0091	0.0023
									124-48-1	Dibromochloromethane	2/17/99	0.017	U		Yes	1	0.017	0.0043
									75-71-8	Dichlorodifluoromethane	2/17/99	0.0099	U		Yes	1	.0099	0.0025
									100-41-4	Ethylbenzene	2/17/99	0.0087	U		Yes	1	.0087	0.0022
									76-14-2	Freon 114	2/17/99	0.014	U		Yes	1	0.014	0.0056
									87-68-3	Hexachlorobutadiene	2/17/99	0.043	U		Yes	1	0.043	0.011
									1634-04-4	Methyl tert-butyl ether (MTBE)	2/17/99	0.036	U		Yes	1	0.036	0.011
									75-09-2	Methylene chloride	2/17/99	0.0070			Yes	1	.0069	0.0028
									100-42-5	Styrene	2/17/99	0.0085	U		Yes	1	.0085	0.0021
									127-18-4	Tetrachloroethene	2/17/99	0.014	U		Yes	1	0.014	0.0034
									108-88-3	Toluene	2/17/99	0.019	U		Yes	1	0.019	0.0019
									156-60-5	trans-1,2-Dichloroethene	2/17/99	0.0079	U		Yes	1	.0079	0.0020
									10061-02-6	trans-1,3-Dichloropropene	2/17/99	0.0091	U		Yes	1	.0091	0.0036
									79-01-6	Trichloroethene	2/17/99	0.011	U		Yes	1	0.011	0.0027
									75-69-4	Trichlorofluoromethane	2/17/99	0.011	U		Yes	1	0.011	0.0028
									108-05-4	Vinyl acetate	2/17/99	0.035	U		Yes	1	0.035	0.0070
									75-01-4	Vinyl chloride	2/17/99	0.0051	U		Yes	1	.0051	0.0020
									1330-20-7	Xylenes (total)	2/17/99	0.011			Yes	1	.0087	0.0035
18708-853	24SG137	2/17/99	10:25	REG	AIR	M9B170222004	UG/L	EPA TO-14	71-55-6	1,1,1-Trichloroethane	2/17/99	2.2	U		Yes	1	2.2	0.0027
									79-34-5	1,1,2,2-Tetrachloroethane	2/17/99	2.7	U		Yes	1	2.7	0.0034
									76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2/17/99	470			Yes	1	3.1	0.0038
									79-00-5	1,1,2-Trichloroethane	2/17/99	2.2	U		Yes	1	2.2	0.0027
									75-34-3	1,1-Dichloroethane	2/17/99	1.6	U		Yes	1	1.6	0.0020
									75-35-4	1,1-Dichloroethene	2/17/99	1.6	U		Yes	1	1.6	0.0020
									120-82-1	1,2,4-Trichlorobenzene	2/17/99	30	U		Yes	1	30	0.022
									95-63-6	1,2,4-Trimethylbenzene	2/17/99	2.0	U		Yes	1	2.0	0.0025
									106-93-4	1,2-Dibromoethane (EDB)	2/17/99	3.1	U		Yes	1	3.1	0.0038
									95-50-1	1,2-Dichlorobenzene	2/17/99	2.4	U		Yes	1	2.4	0.0048
									107-06-2	1,2-Dichloroethane	2/17/99	1.6	U		Yes	1	1.6	0.0032
									78-87-5	1,2-Dichloropropane	2/17/99	1.8	U		Yes	1	1.8	0.0037
									108-67-8	1,3,5-Trimethylbenzene	2/17/99	2.0	U		Yes	1	2.0	0.0039
									541-73-1	1,3-Dichlorobenzene	2/17/99	2.4	U		Yes	1	2.4	0.0030
									106-46-7	1,4-Dichlorobenzene	2/17/99	2.4	U		Yes	1	2.4	0.0048
									78-93-3	2-Butanone (MEK)	2/17/99	5.9	U		Yes	1	5.9	0.0059
									591-78-6	2-Hexanone	2/17/99	25	U		Yes	1	25	0.012
									622-96-8	4-Ethyltoluene	2/17/99	2.0	U		Yes	1	2.0	0.0025
									108-10-1	4-Methyl-2-pentanone (MIBK)	2/17/99	8.2	U		Yes	1	8.2	0.0082
									67-64-1	Acetone	2/17/99	4.7	U		Yes	1	4.7	0.0047
									71-43-2	Benzene	2/17/99	1.3	F		Yes	1	1.3	0.0026

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Val	Y/N	D.F.	RDL	MDL
18708-853	24SG137	2/17/99	10:25	REG	AIR	M9B170222004	UG/L	EPA TO-14	100-44-7	Benzyl chloride	2/17/99	10	U		Yes	1	10	0.004
									75-27-4	Bromodichloromethane	2/17/99	2.7	U		Yes	1	2.7	0.005
									75-25-2	Bromoform	2/17/99	4.1	U		Yes	1	4.1	0.005
									74-83-9	Bromomethane	2/17/99	1.6	U		Yes	1	1.6	0.003
									75-15-0	Carbon disulfide	2/17/99	6.2	U		Yes	1	6.2	0.006
									56-23-5	Carbon tetrachloride	2/17/99	2.5	U		Yes	1	2.5	0.003
									108-90-7	Chlorobenzene	2/17/99	1.8	U		Yes	1	1.8	0.002
									75-00-3	Chloroethane	2/17/99	2.1	U		Yes	1	2.1	0.002
									67-66-3	Chloroform	2/17/99	1.9	U		Yes	1	1.9	0.003
									74-87-3	Chloromethane	2/17/99	1.6	U		Yes	1	1.6	0.002
									156-59-2	cis-1,2-Dichloroethene	2/17/99	1.6	U		Yes	1	1.6	0.003
									10061-01-5	cis-1,3-Dichloropropene	2/17/99	1.8	U		Yes	1	1.8	0.002
									124-48-1	Dibromochloromethane	2/17/99	2.7	U		Yes	1	2.7	0.004
									75-71-8	Dichlorodifluoromethane	2/17/99	2.0	U		Yes	1	2.0	0.002
									100-41-4	Ethylbenzene	2/17/99	1.7	U		Yes	1	1.7	0.002
									76-14-2	Freon 114	2/17/99	2.8	U		Yes	1	2.8	0.005
									87-68-3	Hexachlorobutadiene	2/17/99	8.5	U		Yes	1	8.5	0.01
									1634-04-4	Methyl tert-butyl ether (MTBE)	2/17/99	7.2	U		Yes	1	7.2	0.01
									75-09-2	Methylene chloride	2/17/99	1.4	U		Yes	1	1.4	0.002
									100-42-5	Styrene	2/17/99	1.7	U		Yes	1	1.7	0.002
									127-18-4	Tetrachloroethene	2/17/99	2.7	U		Yes	1	2.7	0.003
									108-88-3	Toluene	2/17/99	3.8	U		Yes	1	3.8	0.001
									156-60-5	trans-1,2-Dichloroethene	2/17/99	1.6	U		Yes	1	1.6	0.002
									10061-02-6	trans-1,3-Dichloropropene	2/17/99	1.8	U		Yes	1	1.8	0.003
									79-01-6	Trichloroethene	2/17/99	0.45			Yes	1	0.011	0.002
									75-69-4	Trichlorofluoromethane	2/17/99	2.2	U		Yes	1	2.2	0.002
									108-05-4	Vinyl acetate	2/17/99	7.0	U		Yes	1	7.0	0.007
									75-01-4	Vinyl chloride	2/17/99	1.0	U		Yes	1	1.0	0.002
									1330-20-7	Xylenes (total)	2/17/99	1.7	U		Yes	1	1.7	0.003
18708-855	24SG137	2/17/99	11:40	REG	AIR	M9B170222006	UG/L	EPA TO-14	71-55-6	1,1,1-Trichloroethane	2/17/99	0.011	U		Yes	1	0.011	0.002
									79-34-5	1,1,2,2-Tetrachloroethane	2/17/99	0.014	U		Yes	1	0.014	0.003
									76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	2/17/99	0.10			Yes	1	0.015	0.003
									79-00-5	1,1,2-Trichloroethane	2/17/99	0.011	U		Yes	1	0.011	0.002
									75-34-3	1,1-Dichloroethane	2/17/99	0.0081	U		Yes	1	.0081	0.002
									75-35-4	1,1-Dichloroethene	2/17/99	0.0079	U		Yes	1	.0079	0.002
									120-82-1	1,2,4-Trichlorobenzene	2/17/99	0.15	U		Yes	1	0.15	0.02
									95-63-6	1,2,4-Trimethylbenzene	2/17/99	0.15			Yes	1	.0098	0.002
									106-93-4	1,2-Dibromoethane (EDB)	2/17/99	0.015	U		Yes	1	0.015	0.003
									95-50-1	1,2-Dichlorobenzene	2/17/99	0.012	U		Yes	1	0.012	0.004
									107-06-2	1,2-Dichloroethane	2/17/99	0.0081	U		Yes	1	.0081	0.003
									78-87-5	1,2-Dichloropropane	2/17/99	0.0092	U		Yes	1	.0092	0.003
									108-67-8	1,3,5-Trimethylbenzene	2/17/99	0.10			Yes	1	.0098	0.003

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Val	Y/N	D.F.	RDL	MDL
									541-73-1	1,3-Dichlorobenzene	2/17/99	0.012	U		Yes	1	0.012	0.0030
									106-46-7	1,4-Dichlorobenzene	2/17/99	0.012	U		Yes	1	0.012	0.0048
									78-93-3	2-Butanone (MEK)	2/17/99	0.029	U		Yes	1	0.029	0.0059
									591-78-6	2-Hexanone	2/17/99	0.12	U		Yes	1	0.12	0.012
									622-96-8	4-Ethyltoluene	2/17/99	0.16			Yes	1	.0098	0.0025
									108-10-1	4-Methyl-2-pentanone (MIBK)	2/17/99	0.041	U		Yes	1	0.041	0.0082
									67-64-1	Acetone	2/17/99	0.024	U		Yes	1	0.024	0.0047
									71-43-2	Benzene	2/17/99	0.0064	U		Yes	1	.0064	0.0026
									100-44-7	Benzyl chloride	2/17/99	0.052	U		Yes	1	0.052	0.0041
									75-27-4	Bromodichloromethane	2/17/99	0.013	U		Yes	1	0.013	0.0053
									75-25-2	Bromoform	2/17/99	0.021	U		Yes	1	0.021	0.0052
									74-83-9	Bromomethane	2/17/99	0.0078	U		Yes	1	.0078	0.0039
									75-15-0	Carbon disulfide	2/17/99	0.031	U		Yes	1	0.031	0.0062
									56-23-5	Carbon tetrachloride	2/17/99	0.013	U		Yes	1	0.013	0.0031
									108-90-7	Chlorobenzene	2/17/99	0.0092	U		Yes	1	.0092	0.0023
									75-00-3	Chloroethane	2/17/99	0.011	U		Yes	1	0.011	0.0021
									67-66-3	Chloroform	2/17/99	0.0097	U		Yes	1	.0097	0.0039
									74-87-3	Chloromethane	2/17/99	0.0082	U		Yes	1	.0082	0.0021
									156-59-2	cis-1,2-Dichloroethene	2/17/99	0.0079	U		Yes	1	.0079	0.0032
									10061-01-5	cis-1,3-Dichloropropene	2/17/99	0.0091	U		Yes	1	.0091	0.0023
									124-48-1	Dibromochloromethane	2/17/99	0.017	U		Yes	1	0.017	0.0043
									75-71-8	Dichlorodifluoromethane	2/17/99	0.0099	U		Yes	1	.0099	0.0025
									100-41-4	Ethylbenzene	2/17/99	0.012			Yes	1	.0087	0.0022
									76-14-2	Freon 114	2/17/99	0.014	U		Yes	1	0.014	0.0056
									87-68-3	Hexachlorobutadiene	2/17/99	0.043	U		Yes	1	0.043	0.01
									1634-04-4	Methyl tert-butyl ether (MTBE)	2/17/99	0.036	U		Yes	1	0.036	0.01
									75-09-2	Methylene chloride	2/17/99	0.0069	U		Yes	1	.0069	0.0028
									100-42-5	Styrene	2/17/99	0.0085	U		Yes	1	.0085	0.002
									127-18-4	Tetrachloroethene	2/17/99	0.014	U		Yes	1	0.014	0.003
									108-88-3	Toluene	2/17/99	0.019	U		Yes	1	0.019	0.001
									156-60-5	trans-1,2-Dichloroethene	2/17/99	0.0079	U		Yes	1	.0079	0.0020
									10061-02-6	trans-1,3-Dichloropropene	2/17/99	0.0091	U		Yes	1	.0091	0.0036
									79-01-6	Trichloroethene	2/17/99	0.011	U		Yes	1	0.011	0.0027
									75-69-4	Trichlorofluoromethane	2/17/99	0.011	U		Yes	1	0.011	0.0028
									108-05-4	Vinyl acetate	2/17/99	0.035	U		Yes	1	0.035	0.0070
									75-01-4	Vinyl chloride	2/17/99	0.0051	U		Yes	1	.0051	0.0020
									1330-20-7	Xylenes (total)	2/17/99	0.071			Yes	1	.0087	0.0035

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Val	Y/N	D.F.	RDL	MDL
18233-029	24SG138-Ambient	1/28/99	08:45	REG	AIR	1360500001SA	UG/L	EPA TO-14	1634-04-4	Methyl tert-butyl ether (MTBE)	1/29/99	0.036	U		Yes	1	0.036	0.036
									75-09-2	Methylene chloride	1/29/99	0.0069	U		Yes	1	.0069	0.0069
									100-42-5	Styrene	1/29/99	0.0085	U		Yes	1	.0085	0.0085
									127-18-4	Tetrachloroethene	1/29/99	0.021			Yes	1	0.014	0.014
									108-88-3	Toluene	1/29/99	0.039			Yes	1	0.019	0.019
									156-60-5	trans-1,2-Dichloroethene	1/29/99	0.0079	U		Yes	1	.0079	0.0079
									10061-02-6	trans-1,3-Dichloropropene	1/29/99	0.0091	U		Yes	1	.0091	0.0091
									79-01-6	Trichloroethene	1/29/99	0.011	U		Yes	1	0.011	0.011
									75-69-4	Trichlorofluoromethane	1/29/99	0.011	U		Yes	1	0.011	0.011
									108-05-4	Vinyl acetate	1/29/99	0.035	U		Yes	1	0.035	0.035
									75-01-4	Vinyl chloride	1/29/99	0.0051	U		Yes	1	.0051	0.0051
									1330-20-7	Xylenes (total)	1/29/99	0.041			Yes	1	.0087	0.0087
18233-030	24SG138 @ 51'	1/28/99	09:25	REG	AIR	1360500002SA	UG/L	EPA TO-14	71-55-6	1,1,1-Trichloroethane	1/29/99	1.1	U		Yes	100	1.1	1.1
									79-34-5	1,1,2,2-Tetrachloroethane	1/29/99	1.4	U		Yes	100	1.4	1.4
									76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1/29/99	300			Yes	100	1.5	1.5
									79-00-5	1,1,2-Trichloroethane	1/29/99	1.1	U		Yes	100	1.1	1.1
									75-34-3	1,1-Dichloroethane	1/29/99	0.81	U		Yes	100	0.81	0.81
									75-35-4	1,1-Dichloroethene	1/29/99	0.89	F		Yes	100	0.79	0.79
									120-82-1	1,2,4-Trichlorobenzene	1/29/99	15	U		Yes	100	15	15
									95-63-6	1,2,4-Trimethylbenzene	1/29/99	0.98	U		Yes	100	0.98	0.98
									106-93-4	1,2-Dibromoethane (EDB)	1/29/99	1.5	U		Yes	100	1.5	1.5
									95-50-1	1,2-Dichlorobenzene	1/29/99	1.2	U		Yes	100	1.2	1.2
									107-06-2	1,2-Dichloroethane	1/29/99	0.81	U		Yes	100	0.81	0.81
									78-87-5	1,2-Dichloropropane	1/29/99	0.92	U		Yes	100	0.92	0.92
									108-67-8	1,3,5-Trimethylbenzene	1/29/99	0.98	U		Yes	100	0.98	0.98
									541-73-1	1,3-Dichlorobenzene	1/29/99	1.2	U		Yes	100	1.2	1.2
									106-46-7	1,4-Dichlorobenzene	1/29/99	1.2	U		Yes	100	1.2	1.2
									78-93-3	2-Butanone (MEK)	1/29/99	2.9	U		Yes	100	2.9	2.9
									591-78-6	2-Hexanone	1/29/99	12	U		Yes	100	12	12
									622-96-8	4-Ethyltoluene	1/29/99	0.99	U		Yes	100	0.99	0.99
									108-10-1	4-Methyl-2-pentanone (MIBK)	1/29/99	4.1	U		Yes	100	4.1	4.1
									67-64-1	Acetone	1/29/99	2.4	U		Yes	100	2.4	2.4
									71-43-2	Benzene	1/29/99	0.64	U		Yes	100	0.64	0.64
									100-44-7	Benzyl chloride	1/29/99	5.2	U		Yes	100	5.2	5.2
									75-27-4	Bromodichloromethane	1/29/99	1.3	U		Yes	100	1.3	1.3
									75-25-2	Bromoform	1/29/99	2.1	U		Yes	100	2.1	2.1
									74-83-9	Bromomethane	1/29/99	0.78	U		Yes	100	0.78	0.78
									75-15-0	Carbon disulfide	1/29/99	3.1	U		Yes	100	3.1	3.1
									56-23-5	Carbon tetrachloride	1/29/99	4.0			Yes	100	1.3	1.3
									108-90-7	Chlorobenzene	1/29/99	0.92	U		Yes	100	0.92	0.92
									75-00-3	Chloroethane	1/29/99	1.1	U		Yes	100	1.1	1.1
									67-66-3	Chloroform	1/29/99	0.97	U		Yes	100	0.97	0.97

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Qlfr Val	Qlfr Y/N	D.F.	RDL	MDL
									74-87-3	Chloromethane	1/29/99	0.82	U		Yes	100	0.82	0.82
									156-59-2	cis-1,2-Dichloroethene	1/29/99	0.79	U		Yes	100	0.79	0.79
									10061-01-5	cis-1,3-Dichloropropene	1/29/99	0.91	U		Yes	100	0.91	0.91
									124-48-1	Dibromochloromethane	1/29/99	1.7	U		Yes	100	1.7	1.7
									75-71-8	Dichlorodifluoromethane	1/29/99	0.99	U		Yes	100	0.99	0.99
									100-41-4	Ethylbenzene	1/29/99	0.87	U		Yes	100	0.87	0.87
									76-14-2	Freon 114	1/29/99	1.4	U		Yes	100	1.4	1.4
									87-68-3	Hexachlorobutadiene	1/29/99	4.2	U		Yes	100	4.2	4.2
									1634-04-4	Methyl tert-butyl ether (MTBE)	1/29/99	3.6	U		Yes	100	3.6	3.6
									75-09-2	Methylene chloride	1/29/99	0.69	U		Yes	100	0.69	0.69
									100-42-5	Styrene	1/29/99	0.85	U		Yes	100	0.85	0.85
									127-18-4	Tetrachloroethene	1/29/99	1.4	U		Yes	100	1.4	1.4
									108-88-3	Toluene	1/29/99	1.9	U		Yes	100	1.9	1.9
									156-60-5	trans-1,2-Dichloroethene	1/29/99	0.79	U		Yes	100	0.79	0.79
									10061-02-6	trans-1,3-Dichloropropene	1/29/99	0.91	U		Yes	100	0.91	0.91
									79-01-6	Trichloroethene	1/29/99	52			Yes	100	1.1	1.1
									75-69-4	Trichlorofluoromethane	1/29/99	1.1	U		Yes	100	1.1	1.1
									108-05-4	Vinyl acetate	1/29/99	3.5	U		Yes	100	3.5	3.5
									75-01-4	Vinyl chloride	1/29/99	0.51	U		Yes	100	0.51	0.51
									1330-20-7	Xylenes (total)	1/29/99	0.87	U		Yes	100	0.87	0.87
18233-031	24SG138 @ 81'	1/28/99	10:55	REG	AIR	1360500003SA	UG/L	EPA TO-14	71-55-6	1,1,1-Trichloroethane	1/29/99	0.011	U		Yes	1	0.011	0.011
									79-34-5	1,1,2,2-Tetrachloroethane	1/29/99	0.014	U		Yes	1	0.014	0.014
									76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1/29/99	0.35			Yes	1	0.015	0.015
									79-00-5	1,1,2-Trichloroethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									75-34-3	1,1-Dichloroethane	1/29/99	0.0081	U		Yes	1	.0081	0.008
									75-35-4	1,1-Dichloroethene	1/29/99	0.0079	U		Yes	1	.0079	0.0079
									120-82-1	1,2,4-Trichlorobenzene	1/29/99	0.15	U		Yes	1	0.15	0.15
									95-63-6	1,2,4-Trimethylbenzene	1/29/99	0.0098	U		Yes	1	.0098	0.0098
									106-93-4	1,2-Dibromoethane (EDB)	1/29/99	0.015	U		Yes	1	0.015	0.015
									95-50-1	1,2-Dichlorobenzene	1/29/99	0.012	U		Yes	1	0.012	0.012
									107-06-2	1,2-Dichloroethane	1/29/99	0.0081	U		Yes	1	.0081	0.008
									78-87-5	1,2-Dichloropropane	1/29/99	0.0092	U		Yes	1	.0092	0.0092
									108-67-8	1,3,5-Trimethylbenzene	1/29/99	0.0098	U		Yes	1	.0098	0.0098
									541-73-1	1,3-Dichlorobenzene	1/29/99	0.012	U		Yes	1	0.012	0.012
									106-46-7	1,4-Dichlorobenzene	1/29/99	0.012	U		Yes	1	0.012	0.012
									78-93-3	2-Butanone (MEK)	1/29/99	0.029	U		Yes	1	0.029	0.029
									591-78-6	2-Hexanone	1/29/99	0.12	U		Yes	1	0.12	0.12
									622-96-8	4-Ethyltoluene	1/29/99	0.0099	U		Yes	1	.0099	0.0099
									108-10-1	4-Methyl-2-pentanone (MIBK)	1/29/99	0.041	U		Yes	1	0.041	0.041
									67-64-1	Acetone	1/29/99	0.036			Yes	1	0.024	0.024
									71-43-2	Benzene	1/29/99	0.0064	U		Yes	1	.0064	0.0064

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Val	Y/N	D.F.	RDL	MDL
18233-031	24SG138 @ 81'	1/28/99	10:55	REG	AIR	1360500003SA	UG/L	EPA TO-14	100-44-7	Benzyl chloride	1/29/99	0.052	U		Yes	1	0.052	0.05
									75-27-4	Bromodichloromethane	1/29/99	0.013	U		Yes	1	0.013	0.01
									75-25-2	Bromoform	1/29/99	0.021	U		Yes	1	0.021	0.02
									74-83-9	Bromomethane	1/29/99	0.0078	U		Yes	1	.0078	0.007
									75-15-0	Carbon disulfide	1/29/99	0.031	U		Yes	1	0.031	0.03
									56-23-5	Carbon tetrachloride	1/29/99	0.022			Yes	1	0.013	0.01
									108-90-7	Chlorobenzene	1/29/99	0.0092	U		Yes	1	.0092	0.009
									75-00-3	Chloroethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									67-66-3	Chloroform	1/29/99	0.0097	U		Yes	1	.0097	0.009
									74-87-3	Chloromethane	1/29/99	0.0082	U		Yes	1	.0082	0.008
									156-59-2	cis-1,2-Dichloroethene	1/29/99	0.0079	U		Yes	1	.0079	0.007
									10061-01-5	cis-1,3-Dichloropropene	1/29/99	0.0091	U		Yes	1	.0091	0.009
									124-48-1	Dibromochloromethane	1/29/99	0.017	U		Yes	1	0.017	0.01
									75-71-8	Dichlorodifluoromethane	1/29/99	0.0099	U		Yes	1	.0099	0.009
									100-41-4	Ethylbenzene	1/29/99	0.0087	U		Yes	1	.0087	0.008
									76-14-2	Freon 114	1/29/99	0.014	U		Yes	1	0.014	0.01
									87-68-3	Hexachlorobutadiene	1/29/99	0.042	U		Yes	1	0.042	0.04
									1634-04-4	Methyl tert-butyl ether (MTBE)	1/29/99	0.036	U		Yes	1	0.036	0.03
									75-09-2	Methylene chloride	1/29/99	0.0069	U		Yes	1	.0069	0.006
									100-42-5	Styrene	1/29/99	0.0085	U		Yes	1	.0085	0.008
									127-18-4	Tetrachloroethene	1/29/99	0.029			Yes	1	0.014	0.01
									108-88-3	Toluene	1/29/99	0.025			Yes	1	0.019	0.01
									156-60-5	trans-1,2-Dichloroethene	1/29/99	0.0079	U		Yes	1	.0079	0.007
									10061-02-6	trans-1,3-Dichloropropene	1/29/99	0.0091	U		Yes	1	.0091	0.009
									79-01-6	Trichloroethene	1/29/99	1.3			Yes	1	0.011	0.01
									75-69-4	Trichlorofluoromethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									108-05-4	Vinyl acetate	1/29/99	0.035	U		Yes	1	0.035	0.03
									75-01-4	Vinyl chloride	1/29/99	0.0051	U		Yes	1	.0051	0.005
									1330-20-7	Xylenes (total)	1/29/99	0.0087	U		Yes	1	.0087	0.008
18233-032	24SG138 @ 81'	1/28/99	11:05	FD	AIR	1360500004SA	UG/L	EPA TO-14	71-55-6	1,1,1-Trichloroethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									79-34-5	1,1,2,2-Tetrachloroethane	1/29/99	0.014	U		Yes	1	0.014	0.01
									76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1/29/99	0.38			Yes	1	0.015	0.01
									79-00-5	1,1,2-Trichloroethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									75-34-3	1,1-Dichloroethane	1/29/99	0.0081	U		Yes	1	.0081	0.008
									75-35-4	1,1-Dichloroethene	1/29/99	0.0079	U		Yes	1	.0079	0.007
									120-82-1	1,2,4-Trichlorobenzene	1/29/99	0.15	U		Yes	1	0.15	0.1
									95-63-6	1,2,4-Trimethylbenzene	1/29/99	0.0098	U		Yes	1	.0098	0.009
									106-93-4	1,2-Dibromoethane (EDB)	1/29/99	0.015	U		Yes	1	0.015	0.01
									95-50-1	1,2-Dichlorobenzene	1/29/99	0.012	U		Yes	1	0.012	0.01
									107-06-2	1,2-Dichloroethane	1/29/99	0.0081	U		Yes	1	.0081	0.008
									78-87-5	1,2-Dichloropropane	1/29/99	0.0092	U		Yes	1	.0092	0.009
									108-67-8	1,3,5-Trimethylbenzene	1/29/99	0.0098	U		Yes	1	.0098	0.009

Sample No.	Location	Sample Date	Time	Rsn	Matrix	Lab Id	Unit	Method	Cas No.	Analytes	Analysis Date	Result	Qlfr Lab	Val	Y/N	D.F.	RDL	MDL
									541-73-1	1,3-Dichlorobenzene	1/29/99	0.012	U		Yes	1	0.012	0.01
									106-46-7	1,4-Dichlorobenzene	1/29/99	0.012	U		Yes	1	0.012	0.01
									78-93-3	2-Butanone (MEK)	1/29/99	0.029	U		Yes	1	0.029	0.02
									591-78-6	2-Hexanone	1/29/99	0.12	U		Yes	1	0.12	0.1
									622-96-8	4-Ethyltoluene	1/29/99	0.0099	U		Yes	1	.0099	0.009
									108-10-1	4-Methyl-2-pentanone (MIBK)	1/29/99	0.041	U		Yes	1	0.041	0.04
									67-64-1	Acetone	1/29/99	0.039			Yes	1	0.024	0.02
									71-43-2	Benzene	1/29/99	0.0064	U		Yes	1	.0064	0.006
									100-44-7	Benzyl chloride	1/29/99	0.052	U		Yes	1	0.052	0.05
									75-27-4	Bromodichloromethane	1/29/99	0.013	U		Yes	1	0.013	0.01
									75-25-2	Bromoform	1/29/99	0.021	U		Yes	1	0.021	0.02
									74-83-9	Bromomethane	1/29/99	0.0078	U		Yes	1	.0078	0.007
									75-15-0	Carbon disulfide	1/29/99	0.031	U		Yes	1	0.031	0.03
									56-23-5	Carbon tetrachloride	1/29/99	0.026			Yes	1	0.013	0.01
									108-90-7	Chlorobenzene	1/29/99	0.0092	U		Yes	1	.0092	0.009
									75-00-3	Chloroethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									67-66-3	Chloroform	1/29/99	0.0097	U		Yes	1	.0097	0.009
									74-87-3	Chloromethane	1/29/99	0.0082	U		Yes	1	.0082	0.008
									156-59-2	cis-1,2-Dichloroethene	1/29/99	0.0079	U		Yes	1	.0079	0.007
									10061-01-5	cis-1,3-Dichloropropene	1/29/99	0.0091	U		Yes	1	.0091	0.009
									124-48-1	Dibromochloromethane	1/29/99	0.017	U		Yes	1	0.017	0.01
									75-71-8	Dichlorodifluoromethane	1/29/99	0.0099	U		Yes	1	.0099	0.009
									100-41-4	Ethylbenzene	1/29/99	0.0087	U		Yes	1	.0087	0.008
									76-14-2	Freon 114	1/29/99	0.014	U		Yes	1	0.014	0.01
									87-68-3	Hexachlorobutadiene	1/29/99	0.042	U		Yes	1	0.042	0.04
									1634-04-4	Methyl tert-butyl ether (MTBE)	1/29/99	0.036	U		Yes	1	0.036	0.03
									75-09-2	Methylene chloride	1/29/99	0.0069	U		Yes	1	.0069	0.006
									100-42-5	Styrene	1/29/99	0.0085	U		Yes	1	.0085	0.008
									127-18-4	Tetrachloroethene	1/29/99	0.029			Yes	1	0.014	0.01
									108-88-3	Toluene	1/29/99	0.024			Yes	1	0.019	0.01
									156-60-5	trans-1,2-Dichloroethene	1/29/99	0.0079	U		Yes	1	.0079	0.007
									10061-02-6	trans-1,3-Dichloropropene	1/29/99	0.0091	U		Yes	1	.0091	0.009
									79-01-6	Trichloroethene	1/29/99	1.4			Yes	1	0.011	0.01
									75-69-4	Trichlorofluoromethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									108-05-4	Vinyl acetate	1/29/99	0.035	U		Yes	1	0.035	0.03
									75-01-4	Vinyl chloride	1/29/99	0.0051	U		Yes	1	.0051	0.005
									1330-20-7	Xylenes (total)	1/29/99	0.0087	U		Yes	1	.0087	0.008
18233-033	24SG68-Ambient-1	1/28/99	13:35	REG	AIR	1360500005SA	UG/L	EPA TO-14	71-55-6	1,1,1-Trichloroethane	1/29/99	0.011	U		Yes	1	0.011	0.01
									79-34-5	1,1,2,2-Tetrachloroethane	1/29/99	0.014	U		Yes	1	0.014	0.01
									76-13-1	1,1,2-Trichloro-1,2,2-trifluoroethane	1/29/99	0.26			Yes	1	0.015	0.01
									79-00-5	1,1,2-Trichloroethane	1/29/99	0.011	U		Yes	1	0.011	0.01

Appendix E
Excerpts from Law/Crandall Report for OWS Site 672A

UHM- 2H000 4/1e

OIL/WATER SEPARATOR SURVEY

EL TORO MARINE CORPS AIR STATION

EL TORO, CALIFORNIA

FOR

DEPARTMENT OF THE NAVY

SOUTHWEST DIVISION

NAVAL FACILITIES ENGINEERING COMMAND

IQ Contract No. N68711-92-D-4652, Delivery Order No. 001

Prepared by Law/Crandall, Incoporated (LCI)

(LCI Project No. S92174.FB)

April 1, 1993

LAW/CRANDALL, INC.

ENGINEERING AND ENVIRONMENTAL SERVICES

ONE OF THE LAW COMPANIES

5.21 OIL/WATER (O/W) SEPARATOR DATA SHEETS

MARINE CORPS AIR STATION: El Toro Marine Corp Air Station

DATE OF SURVEY: January 1993

SURVEY TEAM: Chris Sandall/Mac Mehta

CONTRACT NO: N68711-92-D-4652

PHYSICAL CHARACTERISTICS

O/W Separator I.D.: 672

Location: Southwest of Building 672 near fence

Inlet Pipe Size(s)/Slope(s)/Run(s): 6 inches, slope = 1.8%, run = 225 feet

Outlet Pipe Size(s)/Slopes(s)/Run(s): 8 inches, slope unknown, run = 45 feet to manhole

O/W Separator Constructed of: metal/concrete

O/W Separator Type: Unknown - does not appear similar to "as-built" drawings

Interior Dimensions: 24 inches x 41 inches x 8 feet 1 inch (l x w x d)

Estimated Capacity: approximately 400 gallons

Monitoring/Leak Detection Devices: waste oil level alarm

Discharge Point: sewer

Discharge Point verified by (document reference): Naval Facilities Drawing No. 6147724

Lateral Connections between the Discharge Point and Oil/Water Separator: none reported/observed

O/W SEPARATOR CONDITION AT TIME OF SURVEY

In Use? Yes

Depth of Solids: 1 foot

Depth of Liquid: 8 feet 1 inch

Floating Material Depth: several inches

Other (e.g., odor):

Structural Condition: Appears sound

Run-off Into Oil/Water Separator/Port: yes

TANKS/AUTOMATIC VALVES/APPURTENANCES

Is Tank Associated with the Oil/Water Separator? Yes

Location: Southwest of Building 671

Underground/Above Ground: Underground

Volume: 2 foot diameter tank. 7.5 feet depth, full of oil

Tank Constructed of: appears to be steel

Secondary Containment for Tank: unknown

Secondary Containment for Piping: unknown

Automatic Shutoff/Diversion Valves associated with Oil/Water Separator: manual gate valve upgradient from oil/water separator can divert flows to storm drain

Other:

MAINTENANCE/INSPECTION FREQUENCIES AND WASTE DISPOSAL

Written Maintenance/Inspection Schedules? None observed

Location of written schedules: not applicable

Frequency of Maintenance/Inspection Activities: As necessary

Maintenance/Inspection Performed by: FMD

Sediment Removal/Disposal: FMD

Water Removal/Disposal: FMD

Oil Removal/Disposal: ENRMO

Written History of Problems? None observed. Site personnel indicated that the oil/water separator backs up during heavy washing

O/W SEPARATOR USES

Activities (e.g. truck washing) Discharging to O/W Separator: Washing fuel trucks

Chemicals used in activities tributary to Oil/Water Separator: fuels, oil

Are special management activities employed to control sedimentation or other materials: None observed

Estimated frequency of activity/volume of waste produced: 10 - 40 gpm

Upstream inlets open to run-off? Yes

Square footage of area open to run-off: 750 square feet

Estimated run-off coefficient: 0.9

Materials Storage Areas Upstream of inlet and contacting storm water: Fuel

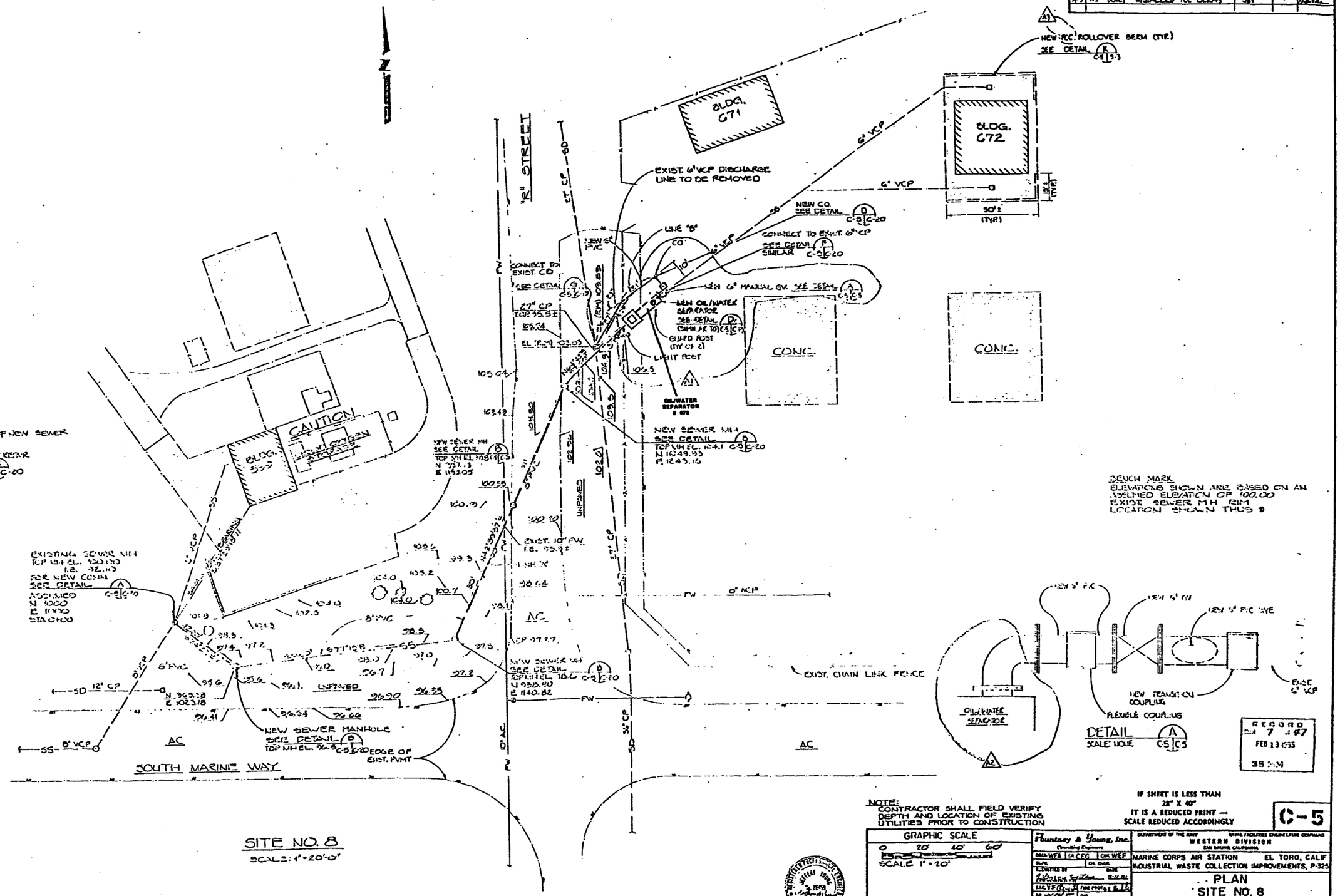
AS-BUILT DRAWINGS/SPECIFICATIONS/ENGINEERING REPORTS

The following documents are available for this oil/water separator and are maintained in the location indicated:

As built drawings under contract 80-C-9175 located in the reproduction room, 2nd floor, Building 368, El Toro MCAS.

Appendix F
Station Drawing

REVISIONS				
SYM	DESCRIPTION	PROP'D BY	DATE	APPROVED
A-1	"AS BUILT" RELOCATED SEPARATOR	JBY	1/26/95	
A-2	"AS BUILT" CHANGED CONNECTION	JBY	"	
A-3	"AS BUILT" INSTALLED RCC BERMS	JBY	"	



NOTES:
1. FOR PROFILE OF NEW SEWER SEE DWG. C-15
2. FOR PAVEMENT REPAIR SEE DETAIL C C-5 C-20

BENCH MARK
ELEVATIONS SHOWN ARE BASED ON AN ASSUMED ELEVATION OF 100.00
EXIST. SEWER MH RIM
LOCATION SHOWN THUS ⊕

NOTE:
CONTRACTOR SHALL FIELD VERIFY DEPTH AND LOCATION OF EXISTING UTILITIES PRIOR TO CONSTRUCTION

SITE NO. 8
SCALE: 1" = 20'-0"

RECORD DWG 7 J #7 FEB 13 1995 35 [illegible]

IF SHEET IS LESS THAN 28" X 40" IT IS A REDUCED PRINT — SCALE REDUCED ACCORDINGLY

C-5

GRAPHIC SCALE
0 20' 40' 60'
SCALE 1" = 20'

Fountney & Young, Inc.
Consulting Engineers

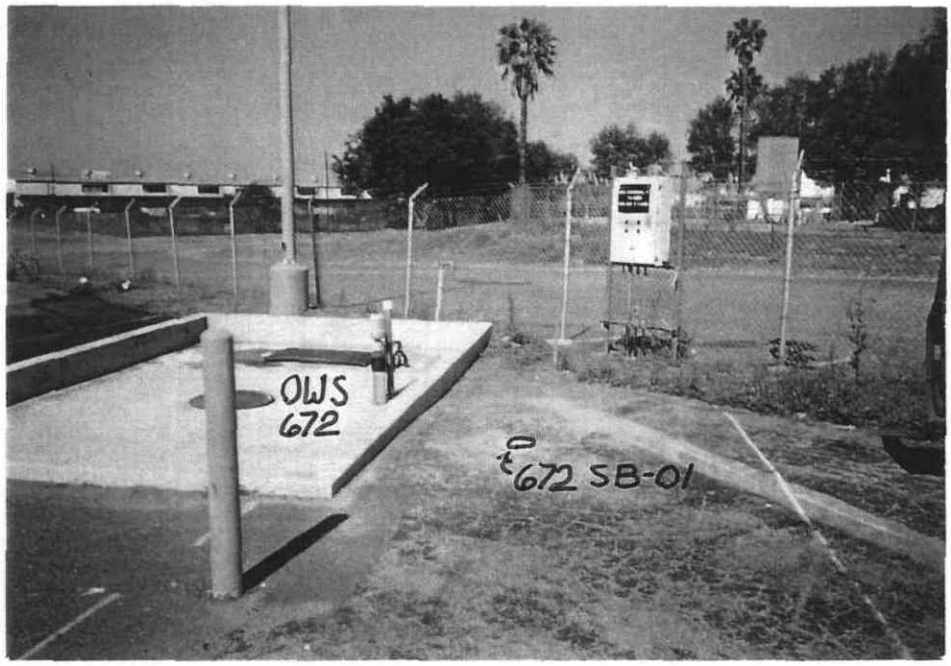
DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
WESTERN DIVISION
SAN BRUNO, CALIFORNIA

MARINE CORPS AIR STATION EL TORO, CALIF
INDUSTRIAL WASTE COLLECTION IMPROVEMENTS, P-325

PLAN
SITE NO. 8

SIZE F | CODE IDENT. NO. 80091 | NAVFAC DRAWING NO. 6147724
CONTR. CONTL. NO. N62474-80-C-9175
SCALE SHOWN | SPEC. 12-80-9175 | SHEET 7 OF

Appendix G
Site Photographs



Photograph No. 1: Oil/water separator (OWS) 672A and soil-boring location SB-01.

Photograph No. 2: OWS 672A, cement truck staged to place slurry in separator.

Appendix H
Site Inspection Log

SITE ASSESSMENT LOG
MCAS El Toro
REMEDIATION OF VARIOUS UST SITES
20242, D.O. 112

~~UST~~ OWS SITE: 672A

Field Observations by: D. Rawal **Date:** 3/17/99

~~**Former**~~ ~~**UST**~~ OWS **area:** (Paved) or Unpaved Asphalt-paved area surrounding OWS 672A.

Paved: Concrete or (Asphalt)
Unpaved: Open dirt area
Any Visible Sprinkler System: Yes / (No)

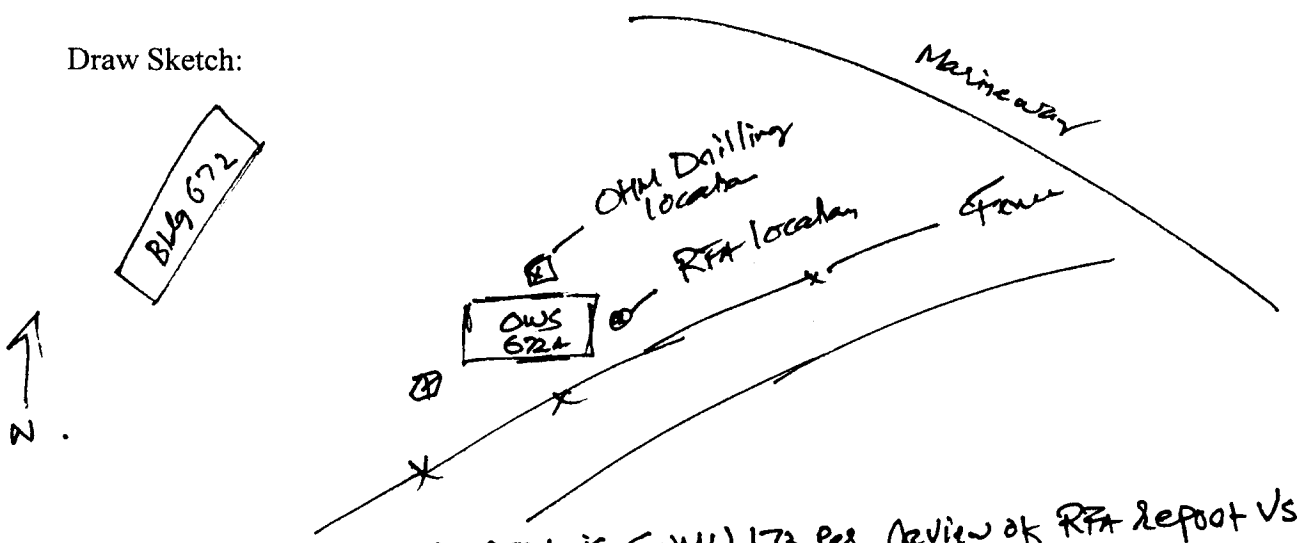
-Nearest Building or Structure Distance: Bldg 672 Appx. 50 feet - South,

-Any Underground Piping/Lines, or Transformer Observed: None

-Overhead Utility Lines/Poles: Yes, Electrical Pole,

-Site Setup Constrains: None but may require Bldg 672 tenant notification also, drill rig can cookiecut Asphalt hole,

Draw Sketch:



Additional Field Notes: OWS 672A is SWMU 173 per review of RFA report VSI form. Field visit confirmed the location of OWS 672A with SWMU 173.
USTs 672A & 672B were removed by OHM.
No spills were observed in the vicinity of OWS. OWS has product in it. Not in use. No UST is associated with this OWS.

Appendix I
Geophysical Survey Data

C9903101F

OWS 672

AREA 28 (MAPS)

N

1" = 20'

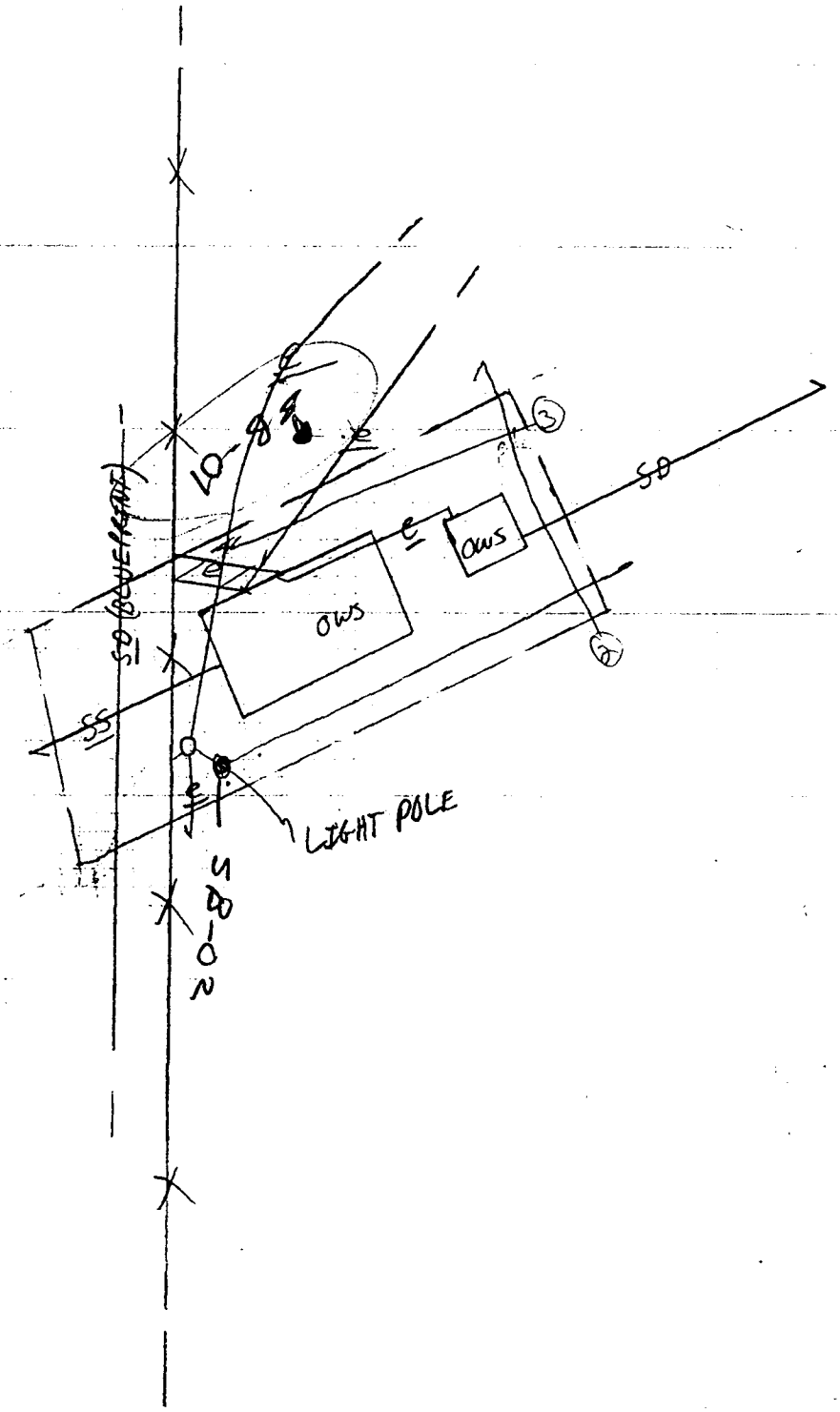
= AREA OF INVESTIGATION

① → GPR TRAVERSE

e = ELECTRIC

SD = STORM DRAIN

SS = SANITARY SEWER



Appendix J
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

992954, 992842
~~992842~~

PROJECT DATA MANAGER'S COPY
222447
FORM 0019 REV. 2-97

OHM's LAB COORDINATOR: THIZAR T. NUT WILLIAMS	LAB COORDINATOR'S PHONE: 949-660-5300	LAB COORDINATOR'S FAX: 949-475-5433	LABORATORY SERVICE ID: 992557	LABORATORY CONTACT: JIM LIN - APCL	MAIL REPORT (COMPANY NAME): OHM REMEDIATION
PROJECT NAME: OWS/UST DO:70	PROJECT LOCATION: MCAS EL TORO	PROJECT NUMBER: 18609	LABORATORY PHONE: 909-590-1828	LABORATORY FAX:	RECIPIENT NAME: DWAYNE ISHIDA
PROJECT CONTACT: —	PROJECT PHONE NUMBER: 949-660-5300	PROJECT FAX: 949-475-5433	LABORATORY ADDRESS: 1360 MAGNOLIA AVE		ADDRESS: 3347 MICHELSON DR #200
PROJECT ADDRESS: MCAS EL TORO	CITY, STATE AND ZIPCODE: SANTA ANA, CA.	CLIENT: LYNN HORNSCHER SWON	CITY, STATE AND ZIPCODE: CHINO, CA. 91710		CITY, STATE, AND ZIPCODE: IRVINE, CA.
PROJECT MANAGER: BILL SEDLAK	PROJECT MANAGER'S PHONE: 949-660-5300	PROJECT MANAGER'S FAX: 949-475-5433			

H = ON HOLD

Item	Sample Identifier	Matrix	Date 1999	Time	Preserved	# of Cont.	QC Level	T.A.T.	EPA 8260 - MTBE	EPA 8015M TPH-GRO	EPA 8015M TPH-DRO	EPA 8021/8020 Benzene	EPA 6010/3005 metals	EPA 8270	Flashpoint (A) 3/30/99	Comments
1	18609-2094	W	3-18	0700	4°C	2	III	72HR	X							
2	18609-2095	W	3-18	0745	4°C	8	III	72HR	X	X	X	X	X	X	X?	
3	18609-2096	W	3-18	0815	4°C	8	III	72HR	X	X	X	X	X	X		STLC - copper ; TCLP & STLC - lead (A) 4/12/99
4	18609-2097	W	3-18	0915	4°C	8	III	72HR	X	X	X	X	X	X		
5	18609-2098	W	3-18	0930	4°C	8	III	72HR	X	X	X	X	X	X		
6	18609-2099	W	3-18	1015	4°C	8	III	72HR	X	X	X	X	X	X		
7	18609-2100	W	3-18	1100	4°C	8	III	72HR	X	X	X	X	X	X	X	Flashpoint
8	18609-2101	W	3-18	1145	4°C	8	III	72HR	X	X	X	X	X	X		LEVEL 4 QC
9															HOLD	
10																

SAMPLES COLLECTED BY: C. PARRISH
COURIER AND AIR BILL NUMBER: APCL
COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
Cory Parrish	[illegible]	3-19-99	[illegible]	

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	G	C	F	QC
1. TRIP BLANK	X			X
2. OWS 892	X			
3. OWS 1702	X			
4. OWS 744	X			
5. OWS 896	X			
6. OWS 672	X			
7. OWS 897	X			
8. OWS 817	X			

Comments: Contents

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

992842
New P.O. issued from here on: #4331

WBS: # 10002720

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
222441
FORM 0019 REV. 2-97

OHM's LAB COORDINATOR: Thizar Tintul-Williams	LAB COORDINATOR'S PHONE: (949) 660-7589	LAB COORDINATOR'S FAX: (949) 475-5433	LABORATORY SERVICE ID: 992792-A	LABORATORY CONTACT: JIM LIN	MAIL REPORT (COMPANY NAME): OHM Remediation
PROJECT NAME: OWS 672 Verification Drilling	PROJECT LOCATION: MCAS EL TORO	PROJECT NUMBER: 18609	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX:	RECIPIENT NAME: Dwayne Ishida
PROJECT CONTACT: Thizar Tintul-Williams	PROJECT PHONE NUMBER: (949) 660-5300	PROJECT FAX: (949) 475-5433	LABORATORY ADDRESS: APCL		ADDRESS: 3347 Michelson Dr. #200
PROJECT ADDRESS: MCAS EL TORO	CITY, STATE AND ZIPCODE: Santa Ana, CA	CLIENT: Lynn Hornecker-SW Div.	CITY, STATE AND ZIPCODE: Chino, CA		CITY, STATE, AND ZIPCODE: Irvine, CA
PROJECT MANAGER: BILL SEDLAK	PROJECT MANAGER'S PHONE: (949) 660-5300	PROJECT MANAGER'S FAX: (949) 475-5433			

Analyze 'x' and

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analyses: 8260 + MTBE	TPH-Purgeable	TPH-Extractable	8015 + TPH-G					Comments
1	18609-2149	water	3/31/99	0745	HCl/4C	2	III	5-DAY	X	X							
2	18609-2158	water	3/31/99	0925	4C labels	5	III	5-DAY	X	X	X						
3	18609-2161	soil	3/31/99	1315	4C	1	III	5-DAY	X	X	X						
4	18609-2162	soil	3/31/99	1345	4C	1	III	5-DAY	X	X	X						
5	18609-2163	soil	3/31/99	1346	4C	1	IV	5-DAY	X	X	X						
6	18609-2164	soil	3/31/99	1350	4C	1	III	5-DAY	X	X	X						#1010
7	18609-2165	soil	3/31/99	1355	4C	1	III	5-DAY	X	X	X						
8	18609-2166	soil	3/31/99	1430	4C	1	III	5-DAY	X	X	X						
9	18609-2167	soil	3/31/99	1440	4C	1	III	5-DAY	X	X	X						
10	18609-2168	soil	3/31/99	1450	4C	1	III	5-DAY	X	X	X						HOLD

SAMPLES COLLECTED BY: [signature]
COURIER AND AIR BILL NUMBER:
COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature]	[signature]	3/31/99	1512	

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			X
2. Rinsate	X		X	X
3. OWS672-SB01 @ 9.5-10'	X		X	
4. OWS672-SB02 @ 20.5-21'	X		X	
5. OWS672-SB01 (Dup) @ 21-21.5'	X		X	X
6. OWS672-SB02 @ 9.5-10'	X		X	
7. OWS672-SB01 @ 30.5-31'	X		X	
8. OWS672-SB02 @ 21-21.5	X		X	
9. OWS672-SB02 @ 30.5-31'	X		X	
10. OWS672-SB02 @ 40.5-41'	X		X	

Comments:
(3)(6) Hand auger.
(4) and (5) are duplicates

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

Invoice paid

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
222442
FORM 0019 REV. 2-97

OHM's LAB COORDINATOR: Thizar Tinkut-Williams	LAB COORDINATOR'S PHONE: (949) 660-5300	LAB COORDINATOR'S FAX: (949) 475-5433	LABORATORY SERVICE ID: 99027924	LABORATORY CONTACT: Jim Lin	MAIL REPORT (COMPANY NAME): OHM Remediation
PROJECT NAME: OWS 672 verify drilling	PROJECT LOCATION: MCAS EL TORO ~~(949) 660-5300~~	PROJECT NUMBER: 18609	LABORATORY PHONE: (909) 590-1828	LABORATORY FAX:	RECIPIENT NAME: Duwayne Ishida
PROJECT CONTACT: Thizar Tinkut-Williams	PROJECT PHONE NUMBER: (949) 660-5300	PROJECT FAX: (949) 475-5433	LABORATORY ADDRESS: APCL		ADDRESS: 3347 Michelson Dr. # 200
PROJECT ADDRESS: MCAS EL TORO	CITY, STATE AND ZIPCODE: Santa Ana, CA	CLIENT: Lynn Hornecker. SWDIV.	CITY, STATE AND ZIPCODE: Chino, CA		CITY, STATE, AND ZIPCODE: Irvine, CA
PROJECT MANAGER: BILL SEDLAK	PROJECT MANAGER'S PHONE: (949) 660-5300	PROJECT MANAGER'S FAX: (949) 475-5433			

Analyze 'X' end

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	Analyses: 8260 + MTBE	TPH-Purgeable	TPH-Extractable	SPLP/TPH-E @ 9/29/99					Comments
1	18609-2169	Soil	3/31/99	1500	4C	1	III	3-DAY	X	X	X	X					
2																	
3																	
4																	
5																	
6																	
7																	
8																	
9																	
10																	

3/31/99

SAMPLES COLLECTED BY: [signature]
COURIER AND AIR BILL NUMBER:
COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature]	[signature]	3/31/99	1511	

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. OWS 672 - SB02 @ ~~20.5-21'~~ 50.5'-51'	X		X	

Comments

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

Invoice paid

Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/18/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	C.Parrish
		Lab Sample ID:	99-2557-6	Received Date:	03/18/1999
Sample ID:	**18609-2099**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: C
Anal. Method:	8260	Prep. Date:	03/23/99	Anal. Date:	03/23/99
Batch No:	99G2029	Prep. No:	-	Anal. Time:	14:35
Data File Name:	2557-06	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE (DB	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

60735

#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	7	J
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	15	< 15	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	95
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	92
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	83
4	TOLUENE-D8	2037-26-5	81-118	106
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	118
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	104
3	FLUOROBENZENE	462-06-6	50-200	128
# 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

60736

Applied P & Ch Laboratory

Organic Analysis Results for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/18/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	C.Parrish
		Lab Sample ID:	99-2557-6	Received Date:	03/18/1999
Sample ID:	**18609-2099**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	3510	Instrument ID:	GC: R
Anal. Method:	8081	Prep. Date:	03/19/99	Anal. Date:	03/22/99
Batch No:	99G2004	Prep. No:	1 of 1	Anal. Time:	22:50
Data File Name:	2557.006	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	ALPHA-CHLORDANE	5103-71-9	µg/L	0.05	<0.05	U
7	GAMMA-CHLORDANE	5103-74-2	µg/L	0.05	<0.05	U
8	4,4'-DDD	72-54-8	µg/L	0.1	<0.1	U
9	4,4'-DDE	72-55-9	µg/L	0.1	<0.1	U
10	4,4'-DDT	50-29-3	µg/L	0.1	<0.1	U
11	DIELDRIN	60-57-1	µg/L	0.1	<0.1	U
12	ENDOSULFAN I	959-98-8	µg/L	0.05	<0.05	U
13	ENDOSULFAN II	33213-65-9	µg/L	0.1	<0.1	U
14	ENDOSULFAN SULFATE	1031-07-8	µg/L	0.5	<0.5	U
15	ENDRIN	72-20-8	µg/L	0.1	<0.1	U
16	ENDRIN ALDEHYDE	7421-93-4	µg/L	0.1	<0.1	U
17	ENDRIN KETONE	53494-70-5	µg/L	0.1	<0.1	U
18	HEPTACHLOR	76-44-8	µg/L	0.05	<0.05	U
19	HEPTACHLOR EPOXIDE	1024-57-3	µg/L	0.05	<0.05	U
20	METHOXYCHLOR	72-43-5	µg/L	2	<2	U
21	TOXAPHENE	8001-35-2	µg/L	5	<5	U
22	AROCLOR-1016	12674-11-2	µg/L	2	<2	U
23	AROCLOR-1221	11104-28-2	µg/L	5	<5	U
24	AROCLOR-1232	11141-16-5	µg/L	2	<2	U
25	AROCLOR-1242	53469-21-9	µg/L	2	<2	U
26	AROCLOR-1248	12672-29-6	µg/L	2	<2	U
27	AROCLOR-1254	11097-69-1	µg/L	1	<1	U
28	AROCLOR-1260	11096-82-5	µg/L	1	<1	U

Surrogates			Control Limit, %	Surro. Rec.%
1	DECACHLOROBIPHENYL (DCB)	2051-24-3	31-147	65
2	2,4,5,6-TETRACHLORO-M-XYLENE	877-09-8	33-146	200
# of out-of-control				1

Internal Standard			Control Limit, %	IS Rec.%
1	DIBUTYLCHLORENDATE (DBC)	1770-80-5	50-200	101
# 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

60887

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/18/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	C.Parrish
		Lab Sample ID:	99-2557-6	Received Date:	03/18/1999
Sample ID:	**18609-2099**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: N
Anal. Method:	M8015V	Prep. Date:	03/19/99	Anal. Date:	03/19/99
Batch No:	99G1998	Prep. No:	-	Anal. Time:	18:36
Data File Name:	2557.106	Sample Amount:	5.00 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	1.21 [b]	

Surrogates		Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (FID) 460-00-4	68-124	96
# of out-of-control			0

[b] Not a typical gas pattern. Most of the peaks in the chromatogram correspond to the heavier portion of the chain.

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

61097

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/18/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	C.Parrish
		Lab Sample ID:	99-2557-6	Received Date:	03/18/1999
Sample ID:	**18609-2099**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	3510	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	03/21/99	Anal. Date:	03/23/99
Batch No:	99G2013	Prep. No:	1 of 1	Anal. Time:	09:31
Data File Name:	2557.006	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	4.7 [e]	
2	TPH AS MOTOR OIL	TBD-0002	mg/L	0.5	0.4	J

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-149	129
# of out-of-control				0

[e]Sample also contains unknown compounds in about C12 range.

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

61155

Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/18/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	C.Parrish
		Lab Sample ID:	99-2557-6	Received Date:	03/18/1999
Sample ID:	**18609-2099**	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	<1.5	U	P		99M1507L	03/22/99	03/22/99	1	6010
ARSENIC	7440-38-2	µg/L	5	<1.2	U	P		99M1507L	03/22/99	03/22/99	1	6010
BARIUM	7440-39-3	µg/L	10	38.4		P		99M1507L	03/22/99	03/22/99	1	6010
BERYLLIUM	7440-41-7	µg/L	2	<0.11	U	P		99M1507L	03/22/99	03/22/99	1	6010
CADMIUM	7440-43-9	µg/L	2	10.5		P		99M1507L	03/22/99	03/22/99	1	6010
CHROMIUM	7440-47-3	µg/L	5	3.3	B	P		99M1507L	03/22/99	03/22/99	1	6010
COBALT	7440-48-4	µg/L	5	10.0		P		99M1507L	03/22/99	03/22/99	1	6010
COPPER	7440-50-8	µg/L	10	8.7	B	P		99M1507L	03/22/99	03/22/99	1	6010
LEAD	7439-92-1	µg/L	5	6.0		P		99M1507L	03/22/99	03/22/99	1	6010
MERCURY	7439-97-6	µg/L	0.5	0.24	B	CV		99M1513N	03/22/99	03/22/99	1	7470
MOLYBDENUM	7439-98-7	µg/L	5	<0.44	U	P		99M1507L	03/22/99	03/22/99	1	6010
NICKEL	7440-02-0	µg/L	5	22.0		P		99M1507L	03/22/99	03/22/99	1	6010
SELENIUM	7782-49-2	µg/L	10	<2.9	U	P		99M1507L	03/22/99	03/22/99	1	6010
SILVER	7440-22-4	µg/L	10	<0.80	U	P		99M1507L	03/22/99	03/22/99	1	6010
THALLIUM	7440-28-0	µg/L	10	12.4		P		99M1507L	03/22/99	03/22/99	1	6010
VANADIUM	7440-62-2	µg/L	10	<0.55	U	P		99M1507L	03/22/99	03/22/99	1	6010
ZINC	7440-66-6	µg/L	5	914		P		99M1507L	03/22/99	03/22/99	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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-1	Received Date:	03/31/1999
Sample ID:	**18609-2149**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/08/99	Anal. Date:	04/08/99
Batch No:	99G2217	Prep. No:	-	Anal. Time:	02:27
Data File Name:	2792-01	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) Y	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	5	< 5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	109
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	106
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	117
4	TOLUENE-D8	2037-26-5	81-118	92
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	64
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	56
3	FLUOROBENZENE	462-06-6	50-200	59
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-2	Received Date:	03/31/1999
Sample ID:	**18609-2158**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/08/99	Anal. Date:	04/08/99
Batch No:	99G2217	Prep. No:	-	Anal. Time:	02:58
Data File Name:	2792-02	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) Y	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	5	< 5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	106
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	108
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	115
4	TOLUENE-D8	2037-26-5	81-118	91
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	67
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	63
3	FLUOROBENZENE	462-06-6	50-200	61
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-3	Received Date:	03/31/1999
Sample ID:	**18609-2161**	Sample Matrix	Soil	Moisture %:	12.9
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/05/99	Anal. Date:	04/05/99
Batch No:	99G2183	Prep. No:	–	Anal. Time:	02:39
Data File Name:	2792-03	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	110	<110	U
2	BENZENE	71-43-2	µg/kg	5.7	<5.7	U
3	BROMOBENZENE	108-86-1	µg/kg	5.7	<5.7	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	5.7	<5.7	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	5.7	<5.7	U
6	BROMOFORM	75-25-2	µg/kg	5.7	<5.7	U
7	BROMOMETHANE	74-83-9	µg/kg	5.7	<5.7	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	110	<110	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	5.7	<5.7	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	5.7	<5.7	U
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	5.7	<5.7	U
12	CARBON DISULFIDE	75-15-0	µg/kg	5.7	2	J
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	5.7	<5.7	U
14	CHLOROBENZENE	108-90-7	µg/kg	5.7	<5.7	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	5.7	<5.7	U
16	CHLOROETHANE	75-00-3	µg/kg	5.7	<5.7	U
17	CHLOROFORM	67-66-3	µg/kg	5.7	<5.7	U
18	CHLOROMETHANE	74-87-3	µg/kg	5.7	<5.7	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	5.7	<5.7	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	5.7	<5.7	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	5.7	<5.7	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	5.7	<5.7	U
23	DIBROMOMETHANE	74-95-3	µg/kg	5.7	<5.7	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	5.7	<5.7	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	5.7	<5.7	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	5.7	<5.7	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	5.7	<5.7	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	5.7	<5.7	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	5.7	<5.7	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	5.7	<5.7	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	5.7	<5.7	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	5.7	<5.7	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	5.7	<5.7	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	5.7	<5.7	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	5.7	<5.7	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	5.7	<5.7	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	5.7	<5.7	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	5.7	<5.7	U
39	ETHYLBENZENE	100-41-4	µg/kg	5.7	<5.7	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	5.7	< 5.7	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	5.7	< 5.7	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	5.7	< 5.7	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	5.7	< 5.7	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	57	< 57	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	11	< 11	U
46	NAPHTHALENE	91-20-3	µg/kg	5.7	< 5.7	U
47	N-PROPYLBENZENE	103-65-1	µg/kg	5.7	< 5.7	U
48	STYRENE	100-42-5	µg/kg	5.7	< 5.7	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	5.7	< 5.7	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	5.7	< 5.7	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	5.7	< 5.7	U
52	TOLUENE	108-88-3	µg/kg	5.7	< 5.7	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	5.7	< 5.7	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	5.7	< 5.7	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	5.7	< 5.7	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	5.7	< 5.7	U
57	TRICHLOROETHENE	79-01-6	µg/kg	5.7	< 5.7	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	5.7	< 5.7	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	5.7	< 5.7	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	5.7	< 5.7	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	5.7	< 5.7	U
62	VINYL CHLORIDE	75-01-4	µg/kg	5.7	< 5.7	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	5.7	< 5.7	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	103
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	101
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	97
4	TOLUENE-D8	2037-26-5	80-119	93
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	121
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	143
3	FLUOROBENZENE	462-06-6	50-200	117
# 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

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Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-4	Received Date:	03/31/1999
Sample ID:	**18609-2162**	Sample Matrix	Soil	Moisture %:	15.1
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/05/99	Anal. Date:	04/05/99
Batch No:	99G2183	Prep. No:	–	Anal. Time:	01:06
Data File Name:	2792-04	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) Y	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	120	<120	U
2	BENZENE	71-43-2	µg/kg	5.9	<5.9	U
3	BROMOBENZENE	108-86-1	µg/kg	5.9	<5.9	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	5.9	<5.9	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	5.9	<5.9	U
6	BROMOFORM	75-25-2	µg/kg	5.9	<5.9	U
7	BROMOMETHANE	74-83-9	µg/kg	5.9	<5.9	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	120	<120	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	5.9	<5.9	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	5.9	<5.9	U
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	5.9	<5.9	U
12	CARBON DISULFIDE	75-15-0	µg/kg	5.9	<5.9	U
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	5.9	<5.9	U
14	CHLOROBENZENE	108-90-7	µg/kg	5.9	<5.9	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	5.9	<5.9	U
16	CHLOROETHANE	75-00-3	µg/kg	5.9	<5.9	U
17	CHLOROFORM	67-66-3	µg/kg	5.9	<5.9	U
18	CHLOROMETHANE	74-87-3	µg/kg	5.9	<5.9	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	5.9	<5.9	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	5.9	<5.9	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	5.9	<5.9	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	5.9	<5.9	U
23	DIBROMOMETHANE	74-95-3	µg/kg	5.9	<5.9	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	5.9	<5.9	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	5.9	<5.9	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	5.9	<5.9	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	5.9	<5.9	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	5.9	<5.9	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	5.9	<5.9	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	5.9	<5.9	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	5.9	<5.9	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	5.9	<5.9	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	5.9	<5.9	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	5.9	<5.9	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	5.9	<5.9	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	5.9	<5.9	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	5.9	<5.9	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	5.9	<5.9	U
39	ETHYLBENZENE	100-41-4	µg/kg	5.9	<5.9	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	5.9	< 5.9	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	5.9	< 5.9	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	5.9	< 5.9	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	5.9	< 5.9	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	59	< 59	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	12	< 12	U
46	NAPHTHALENE	91-20-3	µg/kg	5.9	< 5.9	U
47	N-PROPYLBENZENE	103-65-1	µg/kg	5.9	< 5.9	U
48	STYRENE	100-42-5	µg/kg	5.9	< 5.9	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	5.9	< 5.9	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	5.9	< 5.9	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	5.9	< 5.9	U
52	TOLUENE	108-88-3	µg/kg	5.9	< 5.9	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	5.9	< 5.9	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	5.9	< 5.9	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	5.9	< 5.9	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	5.9	< 5.9	U
57	TRICHLOROETHENE	79-01-6	µg/kg	5.9	< 5.9	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	5.9	< 5.9	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	5.9	< 5.9	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	5.9	< 5.9	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	5.9	< 5.9	U
62	VINYL CHLORIDE	75-01-4	µg/kg	5.9	< 5.9	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	5.9	< 5.9	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	98
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	99
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	89
4	TOLUENE-D8	2037-26-5	80-119	97
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	120
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	151
3	FLUOROBENZENE	462-06-6	50-200	118
# 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

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Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-5	Received Date:	03/31/1999
Sample ID:	**18609-2163**	Sample Matrix	Soil	Moisture %:	8.6
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/05/99	Anal. Date:	04/05/99
Batch No:	99G2183	Prep. No:	–	Anal. Time:	01:37
Data File Name:	2792-05	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	110	<110	U
2	BENZENE	71-43-2	µg/kg	5.5	<5.5	U
3	BROMOBENZENE	108-86-1	µg/kg	5.5	<5.5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	5.5	<5.5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	5.5	<5.5	U
6	BROMOFORM	75-25-2	µg/kg	5.5	<5.5	U
7	BROMOMETHANE	74-83-9	µg/kg	5.5	<5.5	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	110	<110	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	5.5	<5.5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	5.5	<5.5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	5.5	<5.5	U
12	CARBON DISULFIDE	75-15-0	µg/kg	5.5	<5.5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	5.5	<5.5	U
14	CHLOROBENZENE	108-90-7	µg/kg	5.5	<5.5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	5.5	<5.5	U
16	CHLOROETHANE	75-00-3	µg/kg	5.5	<5.5	U
17	CHLOROFORM	67-66-3	µg/kg	5.5	<5.5	U
18	CHLOROMETHANE	74-87-3	µg/kg	5.5	<5.5	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	5.5	<5.5	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	5.5	<5.5	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	5.5	<5.5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	5.5	<5.5	U
23	DIBROMOMETHANE	74-95-3	µg/kg	5.5	<5.5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	5.5	<5.5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	5.5	<5.5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	5.5	<5.5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	5.5	<5.5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	5.5	<5.5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	5.5	<5.5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	5.5	<5.5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	5.5	<5.5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	5.5	<5.5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	5.5	<5.5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	5.5	<5.5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	5.5	<5.5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	5.5	<5.5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	5.5	<5.5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	5.5	<5.5	U
39	ETHYLBENZENE	100-41-4	µg/kg	5.5	<5.5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	5.5	< 5.5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	5.5	< 5.5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	5.5	< 5.5	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	5.5	< 5.5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	55	< 55	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	11	< 11	U
46	NAPHTHALENE	91-20-3	µg/kg	5.5	< 5.5	U
47	N-PROPYLBENZENE	103-65-1	µg/kg	5.5	< 5.5	U
48	STYRENE	100-42-5	µg/kg	5.5	< 5.5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	5.5	< 5.5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	5.5	< 5.5	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	5.5	< 5.5	U
52	TOLUENE	108-88-3	µg/kg	5.5	< 5.5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	5.5	< 5.5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	5.5	< 5.5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	5.5	< 5.5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	5.5	< 5.5	U
57	TRICHLOROETHENE	79-01-6	µg/kg	5.5	< 5.5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	5.5	< 5.5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	5.5	< 5.5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	5.5	< 5.5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	5.5	< 5.5	U
62	VINYL CHLORIDE	75-01-4	µg/kg	5.5	< 5.5	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	5.5	< 5.5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	99
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	97
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	88
4	TOLUENE-D8	2037-26-5	80-119	95
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	120
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	145
3	FLUOROBENZENE	462-06-6	50-200	116
# 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

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Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-7	Received Date:	03/31/1999
Sample ID:	**18609-2165**	Sample Matrix	Soil	Moisture %:	17.4
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/05/99	Anal. Date:	04/05/99
Batch No:	99G2183	Prep. No:	–	Anal. Time:	02:08
Data File Name:	2792-07	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	120	<120	U
2	BENZENE	71-43-2	µg/kg	6.1	<6.1	U
3	BROMOBENZENE	108-86-1	µg/kg	6.1	<6.1	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	6.1	<6.1	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	6.1	<6.1	U
6	BROMOFORM	75-25-2	µg/kg	6.1	<6.1	U
7	BROMOMETHANE	74-83-9	µg/kg	6.1	<6.1	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	120	<120	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	6.1	<6.1	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	6.1	<6.1	U
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	6.1	<6.1	U
12	CARBON DISULFIDE	75-15-0	µg/kg	6.1	<6.1	U
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	6.1	<6.1	U
14	CHLOROBENZENE	108-90-7	µg/kg	6.1	<6.1	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	6.1	<6.1	U
16	CHLOROETHANE	75-00-3	µg/kg	6.1	<6.1	U
17	CHLOROFORM	67-66-3	µg/kg	6.1	<6.1	U
18	CHLOROMETHANE	74-87-3	µg/kg	6.1	<6.1	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	6.1	<6.1	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	6.1	<6.1	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	6.1	<6.1	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	6.1	<6.1	U
23	DIBROMOMETHANE	74-95-3	µg/kg	6.1	<6.1	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	6.1	<6.1	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	6.1	<6.1	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	6.1	<6.1	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	6.1	<6.1	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	6.1	<6.1	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	6.1	<6.1	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	6.1	<6.1	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	6.1	<6.1	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	6.1	<6.1	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	6.1	<6.1	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	6.1	<6.1	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	6.1	<6.1	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	6.1	<6.1	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	6.1	<6.1	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	6.1	<6.1	U
39	ETHYLBENZENE	100-41-4	µg/kg	6.1	<6.1	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	6.1	<6.1	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	6.1	<6.1	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	6.1	<6.1	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	6.1	<6.1	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	61	<61	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	12	<12	U
46	NAPHTHALENE	91-20-3	µg/kg	6.1	<6.1	U
47	N-PROPYLBENZENE	103-65-1	µg/kg	6.1	<6.1	U
48	STYRENE	100-42-5	µg/kg	6.1	<6.1	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	6.1	<6.1	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	6.1	<6.1	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	6.1	<6.1	U
52	TOLUENE	108-88-3	µg/kg	6.1	<6.1	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	6.1	<6.1	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	6.1	<6.1	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	6.1	<6.1	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	6.1	<6.1	U
57	TRICHLOROETHENE	79-01-6	µg/kg	6.1	<6.1	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	6.1	<6.1	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	6.1	<6.1	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	6.1	<6.1	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	6.1	<6.1	U
62	VINYL CHLORIDE	75-01-4	µg/kg	6.1	<6.1	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	6.1	<6.1	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	100
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	101
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	96
4	TOLUENE-D8	2037-26-5	80-119	96
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	110
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	132
3	FLUOROBENZENE	462-06-6	50-200	107
# 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

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Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-8	Received Date:	03/31/1999
Sample ID:	**18609-2166**	Sample Matrix	Soil	Moisture %:	6.6
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/05/99	Anal. Date:	04/05/99
Batch No:	99G2183	Prep. No:	–	Anal. Time:	00:35
Data File Name:	2792-08	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	110	<110	U
2	BENZENE	71-43-2	µg/kg	5.4	<5.4	U
3	BROMOBENZENE	108-86-1	µg/kg	5.4	<5.4	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	5.4	<5.4	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	5.4	<5.4	U
6	BROMOFORM	75-25-2	µg/kg	5.4	<5.4	U
7	BROMOMETHANE	74-83-9	µg/kg	5.4	<5.4	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	110	<110	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	5.4	<5.4	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	5.4	<5.4	U
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	5.4	<5.4	U
12	CARBON DISULFIDE	75-15-0	µg/kg	5.4	<5.4	U
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	5.4	<5.4	U
14	CHLOROBENZENE	108-90-7	µg/kg	5.4	<5.4	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	5.4	<5.4	U
16	CHLOROETHANE	75-00-3	µg/kg	5.4	<5.4	U
17	CHLOROFORM	67-66-3	µg/kg	5.4	<5.4	U
18	CHLOROMETHANE	74-87-3	µg/kg	5.4	<5.4	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	5.4	<5.4	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	5.4	<5.4	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	5.4	<5.4	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	5.4	<5.4	U
23	DIBROMOMETHANE	74-95-3	µg/kg	5.4	<5.4	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	5.4	<5.4	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	5.4	<5.4	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	5.4	<5.4	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	5.4	<5.4	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	5.4	<5.4	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	5.4	<5.4	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	5.4	<5.4	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	5.4	<5.4	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	5.4	<5.4	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	5.4	<5.4	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	5.4	<5.4	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	5.4	<5.4	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	5.4	<5.4	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	5.4	<5.4	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	5.4	<5.4	U
39	ETHYLBENZENE	100-41-4	µg/kg	5.4	<5.4	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	5.4	< 5.4	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	5.4	< 5.4	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	5.4	< 5.4	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	5.4	< 5.4	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	54	< 54	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	11	< 11	U
46	NAPHTHALENE	91-20-3	µg/kg	5.4	6	
47	N-PROPYLBENZENE	103-65-1	µg/kg	5.4	< 5.4	U
48	STYRENE	100-42-5	µg/kg	5.4	< 5.4	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	5.4	< 5.4	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	5.4	< 5.4	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	5.4	< 5.4	U
52	TOLUENE	108-88-3	µg/kg	5.4	< 5.4	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	5.4	< 5.4	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	5.4	< 5.4	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	5.4	< 5.4	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	5.4	< 5.4	U
57	TRICHLOROETHENE	79-01-6	µg/kg	5.4	< 5.4	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	5.4	< 5.4	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	5.4	< 5.4	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	5.4	3	J
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	5.4	< 5.4	U
62	VINYL CHLORIDE	75-01-4	µg/kg	5.4	< 5.4	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	5.4	< 5.4	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	101
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	98
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	90
4	TOLUENE-D8	2037-26-5	80-119	93
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	107
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	123
3	FLUOROBENZENE	462-06-6	50-200	99
# of out-of-control				0

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

[a]Not a typical gas pattern. Most of the peaks in the chromatogram correspond to the heavier portion of the chain.

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

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Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-9	Received Date:	03/31/1999
Sample ID:	**18609-2167**	Sample Matrix	Soil	Moisture %:	19.6
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/05/99	Anal. Date:	04/05/99
Batch No:	99G2183	Prep. No:	-	Anal. Time:	03:09
Data File Name:	2792-09	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) Y	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	120	<120	U
2	BENZENE	71-43-2	µg/kg	6.2	<6.2	U
3	BROMOBENZENE	108-86-1	µg/kg	6.2	<6.2	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	6.2	<6.2	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	6.2	<6.2	U
6	BROMOFORM	75-25-2	µg/kg	6.2	<6.2	U
7	BROMOMETHANE	74-83-9	µg/kg	6.2	<6.2	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	120	<120	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	6.2	<6.2	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	6.2	13	
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	6.2	<6.2	U
12	CARBON DISULFIDE	75-15-0	µg/kg	6.2	3	J
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	6.2	<6.2	U
14	CHLOROBENZENE	108-90-7	µg/kg	6.2	<6.2	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	6.2	<6.2	U
16	CHLOROETHANE	75-00-3	µg/kg	6.2	<6.2	U
17	CHLOROFORM	67-66-3	µg/kg	6.2	<6.2	U
18	CHLOROMETHANE	74-87-3	µg/kg	6.2	<6.2	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	6.2	<6.2	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	6.2	<6.2	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	6.2	<6.2	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	6.2	<6.2	U
23	DIBROMOMETHANE	74-95-3	µg/kg	6.2	<6.2	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	6.2	<6.2	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	6.2	<6.2	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	6.2	<6.2	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	6.2	<6.2	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	6.2	<6.2	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	6.2	<6.2	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	6.2	<6.2	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	6.2	<6.2	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	6.2	<6.2	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	6.2	<6.2	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	6.2	<6.2	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	6.2	<6.2	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	6.2	<6.2	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	6.2	<6.2	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	6.2	<6.2	U
39	ETHYLBENZENE	100-41-4	µg/kg	6.2	2	J

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	6.2	<6.2	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	6.2	3	J
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	6.2	<6.2	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	6.2	<6.2	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	62	<62	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	12	<12	U
46	NAPHTHALENE	91-20-3	µg/kg	6.2	4	J
47	N-PROPYLBENZENE	103-65-1	µg/kg	6.2	5	J
48	STYRENE	100-42-5	µg/kg	6.2	<6.2	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	6.2	<6.2	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	6.2	<6.2	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	6.2	<6.2	U
52	TOLUENE	108-88-3	µg/kg	6.2	<6.2	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	6.2	<6.2	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	6.2	<6.2	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	6.2	<6.2	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	6.2	<6.2	U
57	TRICHLOROETHENE	79-01-6	µg/kg	6.2	<6.2	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	6.2	<6.2	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	6.2	<6.2	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	6.2	<6.2	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	6.2	<6.2	U
62	VINYL CHLORIDE	75-01-4	µg/kg	6.2	<6.2	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	6.2	<6.2	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	96
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	105
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	105
4	TOLUENE-D8	2037-26-5	80-119	91
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	104
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	127
3	FLUOROBENZENE	462-06-6	50-200	96
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-11	Received Date:	03/31/1999
Sample ID:	**18609-2169**	Sample Matrix	Soil	Moisture %:	11.3
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/09/99	Anal. Date:	04/09/99
Batch No:	99G2235	Prep. No:	-	Anal. Time:	15:08
Data File Name:	2792-11A	Sample Amount:	4 g	Dilution Factor:	10
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	1100	<1100	U
2	BENZENE	71-43-2	µg/kg	56	<56	U
3	BROMOBENZENE	108-86-1	µg/kg	56	<56	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	56	<56	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	56	<56	U
6	BROMOFORM	75-25-2	µg/kg	56	<56	U
7	BROMOMETHANE	74-83-9	µg/kg	56	<56	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	1100	<1100	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	56	1000	
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	56	550	
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	56	<56	U
12	CARBON DISULFIDE	75-15-0	µg/kg	56	<56	U
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	56	<56	U
14	CHLOROBENZENE	108-90-7	µg/kg	56	<56	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	56	<56	U
16	CHLOROETHANE	75-00-3	µg/kg	56	<56	U
17	CHLOROFORM	67-66-3	µg/kg	56	<56	U
18	CHLOROMETHANE	74-87-3	µg/kg	56	<56	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	56	<56	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	56	<56	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	56	<56	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	56	<56	U
23	DIBROMOMETHANE	74-95-3	µg/kg	56	<56	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	56	<56	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	56	<56	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	56	<56	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	56	<56	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	56	<56	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	56	<56	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	56	<56	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	56	<56	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	56	<56	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	56	<56	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	56	<56	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	56	<56	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	56	<56	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	56	<56	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	56	<56	U
39	ETHYLBENZENE	100-41-4	µg/kg	56	260	

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	56	< 56	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	56	220	
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	56	130	
43	METHYLENE CHLORIDE	75-09-2	µg/kg	56	< 56	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	560	< 560	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	110	< 110	U
46	NAPHTHALENE	91-20-3	µg/kg	56	6220 [a]	
47	N-PROPYLBENZENE	103-65-1	µg/kg	56	490	
48	STYRENE	100-42-5	µg/kg	56	< 56	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	56	< 56	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	56	< 56	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	56	< 56	U
52	TOLUENE	108-88-3	µg/kg	56	< 56	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	56	< 56	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	56	< 56	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	56	< 56	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	56	< 56	U
57	TRICHLOROETHENE	79-01-6	µg/kg	56	< 56	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	56	< 56	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	56	< 56	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	56	42	J
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	56	< 56	U
62	VINYL CHLORIDE	75-01-4	µg/kg	56	< 56	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	56	< 56	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	88
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	102
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	99
4	TOLUENE-D8	2037-26-5	80-119	88
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	64
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	66
3	FLUOROBENZENE	462-06-6	50-200	52
# of out-of-control				0

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

[a] Additional requested on 4/12/99.

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

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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-1	Received Date:	03/31/1999
Sample ID:	**18609-2149**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: N
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2161	Prep. No:	–	Anal. Time:	22:21
Data File Name:	2792.001	Sample Amount:	5.0 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 (FID)	460-00-4	68-124	112
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-2	Received Date:	03/31/1999
Sample ID:	**18609-2158**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: N
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2161	Prep. No:	-	Anal. Time:	22:46
Data File Name:	2792.002	Sample Amount:	5.0 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 (FID) 460-00-4	68-124	106
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-3	Received Date:	03/31/1999
Sample ID:	**18609-2161**	Sample Matrix	Soil	Moisture %:	12.9
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	–	Anal. Time:	16:25
Data File Name:	2792.003	Sample Amount:	5.0 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	GASOLINE	8006-61-9	mg/kg	1.1	<1.1	U

Surrogates		Control Limit, %	Surro. Rec.%
1 4-BROMO-FLUOROBENZENE (FID)	460-00-4	70-132	102
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-4	Received Date:	03/31/1999
Sample ID:	**18609-2162**	Sample Matrix	Soil	Moisture %:	15.1
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	–	Anal. Time:	16:48
Data File Name:	2792.004	Sample Amount:	5.0 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	GASOLINE	8006-61-9	mg/kg	1.2	<1.2	U

Surrogates		Control Limit, %	Surro. Rec.%
1 4-BROMO-FLUOROBENZENE (FID)	460-00-4	70-132	109
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-5	Received Date:	03/31/1999
Sample ID:	**18609-2163**	Sample Matrix	Soil	Moisture %:	8.6
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	-	Anal. Time:	17:10
Data File Name:	2792.005	Sample Amount:	5.0 g	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	GASOLINE	8006-61-9	mg/kg	1.1	0.07	J

Surrogates		Control Limit, %	Surro. Rec.%
1 4-BROMO-FLUOROBENZENE (FID)	460-00-4	70-132	112
# of out-of-control			0

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

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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-7	Received Date:	03/31/1999
Sample ID:	**18609-2165**	Sample Matrix	Soil	Moisture %:	17.4
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	–	Anal. Time:	19:27
Data File Name:	2792.007	Sample Amount:	5.0 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	GASOLINE	8006-61-9	mg/kg	1.2	0.2	J

Surrogates		Control Limit, %	Surro. Rec.%
1 4-BROMO-FLUOROBENZENE (FID)	460-00-4	70-132	106
# of out-of-control			0

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

66849

Applied P & Ch Laboratory
Gasoline/BTXE, GC analysis by FID/PID

File : c:\data\9904\99g2154\2792.007
Method : c:\ezchrom\methods\lufts014.u00
Sample ID : 2792-7 F=1
Acquired : Apr 01, 1999 19:27:08
Printed : Apr 02, 1999 10:09:30

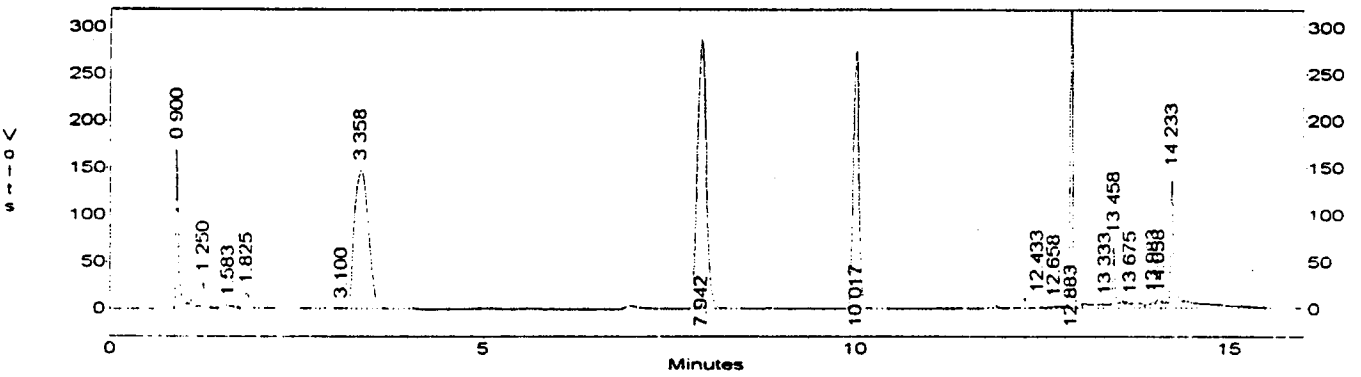
Channel A Results

No.	Name	RT,min	Area	H, V	Ave RF	ESTD (ppb)
6	2. TFT	3.36	1930517	149030	8923.79102	216.3
7	11. Chlorobenzene	7.94	2356086	288195	22058.50000	106.8
8	7. BFB	10.02	1499591	276164	14170.95020	105.8
11	10. 3-cl-br-bz	12.88	1040121	560190	15339.20020	67.8
G1	1. Gasoline		3533281		22417.10352	157.6

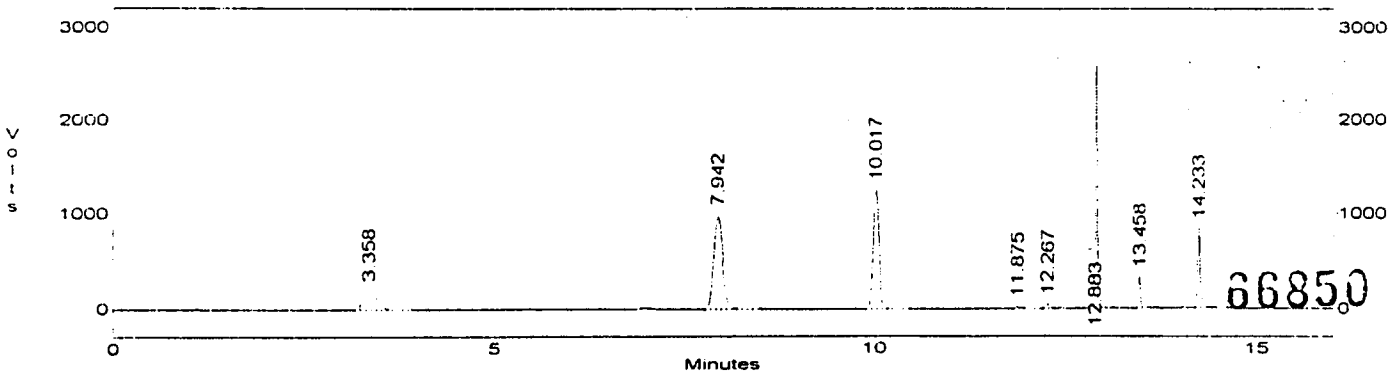
Channel B Results

No.	Name	Rt. min	Area	H, V	Ave. Rf	ISTD (ppb)
--	9. MTBE	1.59	0	0	0.00000	0.00
--	1. Benzene W 20	2.60	0	0	0.00000	0.00
1	2. TFT (Int.)	3.36	2465790	190607	1.00000	100.00
--	3. Toluene W 80	5.26	0	0	0.00000	0.00
2	11. Ch-bz	7.94	8069051	984872	2.93277	111.58
--	5. Et-Bz W 19	8.73	0	0	0.00000	0.00
--	6. P/M xylene W 82	9.00	0	0	0.00000	0.00
--	7. O-xylene W 27	9.57	0	0	0.00000	0.00
3	8. BFB (Surr.)	10.02	6770735	1251250	2.37185	115.77
6	10. 3-Br-cl-bz	12.88	5095059	2889375	1.98747	103.97

c:\data\9904\99g2154\2792.007 -- Channel A



c:\data\9904\99g2154\2792.007 -- Channel B



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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-8	Received Date:	03/31/1999
Sample ID:	**18609-2166**	Sample Matrix	Soil	Moisture %:	6.6
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	–	Anal. Time:	19:49
Data File Name:	2792.008	Sample Amount:	5.0 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	GASOLINE	8006-61-9	mg/kg	1.1	0.1 [a]	J

Surrogates		Control Limit, %	Surro. Rec.%
1 4-BROMO-FLUOROBENZENE (FID)	460-00-4	70-132	106
# of out-of-control			0

[a] Not a typical gas pattern. Most of the peaks in the chromatogram correspond to the heavier portion of the chain.

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

66851

Applied P & Ch Laboratory -
Gasoline/BTXE, GC analysis by FID/PID

File : c:\data\9904\99g2154\2792.008
Method : c:\ezchrom\methods\lufts014.u00
Sample ID : 2792-8 F=1
Acquired : Apr 01, 1999 19:49:48
Printed : Apr 02, 1999 10:10:23

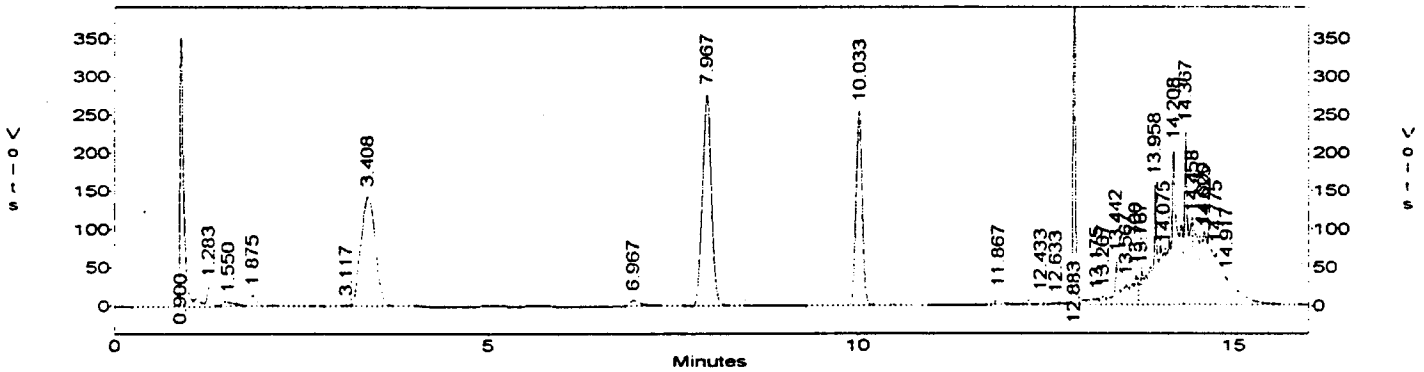
Channel A Results

No.	Name	RT,min	Area	H, V	Ave RF	ESTD (ppb)
6	2. TFT	3.41	1971557	144541	8923.79102	220.9
8	11. Chlorobenzene	7.97	2392341	277319	22058.50000	108.5
9	7. BFB	10.03	1503111	254983	14170.95020	106.1
13	10. 3-cl-br-bz	12.88	1066212	526348	15339.20020	69.5
G1	1. Gasoline		2812910		22417.10352	125.5

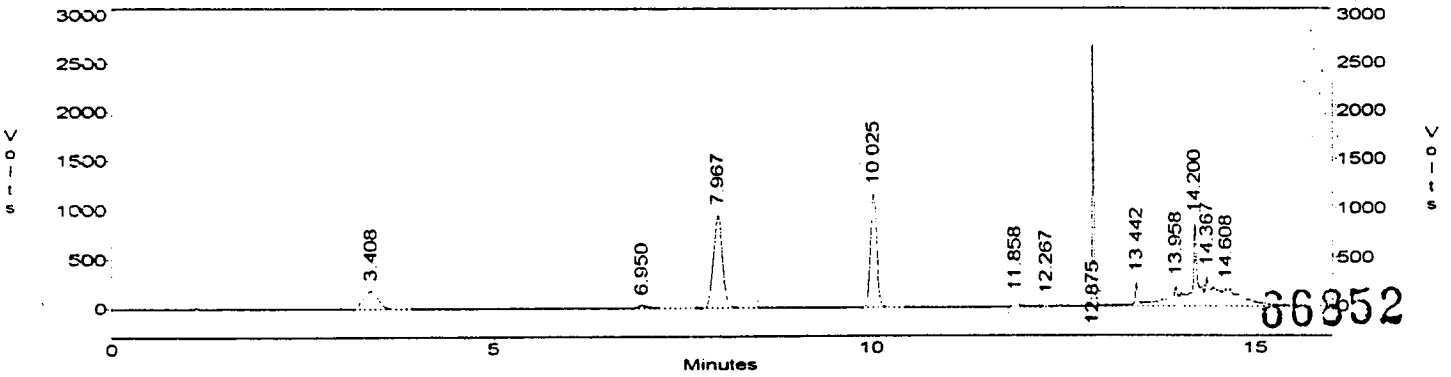
Channel B Results

No.	Name	Rt. min	Area	H, V	Ave. Rf	ISTD (ppb)
--	9. MTBE	1.59	0	0	0.00000	0.00
--	1. Benzene W 20	2.60	0	0	0.00000	0.00
1	2. TFT (Int.)	3.41	2512503	184470	1.00000	100.00
--	3. Toluene W 80	5.26	0	0	0.00000	0.00
3	11. Ch-bz	7.97	8149791	943278	2.93277	110.60
--	5. Et-Bz W 19	8.73	0	0	0.00000	0.00
--	6. P/M xylene W 82	9.00	0	0	0.00000	0.00
--	7. O-xylene W 27	9.57	0	0	0.00000	0.00
4	8. BFB (Surr.)	10.02	6799656	1147685	2.37185	114.10
7	10. 3-Br-cl-bz	12.88	5138870	2759585	1.98747	102.91

c:\data\9904\99g2154\2792.008 -- Channel A



c:\data\9904\99g2154\2792.008 -- Channel B



Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-9	Received Date:	03/31/1999
Sample ID:	**18609-2167**	Sample Matrix	Soil	Moisture %:	19.6
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	–	Anal. Time:	17:33
Data File Name:	2792.009	Sample Amount:	1.0 g	Dilution Factor:	5
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	GASOLINE	8006-61-9	mg/kg	6.2	7 [a]	

Surrogates		Control Limit, %	Surro. Rec.%
1 4-BROMO-FLUOROBENZENE (FID)	460-00-4	70-132	98
# of out-of-control			0

[a] Not a typical gas pattern. Most of the peaks in the chromatogram correspond to the heavier portion of the chain.

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

66853

Gasoline/BTXE, GC analysis by FID/PID

File : c:\data\9904\99g2154\2792.009
Method : c:\ezchrom\methods\lufts014.u00
Sample ID : 2792-9 F=5
Acquired : Apr 01, 1999 17:33:22
Printed : Apr 01, 1999 18:17:04

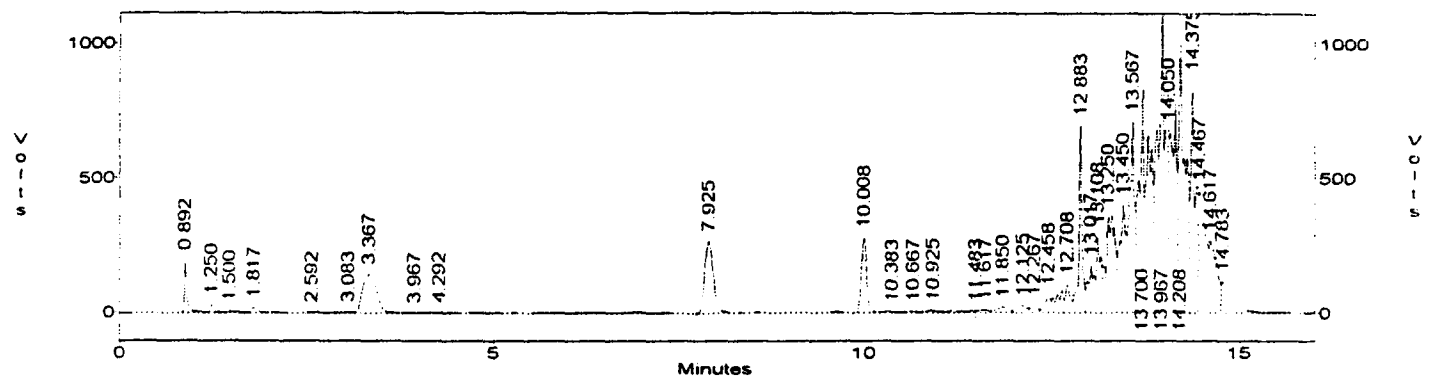
Channel A Results

No.	Name	RT,min	Area	H, V	Ave RF	ESTD (ppb)
7	2. TFT	3.37	1863783	144218	8923.79102	208.9
10	11. Chlorobenzene	7.93	2138273	268160	22058.50000	96.9
11	7. BFB	10.01	1393748	281203	14170.95020	98.4
22	10. 3-cl-br-bz	12.88	1969428	697182	15339.20020	128.4
G1	1. Gasoline		26751900		22417.10352	1193.4

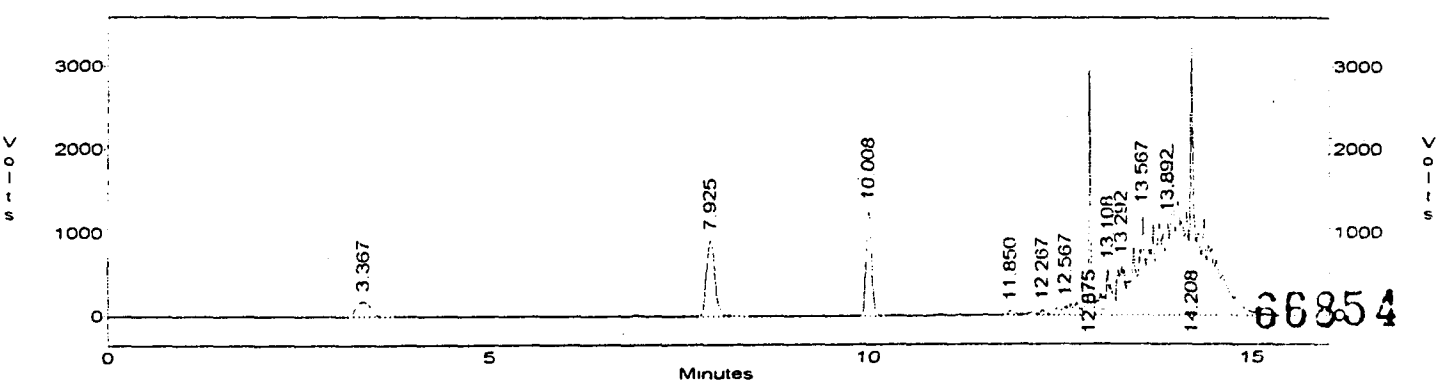
Channel B Results

No.	Name	Rt. min	Area	H, V	Ave. Rf	ISTD (ppb)
--	9. MTBE	1.59	0	0	0.00000	0.00
--	1. Benzene W 20	2.60	0	0	0.00000	0.00
1	2. TFT (Int.)	3.37	2358733	182856	1.00000	100.00
--	3. Toluene W 80	5.26	0	0	0.00000	0.00
2	11. Ch-bz	7.93	7233057	911611	2.93277	104.56
--	5. Et-Bz W 19	8.73	0	0	0.00000	0.00
--	6. P/M xylene W 82	9.00	0	0	0.00000	0.00
--	7. O-xylene W 27	9.57	0	0	0.00000	0.00
3	8. BFB (Surr.)	10.01	6189636	1263469	2.37185	110.64
7	10. 3-Br-cl-bz	12.88	6533838	3037003	1.98747	139.38

c:\data\9904\99g2154\2792.009 -- Channel A



c:\data\9904\99g2154\2792.009 -- Channel B



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Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-11	Received Date:	03/31/1999
Sample ID:	**18609-2169**	Sample Matrix	Soil	Moisture %:	11.3
Sample Type:	Field Sample	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	–	Anal. Time:	17:56
Data File Name:	2792.011	Sample Amount:	0.5 g	Dilution Factor:	10
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	GASOLINE	8006-61-9	mg/kg	11	20 [a]	

Surrogates		Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (FID) 460-00-4	70-132	120
# of out-of-control			0

[a] Not a typical gas pattern. Most of the peaks in the chromatogram correspond to the heavier portion of the chain.

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

66855

Applied P & CH Laboratory
Gasoline/BTXE, GC analysis by FID/PID

File : c:\data\9904\99g2154\2792.011
Method : c:\ezchrom\methods\lufts014.u00
Sample ID : 2792-11 F=10
Acquired : Apr 01, 1999 17:56:09
Printed : Apr 02, 1999 11:30:01

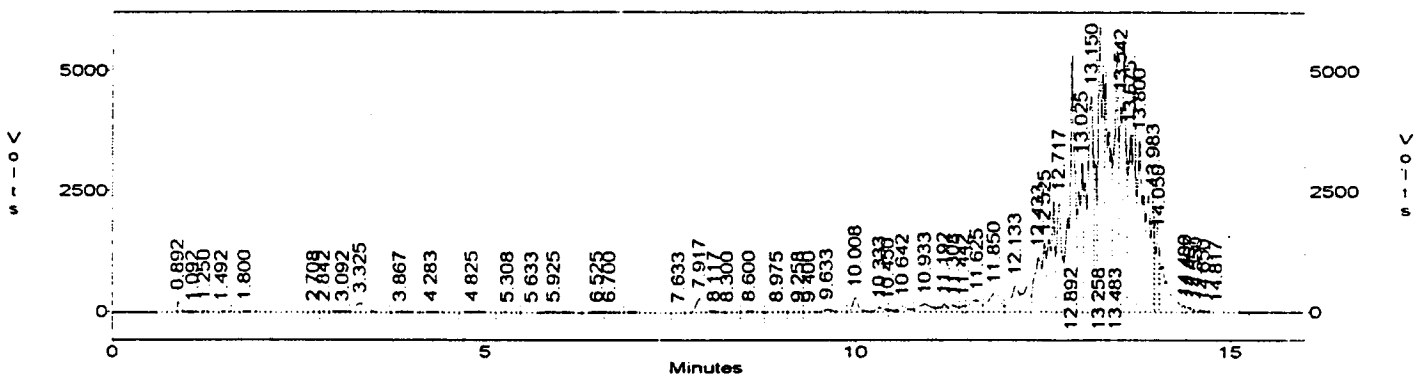
Channel A Results

No.	Name	RT,min	Area	H, V	Ave RF	ESTD (ppb)
--	2. TFT	3.51	0	0	0.00000	0.0
19	11. Chlorobenzene	7.92	2229295	282503	22058.50000	101.1
27	7. BFB	10.01	1694535	306533	14170.95020	119.6
41	10. 3-cl-br-bz	12.89	27045978	5358413	15339.20020	1763.2
G1	1. Gasoline		39352488		22417.10352	1755.5

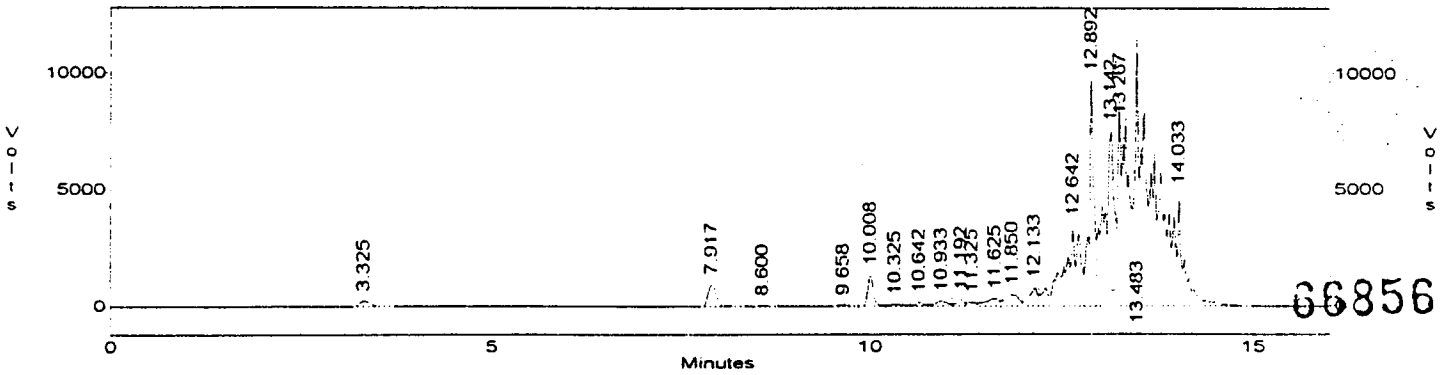
Channel B Results

No.	Name	Rt. min	Area	H, V	Ave. Rf	ISTD (ppb)
--	9. MTBE	1.59	0	0	0.00000	0.00
--	1. Benzene W 20	2.60	0	0	0.00000	0.00
1	2. TFT (Int.)	3.33	2376025	224428	1.00000	100.00
--	3. Toluene W 80	5.26	0	0	0.00000	0.00
2	11. Ch-bz	7.92	7327638	961650	2.93277	105.16
3	5. Et-Bz W 19	8.60	305577	38208	2.77374	4.64
--	6. P/M xylene W 82	9.00	0	0	0.00000	0.00
--	7. O-xylene W 27	9.57	0	0	0.00000	0.00
5	8. BFB (Surr.)	10.01	6497671	1333211	2.37185	115.30
15	10. 3-Br-cl-bz	12.89	43656616	9677039	1.98747	924.48

c:\data\9904\99g2154\2792.011 -- Channel A



c:\data\9904\99g2154\2792.011 -- Channel B



66856

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-2	Received Date:	03/31/1999
Sample ID:	**18609-2158**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Field Sample	Prep. Method:	3510	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/02/99	Anal. Date:	04/02/99
Batch No:	99G2166	Prep. No:	1 of 1	Anal. Time:	22:46
Data File Name:	2792.002	Sample Amount:	1000 mL	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	N Unit	RL	Result	Qualifier
1	TPH AS DIESEL	68334-30-5	mg/L	0.5	<0.5	U
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	51
# 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

66903

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-3	Received Date:	03/31/1999
Sample ID:	**18609-2161**	Sample Matrix	Soil	Moisture %:	12.9
Sample Type:	Field Sample	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	22:54
Data File Name:	2792.003	Sample Amount:	20.0 g	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	N Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	11	<11	U
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	11	<11	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	69
# 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

66904

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-4	Received Date:	03/31/1999
Sample ID:	**18609-2162**	Sample Matrix	Soil	Moisture %:	15.1
Sample Type:	Field Sample	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	23:19
Data File Name:	2792.004	Sample Amount:	20.0 g	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	N Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	12	< 12	U
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	12	< 12	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	69
# 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

66905

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-5	Received Date:	03/31/1999
Sample ID:	**18609-2163**	Sample Matrix	Soil	Moisture %:	8.6
Sample Type:	Field Sample	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	23:44
Data File Name:	2792.005	Sample Amount:	20.0 g	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	N Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	11	<11	U
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	11	<11	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	74
# 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

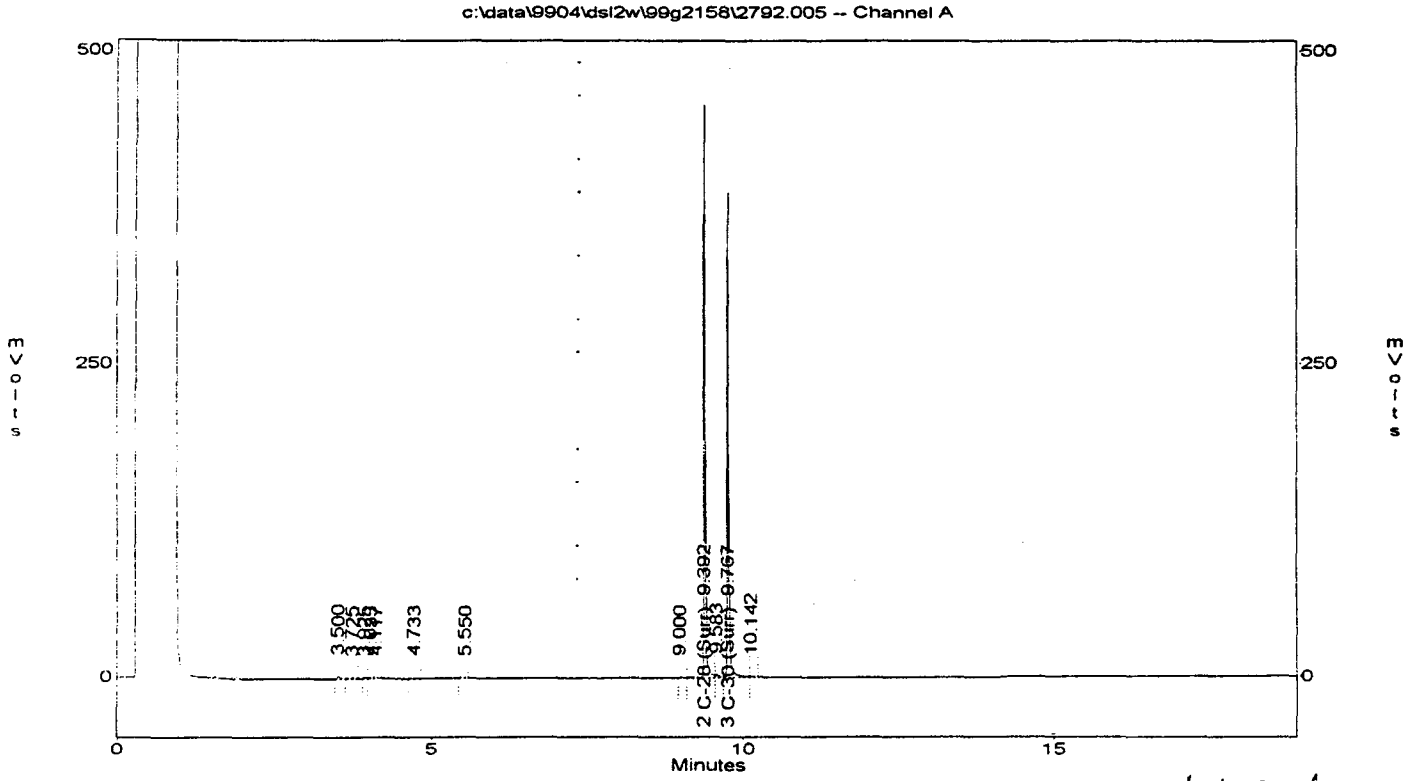
66906

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

File : c:\data\9904\dsl2w\99g2158\2792.005
Method : c:\ezchrom\methods\dsl2-026.w00
Sample ID : 2792-5 f=0.05
Vial : 8
Volume : 1
Acquired : Apr 01, 1999 23:44:23
Printed : Apr 05, 1999 17:36:27
User : System

Channel A Results

Name	Time	Area	AVE RF	Conc (ppm)
C-10	2.63	0	0.000	0.000
C-16	6.53	0	0.000	0.000
C-22	8.01	0	0.000	0.000
C-24	8.25	0	0.000	0.000
2 C-28 (Surr)	9.39	668671	18003.779	37.141
3 C-30 (Surr)	9.77	655304	16961.650	38.634
C-36	11.04	0	0.000	0.000
1 Diesel		5229	15071.858	0.347
4 Motor oil		4685	12791.396	0.366



A.L. 16906A
Amended
1/29/99

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
t ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-7	Received Date:	03/31/1999
ample ID:	**18609-2165**	Sample Matrix	Soil	Moisture %:	17.4
ample Type:	Field Sample	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/02/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	00:09
Data File Name:	2792.007	Sample Amount:	20.0 g	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	N Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	12	<12	U
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	12	<12	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	70
# 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

66907

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-8	Received Date:	03/31/1999
Sample ID:	**18609-2166**	Sample Matrix	Soil	Moisture %:	6.6
Sample Type:	Field Sample	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/02/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	00:34
Data File Name:	2792.008	Sample Amount:	20.0 g	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	11	1	J
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	11	<11	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	69
# of out-of-control				0

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

[a]Not a typical gas pattern. Most of the peaks in the chromatogram correspond to the heavier portion of the chain.

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

L6907A
A.L.
Amended
11/30/99

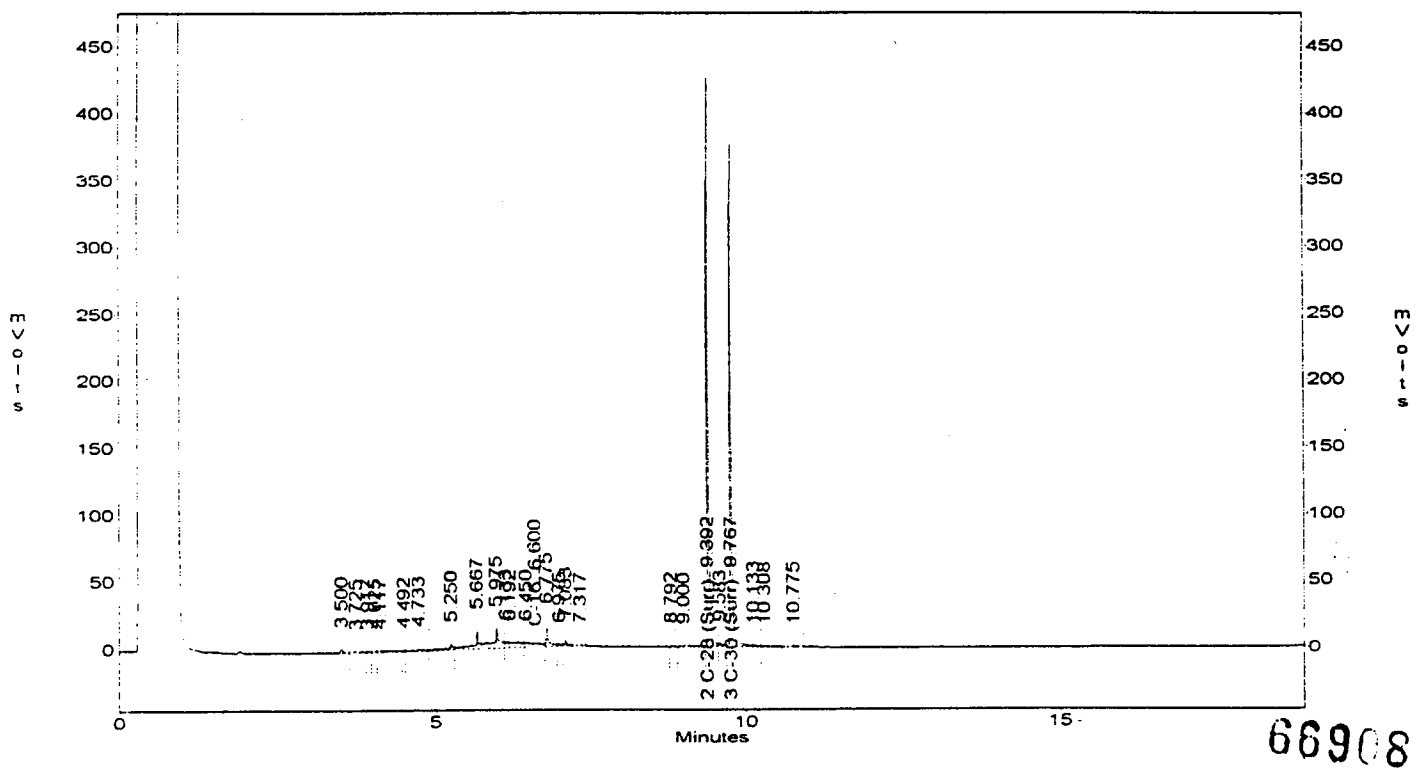
Applied P & Ch Lab
Total Extractable Petroleum Hydrocarbon Analysis by GC-FID
Instrument ID: GC-W, Column: DB-1 (0.32mm x 15m x 0.25 um), 1ul

File : c:\data\9904\dsl2w\99g2158\2792.008
Method : c:\ezchrom\methods\dsl2-026.w00
Sample ID : 2792-8 f=0.05
Vial : 10
Volume : 1
Acquired : Apr 02, 1999 00:34:24
Printed : Apr 05, 1999 17:36:55
User : System

Channel A Results

Name	Time	Area	AVE RF	Conc (ppm)
C-10	2.63	0	0.000	0.000
C-16	6.60	27815	0.000	0.000
C-22	8.01	0	0.000	0.000
C-24	8.25	0	0.000	0.000
2 C-28 (Surr)	9.39	622402	18003.779	34.571
3 C-30 (Surr)	9.77	619917	16961.650	36.548
C-36	11.04	0	0.000	0.000
1 Diesel		402156	15071.858	26.683
4 Motor oil		19784	12791.396	1.547

c:\data\9904\dsl2w\99g2158\2792.008 -- Channel A



66908

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-9	Received Date:	03/31/1999
Sample ID:	**18609-2167**	Sample Matrix	Soil	Moisture %:	19.6
Sample Type:	Field Sample	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/02/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	01:49
Data File Name:	2792.009	Sample Amount:	20.0 g	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	N Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	12	76 [a]	
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	12	< 12	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	73
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]Similar to JP-5

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

66909

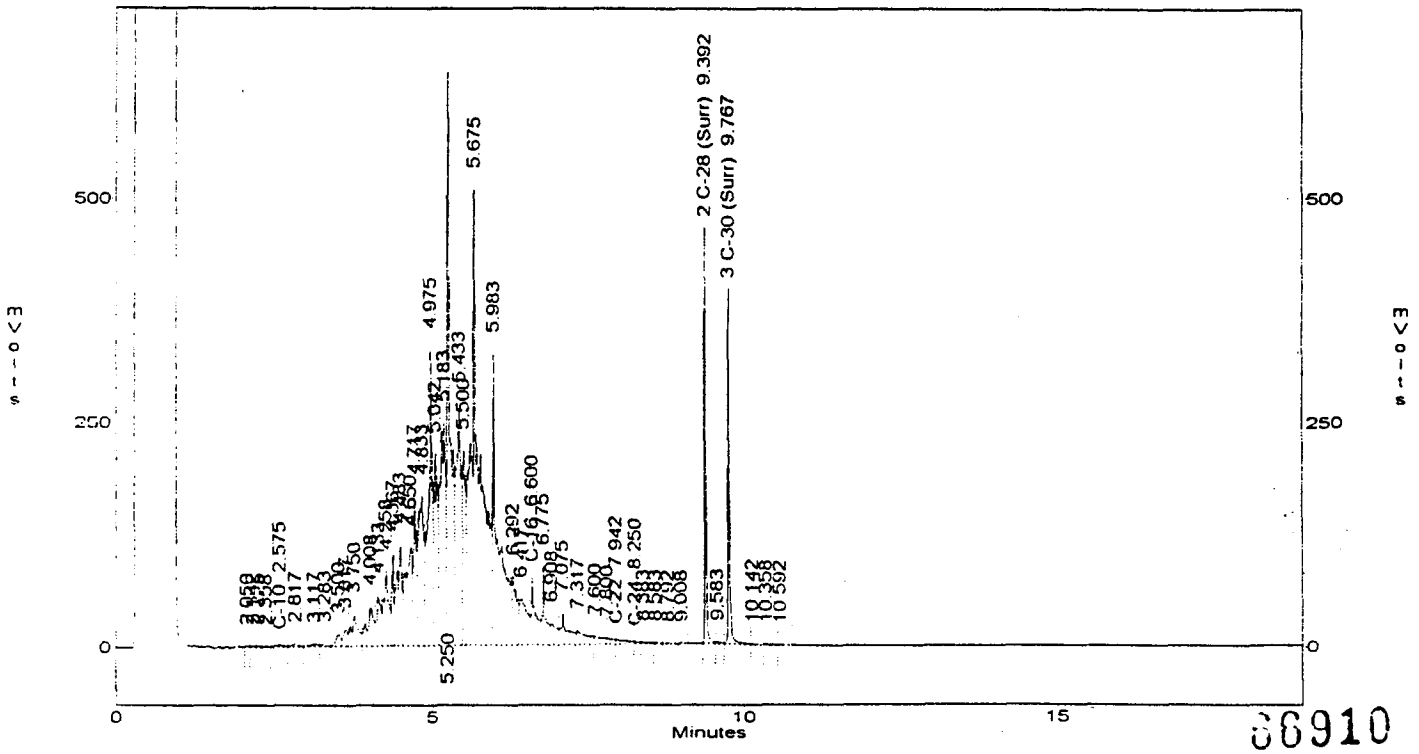
Applied P & Ch Lab
Total Extractable Petroleum Hydrocarbon Analysis by GC-FID
Instrument ID: GC-W, Column: DB-1 (0.32mm x 15m x 0.25 um), 1ul

File : c:\data\9904\dsl2w\99g2158\2792.009
Method : c:\ezchrom\methods\dsl2-026.w00
Sample ID : 2792-9 f=0.05
Vial : 11
Volume : 1
Acquired : Apr 02, 1999 01:49:42
Printed : Apr 05, 1999 17:37:10
User : System

Channel A Results

Name	Time	Area	AVE RF	Conc (ppm)
C-10	2.58	22124	0.000	0.000
C-16	6.60	361436	0.000	0.000
C-22	7.94	65188	0.000	0.000
C-24	8.25	14377	0.000	0.000
2 C-28 (Surr)	9.39	661987	18003.779	36.769
3 C-30 (Surr)	9.77	657273	16961.650	38.751
C-36	11.04	0	0.000	0.000
1 Diesel		19795496	15071.858	1313.408
4 Motor oil		48093	12791.396	3.760

c:\data\9904\dsl2w\99g2158\2792.009 -- Channel A



Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-11	Received Date:	03/31/1999
Sample ID:	**18609-2169**	Sample Matrix	Soil	Moisture %:	11.3
Sample Type:	Field Sample	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/05/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	18:52
Data File Name:	2792.111	Sample Amount:	20.0 g	Dilution Factor:	10
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	N Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	110	1200 [a]	
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	110	<110	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	82
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]Similar to JP-5

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

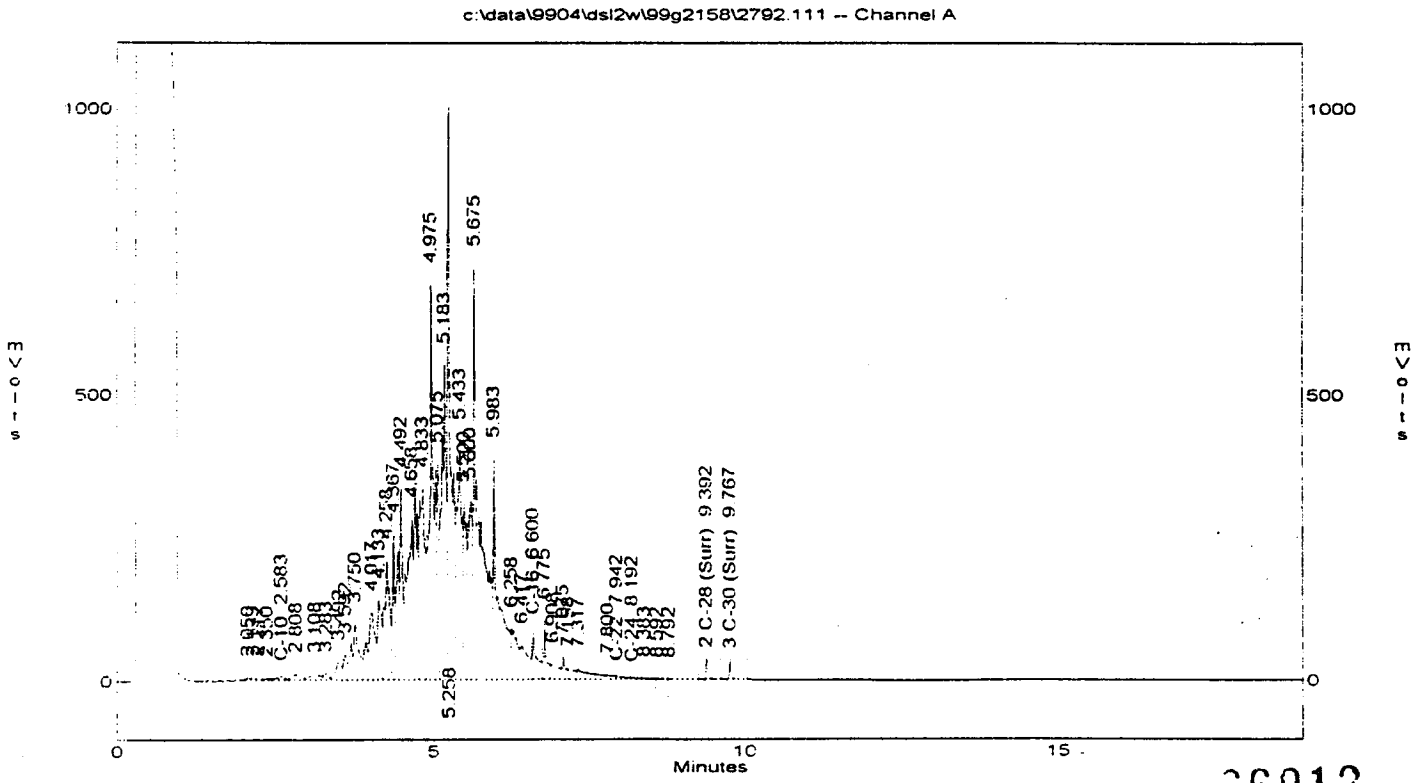
36911

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

File : c:\data\9904\dsl2w\99g2158\2792.111
Method : c:\ezchrom\methods\dsl2-026.w00
Sample ID : 2792-11 f=0.50
Vial : 30
Volume : 1
Acquired : Apr 05, 1999 18:52:37
Printed : Apr 19, 1999 11:01:43
User : System

Channel A Results

Name	Time	Area	AVE RF	Conc (ppm)
C-10	2.58	63154	0.000	0.000
C-16	6.60	401979	0.000	0.000
C-22	7.94	56940	0.000	0.000
C-24	8.19	25245	0.000	0.000
2 C-28 (Surr)	9.39	73431	18003.779	4.079
3 C-30 (Surr)	9.77	70964	16961.650	4.184
C-36	11.04	0	0.000	0.000
1 Diesel		30978340	15071.858	2055.376
4 Motor oil		173132	12791.396	13.535



66912

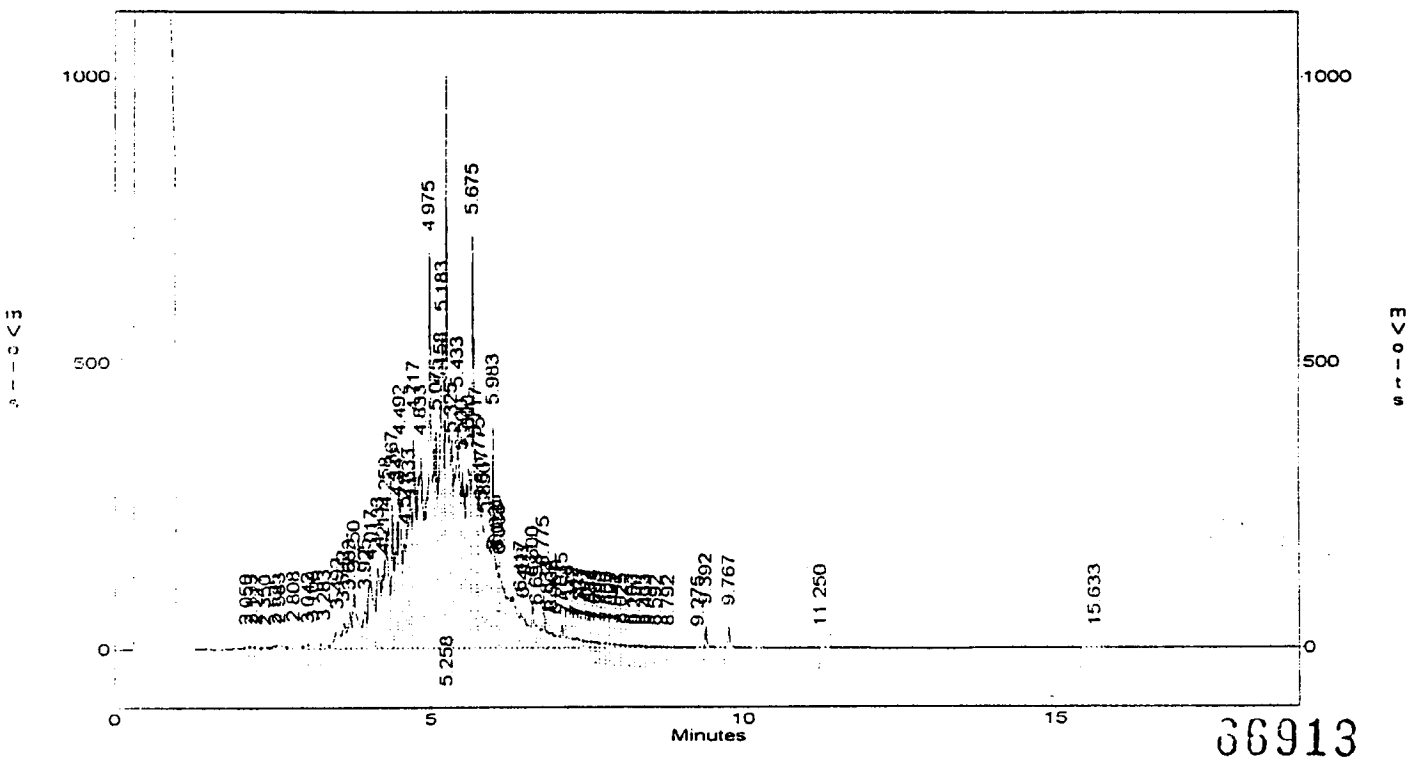
Applied P & Ch Lab
Total Extractable Petroleum Hydrocarbon Analysis by GC-FID
Instrument ID: GC-W, Column: DB-1 (0.32mm x 15m x 0.25 um), 1ul

File : c:\data\9904\dsl2w\99g2158\2792.111
Method : c:\ezchrom\methods\ejp5-026.w00
Sample ID : 2792-11 f=0.50
Vial : 30
Volume : 1
Acquired : Apr 05, 1999 18:52:37
Printed : Apr 06, 1999 10:36:39
User : System

Channel A Results

Name	Time	Area	Conc (ppm)
1 Jp-5		34123044	2105.436

c:\data\9904\dsl2w\99g2158\2792.111 -- Channel A



36913

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	03/31/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	Thizar TW
		Lab Sample ID:	99-2792-11	Received Date:	03/31/1999
Sample ID:	**18609-2169**	Sample Matrix	Soil	Moisture %:	11.3
Sample Type:	Field Sample	Prep. Method:	3510	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/13/99	Anal. Date:	04/13/99
Batch No:	99G2265	Prep. No:	1 of 1	Anal. Time:	18:28
Data File Name:	2792.î1	Sample Amount:	250. mL	Dilution Factor:	1
Extract Vol.	1.0 mL	Leach Method:	SPLP		

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	SPLP TPH AS DIESEL	68334-30-5	mg/L	0.5	1.7 [a]	
2	SPLP 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	87
# of out-of-control				0

Not Detected is shown as PQL, with dilution and moisture corrected if applicable.
[a]Similar to JP-5

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

36914

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

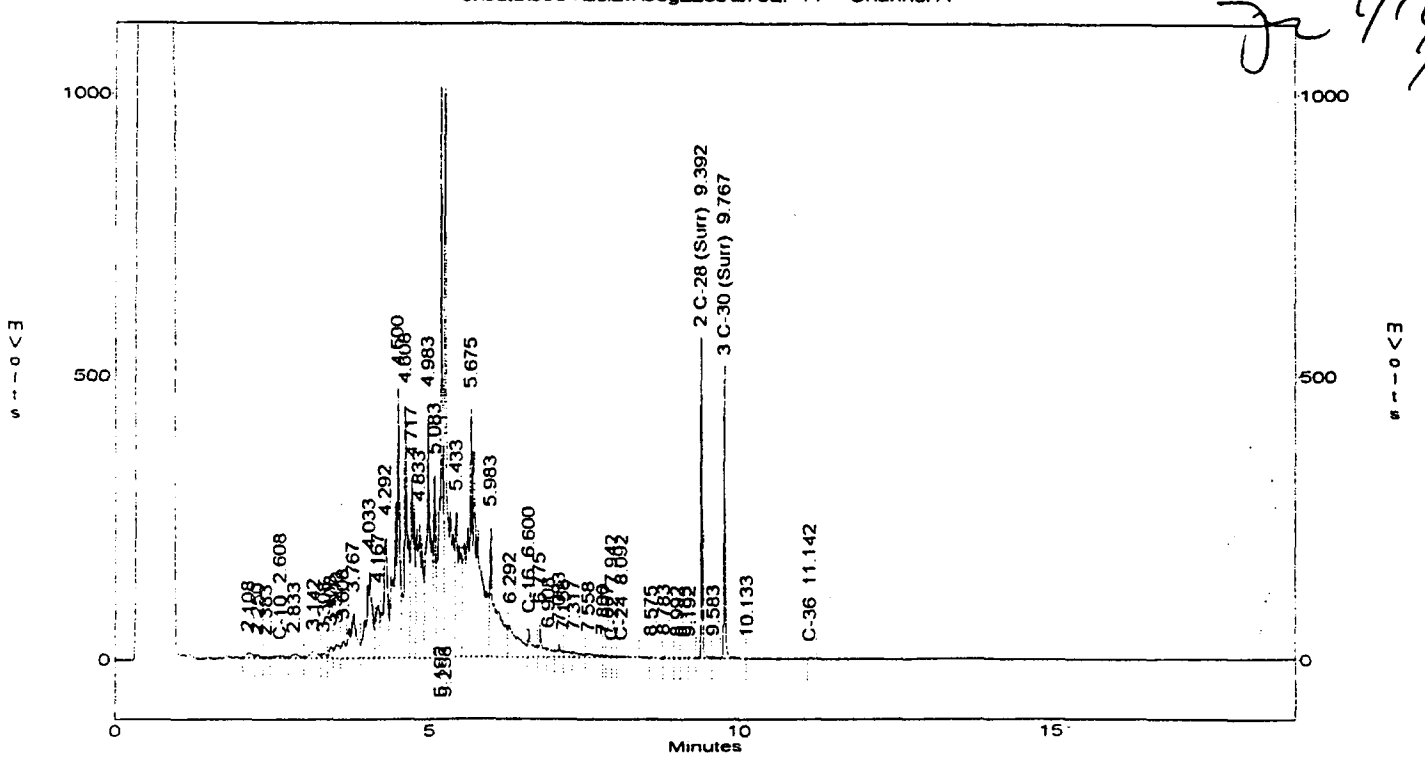
File : c:\data\9904\dsl2w\99g2265\2792.^11
Method : c:\ezchrom\methods\Dsl2-026.w00
Sample ID : 2792-11@s f=0.001
Vial : 6
Volume : 1
Acquired : Apr 13, 1999 18:28:59
Printed : Apr 13, 1999 18:47:57
User : System

Channel A Results

Name	Time	Area	AVE RF	Conc (ppm)
C-10	2.61	45457	0.000	0.000
C-16	6.60	232649	0.000	0.000
C-22	7.94	9814	0.000	0.000
C-24	8.09	20338	0.000	0.000
2 C-28 (Surr)	9.39	779498	18003.779	43.296
3 C-30 (Surr)	9.77	758056	16961.650	44.692
C-36	11.14	10216	0.000	0.000
1 Diesel		24933368	15071.858	1654.300
4 Motor oil		31895	12791.396	2.493

see JPS Results
4/14/99

c:\data\9904\dsl2w\99g2265\2792.^11 -- Channel A



66915

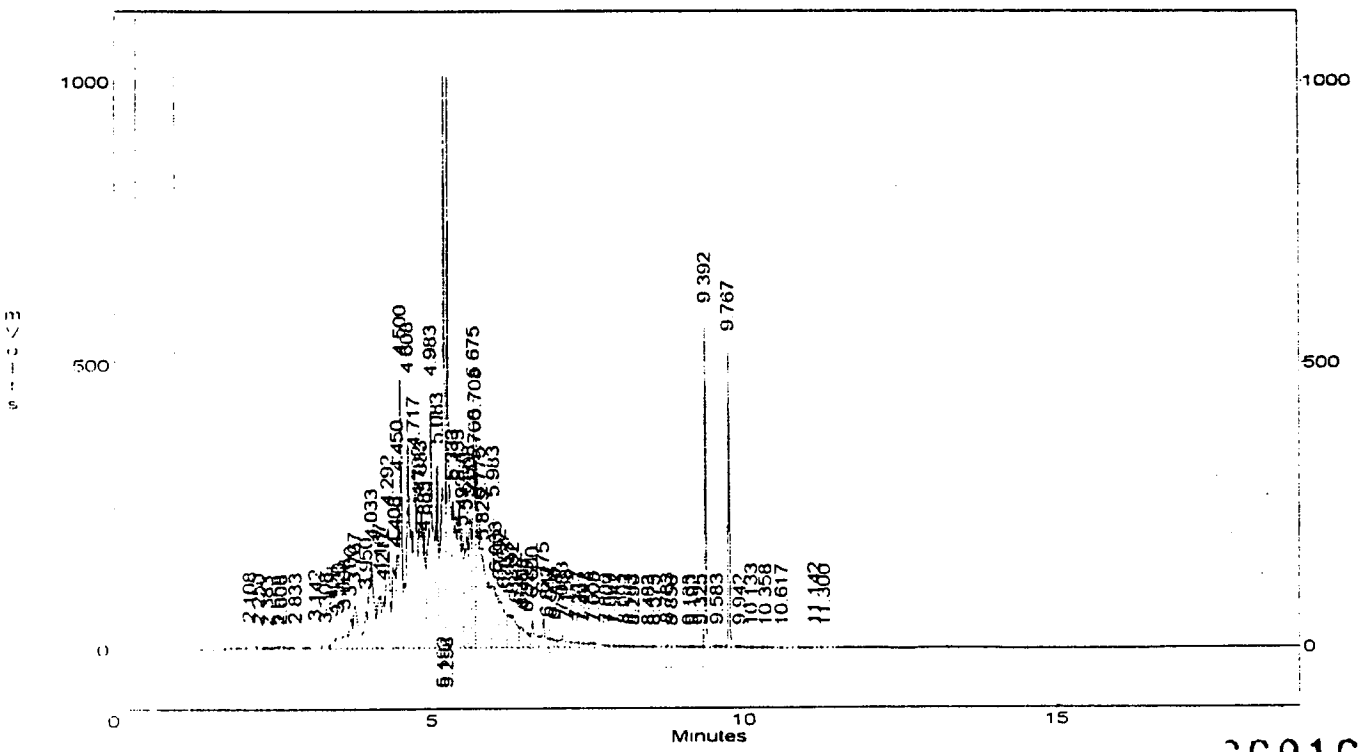
Applied P & Ch Lab
Total Extractable Petroleum Hydrocarbon Analysis by GC-FID
Instrument ID: GC-W, Column: DB-1 (0.32mm x 15m x 0.25 um), 1ul

File : c:\data\9904\dsl2w\99g2265\2792.^11
Method : c:\ezchrom\methods\ejp5-026.w00
Sample ID : 2792-11@s f=0.001
Vial : 6
Volume : 1
Acquired : Apr 13, 1999 18:28:59
Printed : Apr 14, 1999 09:09:48
User : System

Channel A Results

Name	Time	Area	Conc (ppm)
1 Jp-5		27987712	1726.878 X 0,001

c:\data\9904\dsl2w\99g2265\2792.^11 – Channel A



06916

Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/23/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2029-MB-01	Received Date:	03/23/1999
Sample ID:	**99G2029-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: C
Anal. Method:	8260	Prep. Date:	03/23/99	Anal. Date:	03/23/99
Batch No:	99G2029	Prep. No:	-	Anal. Time:	06:53
Data File Name:	G2029K02	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE (DB	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	15	< 15	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	89
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	90
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	107
4	TOLUENE-D8	2037-26-5	81-118	106
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	82
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	76
3	FLUOROBENZENE	462-06-6	50-200	90
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/24/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2046-MB-01	Received Date:	03/24/1999
Sample ID:	**99G2046-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: C
Anal. Method:	8260	Prep. Date:	03/24/99	Anal. Date:	03/24/99
Batch No:	99G2046	Prep. No:	-	Anal. Time:	13:34
Data File Name:	G2046K01	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE (DB	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	15	< 15	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	86
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	87
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	92
4	TOLUENE-D8	2037-26-5	81-118	109
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	75
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	72
3	FLUOROBENZENE	462-06-6	50-200	80
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/28/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2099-MB-01	Received Date:	03/28/1999
Sample ID:	**99G2099-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	03/28/99	Anal. Date:	03/28/99
Batch No:	99G2099	Prep. No:	-	Anal. Time:	19:30
Data File Name:	G2099K01	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	< 100	U
2	BENZENE	71-43-2	µg/L	5	< 5	U
3	BROMOBENZENE	108-86-1	µg/L	5	< 5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	< 5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	< 5	U
6	BROMOFORM	75-25-2	µg/L	5	< 5	U
7	BROMOMETHANE	74-83-9	µg/L	5	< 5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	< 100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	< 5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	< 5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	< 5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	< 5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	< 5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	< 5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	< 5	U
16	CHLOROETHANE	75-00-3	µg/L	5	< 5	U
17	CHLOROFORM	67-66-3	µg/L	5	< 5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	< 5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	< 5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	< 5	U
21	1,2-DIBROMO-3-CHLOROPROPANE (DB	96-12-8	µg/L	5	< 5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	< 5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	< 5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	< 5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	< 5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	< 5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	< 5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	< 5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	< 5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	< 5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	< 5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	< 5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	< 5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	< 5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	< 5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	< 5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	< 5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	< 5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	< 5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	15	< 15	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	97
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	97
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	95
4	TOLUENE-D8	2037-26-5	81-118	90
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	150
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	161
3	FLUOROBENZENE	462-06-6	50-200	128
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/29/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2099-MB-02	Received Date:	03/29/1999
Sample ID:	**99G2099-MB-02**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	03/29/99	Anal. Date:	03/29/99
Batch No:	99G2099	Prep. No:	-	Anal. Time:	03:46
Data File Name:	G2099K02	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE (DB	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	15	< 15	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	101
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	106
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	111
4	TOLUENE-D8	2037-26-5	81-118	87
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	117
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	119
3	FLUOROBENZENE	462-06-6	50-200	91
# 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

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FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		SDG Number:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2029		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	99G2029-LCS-01	99G2029-LCS-01	86	86	87	91	0
2	99G2029-MB-01	99G2029-MB-01	89	90	107	106	0
3	99G2029-LSD-01	99G2029-LSD-01	87	82	92	93	0
4	18609-2088-MS	99-2536-1MS	87	88	96	98	0
5	18609-2088-MSD	99-2536-1MSD	90	89	98	98	0
6	18609-2094	99-2557-1	88	94	94	100	0
7	18609-2095	99-2557-2	94	93	86	105	0
8	18609-2097	99-2557-4	99	90	84	101	0
9	18609-2098	99-2557-5	97	92	80 *	105	1
10	18609-2099	99-2557-6	95	92	83	106	0
11	18609-2100	99-2557-7	92	91	83	106	0
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (BFB)	80-119
S2 = DIBROMOFLUOROMETHANE	79-120
S3 = 1,2-DICHLOROETHANE-D4	81-119
S4 = TOLUENE-D8	81-118

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

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FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2046		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	99G2046-MB-01	99G2046-MB-01	86	87	92	109	0
2	99G2046-LCS-01	99G2046-LCS-01	84	81	85	93	0
3	N-18-2A-03-19-99-MS	99-2586-1MS	85	82	83	93	0
4	N-18-2A-03-19-99-MSD	99-2586-1MSD	82	79	82	89	0
5	18609-2101	99-2557-8	83	94	107	106	0
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (BFB)	80-119
S2 = DIBROMOFLUOROMETHANE	79-120
S3 = 1,2-DICHLOROETHANE-D4	81-119
S4 = TOLUENE-D8	81-118

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

60746

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2099		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	99G2099-MB-01	99G2099-MB-01	97	97	95	90	0
2	99G2099-LCS-01	99G2099-LCS-01	112	104	105	106	0
3	18609-2096-MS	99-2557-3MS	113	99	94	107	0
4	18609-2096-MSD	99-2557-3MSD	112	99	92	106	0
5	18609-2096	99-2557-3	99	99	98	90	0
6	99G2099-MB-02	99G2099-MB-02	101	106	111	87	0
7	99G2099-LSD-01	99G2099-LSD-01	104	103	110	91	0
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (BFB)	80-119
S2 = DIBROMOFLUOROMETHANE	79-120
S3 = 1,2-DICHLOROETHANE-D4	81-119
S4 = TOLUENE-D8	81-118

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

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FORM-3A

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2029		
LCS Filename:	G2029L01	Date Analyzed:	032299	Time Analyzed:	19:55
LCSD Filename:	G2029J01	Date Analyzed:	032399	Time Analyzed:	07:26

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
BENZENE	µg/L	50	0	48.5	97	76-121
CHLOROBENZENE	µg/L	50	0	46.7	93	77-122
1,1-DICHLOROETHENE	µg/L	50	0	49.0	98	71-126
TOLUENE	µg/L	50	0	48.0	96	77-120
TRICHLOROETHENE	µg/L	50	0	42.9	86	73-124
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
BENZENE	µg/L	50	49.6	99	2	27	76-121
CHLOROBENZENE	µg/L	50	47.7	95	2	31	77-122
1,1-DICHLOROETHENE	µg/L	50	48.8	98	0	34	71-126
TOLUENE	µg/L	50	49.5	99	3	30	77-120
TRICHLOROETHENE	µg/L	50	41.0	82	5	35	73-124
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

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FORM-3A

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2029		
MS Filename:	G2029M02	Date Analyzed:	032399	Time Analyzed:	07:59
MSD Filename:	G2029N02	Date Analyzed:	032399	Time Analyzed:	08:33
MS Sample No:	**18609-2088**	Sample Lab ID:	99-2536-1		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
BENZENE	µg/L	50	0	52.5	105	72-126
CHLOROBENZENE	µg/L	50	0	48.7	97	69-131
1,1-DICHLOROETHENE	µg/L	50	0	50.7	101	66-133
TOLUENE	µg/L	50	0	50.9	102	70-129
TRICHLOROETHENE	µg/L	50	0	43.1	86	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
BENZENE	µg/L	50	54.0	108	3	27	72-126
CHLOROBENZENE	µg/L	50	50.5	101	4	31	69-131
1,1-DICHLOROETHENE	µg/L	50	48.1	96	5	34	66-133
TOLUENE	µg/L	50	51.5	103	1	30	70-129
TRICHLOROETHENE	µg/L	50	45.5	91	6	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

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FORM-3A

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2046		
LCS Filename:	G2046L01	Date Analyzed:	032499	Time Analyzed:	14:07
LCSD Filename:	-	Date Analyzed:	-	Time Analyzed:	-

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
BENZENE	µg/L	50	0	50.7	101	76-121
CHLOROBENZENE	µg/L	50	0	46.3	93	77-122
1,1-DICHLOROETHENE	µg/L	50	0	41.8	84	71-126
TOLUENE	µg/L	50	0	49.0	98	77-120
TRICHLOROETHENE	µg/L	50	0	42.4	85	73-124
# of Out-of-control					0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

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FORM-3A

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2046		
MS Filename:	G2046M01	Date Analyzed:	032499	Time Analyzed:	14:40
MSD Filename:	G2046N01	Date Analyzed:	032499	Time Analyzed:	15:13
MS Sample No:	N-18-2A-03-19-99	Sample Lab ID:	99-2586-1		

Spiked Components	Unit	Spike Added	Concentration Unspiked	MS	MS Rec% #	QC Limit, % REC
BENZENE	µg/L	50	0	49.5	99	72-126
CHLOROBENZENE	µg/L	50	0	46.2	92	69-131
1,1-DICHLOROETHENE	µg/L	50	0	45.5	91	66-133
TOLUENE	µg/L	50	0	48.5	97	70-129
TRICHLOROETHENE	µg/L	50	5	41.9	74	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	REC
BENZENE	µg/L	50	47.6	95	4	27	72-126
CHLOROBENZENE	µg/L	50	44.3	89	3	31	69-131
1,1-DICHLOROETHENE	µg/L	50	38.1	76	18	34	66-133
TOLUENE	µg/L	50	46.0	92	5	30	70-129
TRICHLOROETHENE	µg/L	50	40.6	71	4	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

60756

Applied P & Ch Laboratory

Organic Analysis Results for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/19/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2004-MB-01	Received Date:	03/19/1999
Sample ID:	**99G2004-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	3510	Instrument ID:	GC: R
Anal. Method:	8081	Prep. Date:	03/19/99	Anal. Date:	03/22/99
Batch No:	99G2004	Prep. No:	1 of 1	Anal. Time:	19:58
Data File Name:	2004G.K01	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	ALPHA-CHLORDANE	5103-71-9	µg/L	0.05	<0.05	U
7	GAMMA-CHLORDANE	5103-74-2	µg/L	0.05	<0.05	U
8	4,4'-DDD	72-54-8	µg/L	0.1	<0.1	U
9	4,4'-DDE	72-55-9	µg/L	0.1	<0.1	U
10	4,4'-DDT	50-29-3	µg/L	0.1	<0.1	U
11	DIELDRIN	60-57-1	µg/L	0.1	<0.1	U
12	ENDOSULFAN I	959-98-8	µg/L	0.05	<0.05	U
13	ENDOSULFAN II	33213-65-9	µg/L	0.1	<0.1	U
14	ENDOSULFAN SULFATE	1031-07-8	µg/L	0.5	<0.5	U
15	ENDRIN	72-20-8	µg/L	0.1	<0.1	U
16	ENDRIN ALDEHYDE	7421-93-4	µg/L	0.1	<0.1	U
17	ENDRIN KETONE	53494-70-5	µg/L	0.1	<0.1	U
18	HEPTACHLOR	76-44-8	µg/L	0.05	<0.05	U
19	HEPTACHLOR EPOXIDE	1024-57-3	µg/L	0.05	<0.05	U
20	METHOXYCHLOR	72-43-5	µg/L	2	<2	U
21	TOXAPHENE	8001-35-2	µg/L	5	<5	U
22	AROCLOR-1016	12674-11-2	µg/L	2	<2	U
23	AROCLOR-1221	11104-28-2	µg/L	5	<5	U
24	AROCLOR-1232	11141-16-5	µg/L	2	<2	U
25	AROCLOR-1242	53469-21-9	µg/L	2	<2	U
26	AROCLOR-1248	12672-29-6	µg/L	2	<2	U
27	AROCLOR-1254	11097-69-1	µg/L	1	<1	U
28	AROCLOR-1260	11096-82-5	µg/L	1	<1	U

Surrogates			Control Limit, %	Surro. Rec.%
1	DECACHLOROBIPHENYL (DCB)	2051-24-3	31-147	80
2	2,4,5,6-TETRACHLORO-M-XYLENE	877-09-8	33-146	77
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	DIBUTYLCHLORENDATE (DBC)	1770-80-5	50-200	162
# 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

60878

Applied P & Ch Laboratory

Organic Analysis Results for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/25/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2077-MB-01	Received Date:	03/25/1999
Sample ID:	**99G2077-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	3510	Instrument ID:	GC: R
Anal. Method:	8081	Prep. Date:	03/25/99	Anal. Date:	03/26/99
Batch No:	99G2077	Prep. No:	1 of 1	Anal. Time:	17:32
Data File Name:	2077G.K01	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	ALPHA-CHLORDANE	5103-71-9	µg/L	0.05	<0.05	U
7	GAMMA-CHLORDANE	5103-74-2	µg/L	0.05	<0.05	U
8	4,4'-DDD	72-54-8	µg/L	0.1	<0.1	U
9	4,4'-DDE	72-55-9	µg/L	0.1	<0.1	U
10	4,4'-DDT	50-29-3	µg/L	0.1	<0.1	U
11	DIELDRIN	60-57-1	µg/L	0.1	<0.1	U
12	ENDOSULFAN I	959-98-8	µg/L	0.05	<0.05	U
13	ENDOSULFAN II	33213-65-9	µg/L	0.1	<0.1	U
14	ENDOSULFAN SULFATE	1031-07-8	µg/L	0.5	<0.5	U
15	ENDRIN	72-20-8	µg/L	0.1	<0.1	U
16	ENDRIN ALDEHYDE	7421-93-4	µg/L	0.1	<0.1	U
17	ENDRIN KETONE	53494-70-5	µg/L	0.1	<0.1	U
18	HEPTACHLOR	76-44-8	µg/L	0.05	<0.05	U
19	HEPTACHLOR EPOXIDE	1024-57-3	µg/L	0.05	<0.05	U
20	METHOXYCHLOR	72-43-5	µg/L	2	<2	U
21	TOXAPHENE	8001-35-2	µg/L	5	<5	U
22	AROCLOR-1016	12674-11-2	µg/L	2	<2	U
23	AROCLOR-1221	11104-28-2	µg/L	5	<5	U
24	AROCLOR-1232	11141-16-5	µg/L	2	<2	U
25	AROCLOR-1242	53469-21-9	µg/L	2	<2	U
26	AROCLOR-1248	12672-29-6	µg/L	2	<2	U
27	AROCLOR-1254	11097-69-1	µg/L	1	<1	U
28	AROCLOR-1260	11096-82-5	µg/L	1	<1	U

Surrogates			Control Limit, %	Surro. Rec.%
1	DECACHLOROBIPHENYL (DCB)	2051-24-3	31-147	65
2	2,4,5,6-TETRACHLORO-M-XYLENE	877-09-8	33-146	64
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	DIBUTYLCHLORENDATE (DBC)	1770-80-5	50-200	93
# 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

60881

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2004		

#	Client Sample No	Lab Sample ID	S1 %	#	S2 %	#	TOT OUT
1	99G2004-MB-01	99G2004-MB-01	80		77		0
2	18609-2095	99-2557-2	32		75		0
3	18609-2101	99-2557-8	60		163	D	1
4	18609-2100	99-2557-7	164	D	86		1
5	18609-2098	99-2557-5	81		49		0
6	18609-2097	99-2557-4	66		82		0
7	18609-2099	99-2557-6	65		200	I	1
8	99G2004-LCS-01	99G2004-LCS-01	65		88		0
9	99G2004-LSD-01	99G2004-LSD-01	84		92		0
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25							

	QC Control Limit
S1 = DECACHLOROBIPHENYL (DCB)	31-147
S2 = 2,4,5,6-TETRACHLORO-M-XYLENE	33-146

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

60892

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2077		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	TOT OUT
1	99G2077-MB-01	99G2077-MB-01	65	64	0
2	18609-2096	99-2557-3	58	100	0
3	99G2077-LCS-01	99G2077-LCS-01	66	75	0
4	99G2077-LSD-01	99G2077-LSD-01	70	76	0
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	QC Control Limit
S1 = DECACHLOROBIPHENYL (DCB)	31-147
S2 = 2,4,5,6-TETRACHLORO-M-XYLENE	33-146

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

60893

FORM-3C

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2004		
LCS Filename:	2004G.L01	Date Analyzed:	032299	Time Analyzed:	23:15
LCSD Filename:	2004G.J01	Date Analyzed:	032299	Time Analyzed:	23:39

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
ALDRIN	μg/L	0.50	0	0.463	93	37-131
GAMMA-BHC	μg/L	0.50	0	0.487	97	38-134
4,4'-DDT	μg/L	0.50	0	0.484	97	35-134
DIELDRIN	μg/L	0.50	0	0.450	90	40-130
ENDRIN	μg/L	0.50	0	0.477	95	36-133
HEPTACHLOR	μg/L	0.50	0	0.471	94	36-129
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
ALDRIN	μg/L	0.50	0.500	100	7	32	37-131
GAMMA-BHC	μg/L	0.50	0.512	102	5	48	38-134
4,4'-DDT	μg/L	0.50	0.519	104	7	31	35-134
DIELDRIN	μg/L	0.50	0.458	92	2	44	40-130
ENDRIN	μg/L	0.50	0.493	99	4	46	36-133
HEPTACHLOR	μg/L	0.50	0.502	100	6	49	36-129
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

60894

FORM-3C

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2077		
LCS Filename:	2077G.L01	Date Analyzed:	032699	Time Analyzed:	18:22
LCSD Filename:	2077G.J01	Date Analyzed:	032699	Time Analyzed:	18:46

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
ALDRIN	µg/L	0.50	0	0.363	73	37-131
GAMMA-BHC	µg/L	0.50	0	0.389	78	38-134
4,4'-DDT	µg/L	0.50	0	0.391	78	35-134
DIELDRIN	µg/L	0.50	0	0.368	74	40-130
ENDRIN	µg/L	0.50	0	0.388	78	36-133
HEPTACHLOR	µg/L	0.50	0	0.366	73	36-129
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
ALDRIN	µg/L	0.50	0.389	78	7	32	37-131
GAMMA-BHC	µg/L	0.50	0.402	80	3	48	38-134
4,4'-DDT	µg/L	0.50	0.408	82	5	31	35-134
DIELDRIN	µg/L	0.50	0.389	78	5	44	40-130
ENDRIN	µg/L	0.50	0.408	82	5	46	36-133
HEPTACHLOR	µg/L	0.50	0.383	77	5	49	36-129
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

60899

FORM-4B

Applied P & Ch Laboratory

Method Blank Summary for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Analysis Date:	03/22/99
		Sample Matrix:	Water	Analysis Time:	19:58
Sample ID:	**99G2004-MB-01**	Batch No:	99G2004	Instrument ID:	GC: R
Lab Sample ID:	99G2004-MB-01	Data File Name:	2004G.K01	GC Column:	DB-608
				Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	18609-2095	99-2557-2	Field Sample	2557.002	03/22/99	20:22
2	18609-2101	99-2557-8	Field Sample	2557.008	03/22/99	21:12
3	18609-2100	99-2557-7	Field Sample	2557.007	03/22/99	21:36
4	18609-2098	99-2557-5	Field Sample	2557.005	03/22/99	22:01
5	18609-2097	99-2557-4	Field Sample	2557.004	03/22/99	22:26
6	18609-2099	99-2557-6	Field Sample	2557.006	03/22/99	22:50
7	99G2004-LCS-01	99G2004-LCS-01	Lab Control Spike	2004G.L01	03/22/99	23:15
8	99G2004-LSD-01	99G2004-LSD-01	Lab Control Spike Duplicate	2004G.J01	03/22/99	23:39
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60900

FORM-4B

Applied P & Ch Laboratory

Method Blank Summary for Method 8081

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Analysis Date:	03/26/99
		Sample Matrix:	Water	Analysis Time:	17:32
Sample ID:	**99G2077-MB-01**	Batch No:	99G2077	Instrument ID:	GC: R
Lab Sample ID:	99G2077-MB-01	Data File Name:	2077G.K01	GC Column:	DB-608
				Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	18609-2096	99-2557-3	Field Sample	2557.003	03/26/99	17:57
2	99G2077-LCS-01	99G2077-LCS-01	Lab Control Spike	2077G.L01	03/26/99	18:22
3	99G2077-LSD-01	99G2077-LSD-01	Lab Control Spike Duplicate	2077G.J01	03/26/99	18:46
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60901

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/19/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G1998-MB-01	Received Date:	03/19/1999
Sample ID:	**99G1998-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC: N
Anal. Method:	M8015V	Prep. Date:	03/19/99	Anal. Date:	03/19/99
Batch No:	99G1998	Prep. No:	-	Anal. Time:	10:25
Data File Name:	1998G.K01	Sample Amount:	5.00 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 (FI	460-00-4	68-124	90
# 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

61086

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/25/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2061-MB-01	Received Date:	03/25/1999
Sample ID:	**99G2061-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	03/25/99	Anal. Date:	03/25/99
Batch No:	99G2061	Prep. No:	-	Anal. Time:	10:49
Data File Name:	2061G.K01	Sample Amount:	5.0 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	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 (FI 460-00-4	68-124	119
# 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

61088

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G1998		

#	Client Sample No	Lab Sample ID	S1 %	#	TOT OUT
1	99G1998-MB-01	99G1998-MB-01	90		0
2	99G1998-LCS-01	99G1998-LCS-01	92		0
3	99G1998-LSD-01	99G1998-LSD-01	93		0
4	MWT07-02-MS	99-2555-2MS	94		0
5	MWT07-02-MSD	99-2555-2MSD	94		0
6	18609-2095	99-2557-2	90		0
7	18609-2100	99-2557-7	159	I	1
8	18609-2098	99-2557-5	93		0
9	18609-2099	99-2557-6	96		0
10	18609-2101	99-2557-8	95		0
11	18609-2097	99-2557-4	96		0
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	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (FID)	68-124

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

61103

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2061		

#	Client Sample No	Lab Sample ID	S1 %' #	TOT OUT
1	99G2061-MB-01	99G2061-MB-01	119	0
2	99G2061-LCS-01	99G2061-LCS-01	98	0
3	99G2061-LSD-01	99G2061-LSD-01	108	0
4	18609-2102-MS	99-2661-1MS	115	0
5	18609-2102-MSD	99-2661-1MSD	113	0
6	18609-2096	99-2557-3	101	0
7				
8				
9				
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25				

QC Control Limit

S1 = 4-BROMO-FLUOROBENZENE (FID) 68-124

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

61104

FORM-3A

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G1998		
LCS Filename:	1998G.L01	Date Analyzed:	031999	Time Analyzed:	10:50
LCSD Filename:	1998G.J01	Date Analyzed:	031999	Time Analyzed:	11:15

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
GASOLINE	mg/L	1	0	1.11	111	75-122
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
GASOLINE	mg/L	1	1.12	112	1	23	75-122
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

61105

FORM-3A

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G1998		
MS Filename:	1998G.M01	Date Analyzed:	031999	Time Analyzed:	11:41
MSD Filename:	1998G.N01	Date Analyzed:	031999	Time Analyzed:	12:07
MS Sample No:	MWT07-02	Sample Lab ID:	99-2555-2		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
GASOLINE	mg/L	1	0	1.14	114	75-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
GASOLINE	mg/L	1	1.11	111	3	23	75-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61108

FORM-3A

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2061		
LCS Filename:	2061G.L01	Date Analyzed:	032599	Time Analyzed:	11:12
LCSD Filename:	2061G.J01	Date Analyzed:	032599	Time Analyzed:	11:35

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
GASOLINE	mg/L	1	0	1.05	105	75-122
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
GASOLINE	mg/L	1	1.11	111	6	23	75-122
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61112

FORM-3A

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2061		
MS Filename:	2061G.M01	Date Analyzed:	032599	Time Analyzed:	11:59
MSD Filename:	2061G.N01	Date Analyzed:	032599	Time Analyzed:	12:22
MS Sample No:	**18609-2102**	Sample Lab ID:	99-2661-1		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
GASOLINE	mg/L	1	0	1.13	113	75-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
GASOLINE	mg/L	1	1.12	112	1	23	75-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

61113

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Analysis Date:	03/19/99
		Sample Matrix:	Water	Analysis Time:	10:25
Sample ID:	**99G1998-MB-01**	Batch No:	99G1998	Instrument ID:	GC: N
Lab Sample ID:	99G1998-MB-01	Data File Name:	1998G.K01	GC Column:	DB-1
		Heated Purge: (Y/N)	N	Column ID:	0.53 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G1998-LCS-01	99G1998-LCS-01	Lab Control Spike	1998G.L01	03/19/99	10:50
2	99G1998-LSD-01	99G1998-LSD-01	Lab Control Spike Duplicate	1998G.J01	03/19/99	11:15
3	MWT07-02-MS	99-2555-2MS	Matrix Spike	1998G.M01	03/19/99	11:41
4	MWT07-02-MSD	99-2555-2MSD	Matrix Spike Duplicate	1998G.N01	03/19/99	12:07
5	18609-2095	99-2557-2	Field Sample	2557.002	03/19/99	16:48
6	18609-2100	99-2557-7	Field Sample	2557.007	03/19/99	17:13
7	18609-2098	99-2557-5	Field Sample	2557.105	03/19/99	18:11
8	18609-2099	99-2557-6	Field Sample	2557.106	03/19/99	18:36
9	18609-2101	99-2557-8	Field Sample	2557.108	03/19/99	19:01
10	18609-2097	99-2557-4	Field Sample	2557.004	03/19/99	22:22
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61114

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Analysis Date:	03/25/99
		Sample Matrix:	Water	Analysis Time:	10:49
Sample ID:	**99G2061-MB-01**	Batch No:	99G2061	Instrument ID:	GC: U
Lab Sample ID:	99G2061-MB-01	Data File Name:	2061G.K01	GC Column:	DB-1
		Heated Purge: (Y/N)	N	Column ID:	0.53 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2061-LCS-01	99G2061-LCS-01	Lab Control Spike	2061G.L01	03/25/99	11:12
2	99G2061-LSD-01	99G2061-LSD-01	Lab Control Spike Duplicate	2061G.J01	03/25/99	11:35
3	18609-2102-MS	99-2661-1MS	Matrix Spike	2061G.M01	03/25/99	11:59
4	18609-2102-MSD	99-2661-1MSD	Matrix Spike Duplicate	2061G.N01	03/25/99	12:22
5	18609-2096	99-2557-3	Field Sample	2557.103	03/25/99	16:58
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61115

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/21/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2013-MB-01	Received Date:	03/21/1999
Sample ID:	**99G2013-MB-01**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Method Blank	Prep. Method:	3510	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	03/21/99	Anal. Date:	03/22/99
Batch No:	99G2013	Prep. No:	1 of 1	Anal. Time:	23:30
Data File Name:	2013G.K01	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	<0.5	U
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	72
# 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

61144

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/25/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99G2063-MB-01	Received Date:	03/25/1999
Sample ID:	**99G2063-MB-01**	Sample Matrix	Water	Moisture %:	–
Sample Type:	Method Blank	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	03/25/99	Anal. Date:	03/25/99
Batch No:	99G2063	Prep. No:	1 of 1	Anal. Time:	16:43
Data File Name:	2063G.K01	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	<0.5	U
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	89
# 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

01146

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2013		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1	99G2013-MB-01	99G2013-MB-01	59	0
2	99G2013-LCS-01	99G2013-LCS-01	93	0
3	99G2013-LSD-01	99G2013-LSD-01	90	0
4	18609-2097	99-2557-4	85	0
5	18609-2098	99-2557-5	498 I	1
6	18609-2099	99-2557-6	129	0
7	18609-2100	99-2557-7	304000 D	1
8	18609-2095	99-2557-2	1172 D	1
9	18609-2101	99-2557-8	368 D	1
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	QC Control Limit
S1 = OCTACOSANE, C_{28}	50-149

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

61161

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2063		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1	99G2063-MB-01	99G2063-MB-01	89	0
2	99G2063-LCS-01	99G2063-LCS-01	87	0
3	99G2063-LSD-01	99G2063-LSD-01	91	0
4	T-914-606-MS	99-2663-2MS	73	0
5	T-914-606-MSD	99-2663-2MSD	64	0
6	18609-2096	99-2557-3	6320 D	1
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S1 = OCTACOSANE, C_{28}

QC Control Limit
50-149

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

61162

FORM-3C

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2013		
LCS Filename:	2013G.L01	Date Analyzed:	032299	Time Analyzed:	23:55
LCSD Filename:	2013G.J01	Date Analyzed:	032399	Time Analyzed:	00:20

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0	0.789	79	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0.776	78	1	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61163

FORM-3C

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2063		
LCS Filename:	2063G.L01	Date Analyzed:	032599	Time Analyzed:	17:08
LCSD Filename:	2063G.J01	Date Analyzed:	032599	Time Analyzed:	17:34

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0	1.03	103	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/L	1	1.11	111	7	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61166

FORM-3C

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99G2063		
MS Filename:	2063G.M01	Date Analyzed:	032599	Time Analyzed:	17:59
MSD Filename:	2063G.N01	Date Analyzed:	032599	Time Analyzed:	18:25
MS Sample No:	T-914-606	Sample Lab ID:	99-2663-2		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0	0.877	88	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0.802	80	10	30	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61167

FORM-4B

Applied P & Ch Laboratory

Method Blank Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Analysis Date:	03/22/99
		Sample Matrix:	Water	Analysis Time:	23:30
Sample ID:	**99G2013-MB-01**	Batch No:	99G2013	Instrument ID:	GC: W
Lab Sample ID:	99G2013-MB-01	Data File Name:	2013G.K01	GC Column:	DB-1
				Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2013-LCS-01	99G2013-LCS-01	Lab Control Spike	2013G.L01	03/22/99	23:55
2	99G2013-LSD-01	99G2013-LSD-01	Lab Control Spike Duplicate	2013G.J01	03/23/99	00:20
3	18609-2097	99-2557-4	Field Sample	2557.004	03/23/99	07:51
4	18609-2098	99-2557-5	Field Sample	2557.005	03/23/99	08:16
5	18609-2099	99-2557-6	Field Sample	2557.006	03/23/99	09:31
6	18609-2100	99-2557-7	Field Sample	2557.007	03/23/99	10:22
7	18609-2095	99-2557-2	Field Sample	2557.102	03/23/99	18:13
8	18609-2101	99-2557-8	Field Sample	2557.108	03/23/99	18:39
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61168

FORM-4B

Applied P & Ch Laboratory

Method Blank Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Analysis Date:	03/25/99
		Sample Matrix:	Water	Analysis Time:	16:43
Sample ID:	**99G2063-MB-01**	Batch No:	99G2063	Instrument ID:	GC: W
Lab Sample ID:	99G2063-MB-01	Data File Name:	2063G.K01	GC Column:	DB-1
				Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2063-LCS-01	99G2063-LCS-01	Lab Control Spike	2063G.L01	03/25/99	17:08
2	99G2063-LSD-01	99G2063-LSD-01	Lab Control Spike Duplicate	2063G.J01	03/25/99	17:34
3	T-914-606-MS	99-2663-2MS	Matrix Spike	2063G.M01	03/25/99	17:59
4	T-914-606-MSD	99-2663-2MSD	Matrix Spike Duplicate	2063G.N01	03/25/99	18:25
5	18609-2096	99-2557-3	Field Sample	2557.003	03/26/99	01:33
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Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/22/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99M1507-MB-01	Received Date:	03/22/1999
Sample ID:	**99M1507-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
ANTIMONY	7440-36-0	µg/L	10	<1.5	U	P		99M1507L	03/22/99	03/22/99	1	6010
ARSENIC	7440-38-2	µg/L	5	1.5	B	P		99M1507L	03/22/99	03/22/99	1	6010
BARIUM	7440-39-3	µg/L	10	<0.72	U	P		99M1507L	03/22/99	03/22/99	1	6010
BERYLLIUM	7440-41-7	µg/L	2	<0.11	U	P		99M1507L	03/22/99	03/22/99	1	6010
CADMIUM	7440-43-9	µg/L	2	<0.17	U	P		99M1507L	03/22/99	03/22/99	1	6010
CHROMIUM	7440-47-3	µg/L	5	<0.41	U	P		99M1507L	03/22/99	03/22/99	1	6010
COBALT	7440-48-4	µg/L	5	<0.29	U	P		99M1507L	03/22/99	03/22/99	1	6010
COPPER	7440-50-8	µg/L	10	<1.2	U	P		99M1507L	03/22/99	03/22/99	1	6010
LEAD	7439-92-1	µg/L	5	<0.95	U	P		99M1507L	03/22/99	03/22/99	1	6010
MERCURY	7439-97-6	µg/L	0.5	<0.097	U	CV		99M1513N	03/22/99	03/22/99	1	7470
MOLYBDENUM	7439-98-7	µg/L	5	<0.44	U	P		99M1507L	03/22/99	03/22/99	1	6010
NICKEL	7440-02-0	µg/L	5	<0.36	U	P		99M1507L	03/22/99	03/22/99	1	6010
SELENIUM	7782-49-2	µg/L	10	<2.9	U	P		99M1507L	03/22/99	03/22/99	1	6010
SILVER	7440-22-4	µg/L	10	<0.80	U	P		99M1507L	03/22/99	03/22/99	1	6010
THALLIUM	7440-28-0	µg/L	10	<1.6	U	P		99M1507L	03/22/99	03/22/99	1	6010
VANADIUM	7440-62-2	µg/L	10	<0.55	U	P		99M1507L	03/22/99	03/22/99	1	6010
ZINC	7440-66-6	µg/L	5	<0.96	U	P		99M1507L	03/22/99	03/22/99	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

61217

Applied P & Ch Laboratory

Metal Analysis Results

Client Name:	OHM Remediation Services (Irvine)	Project No:	18609	Collection Date:	03/26/1999
Project ID:	MCAS El Toro	Service ID:	992557	Collected by:	
		Lab Sample ID:	99M1541-MB-01	Received Date:	03/26/1999
Sample ID:	**99M1541-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank				

Element Name	CAS No	Unit	RL	Result	C	M	Q	Batch	D-Date	A-Date	DF	Method
ANTIMONY	7440-36-0	µg/L	10	<1.5	U	P		99M1541L	03/26/99	03/26/99	1	6010
ARSENIC	7440-38-2	µg/L	5	1.6	B	P		99M1541L	03/26/99	03/26/99	1	6010
BARIUM	7440-39-3	µg/L	10	<0.72	U	P		99M1541L	03/26/99	03/26/99	1	6010
BERYLLIUM	7440-41-7	µg/L	2	<0.11	U	P		99M1541L	03/26/99	03/26/99	1	6010
CADMIUM	7440-43-9	µg/L	2	0.18	B	P		99M1541L	03/26/99	03/26/99	1	6010
CHROMIUM	7440-47-3	µg/L	5	<0.41	U	P		99M1541L	03/26/99	03/26/99	1	6010
COBALT	7440-48-4	µg/L	5	<0.29	U	P		99M1541L	03/26/99	03/26/99	1	6010
COPPER	7440-50-8	µg/L	10	1.7	B	P		99M1541L	03/26/99	03/26/99	1	6010
LEAD	7439-92-1	µg/L	5	<0.95	U	P		99M1541L	03/26/99	03/26/99	1	6010
MERCURY	7439-97-6	µg/L	0.5	<0.097	U	CV		99M1545N	03/26/99	03/29/99	1	7470
MOLYBDENUM	7439-98-7	µg/L	5	0.55	B	P		99M1541L	03/26/99	03/26/99	1	6010
NICKEL	7440-02-0	µg/L	5	<0.36	U	P		99M1541L	03/26/99	03/26/99	1	6010
SELENIUM	7782-49-2	µg/L	10	<2.9	U	P		99M1541L	03/26/99	03/26/99	1	6010
SILVER	7440-22-4	µg/L	10	<0.80	U	P		99M1541L	03/26/99	03/26/99	1	6010
THALLIUM	7440-28-0	µg/L	10	<1.6	U	P		99M1541L	03/26/99	03/26/99	1	6010
VANADIUM	7440-62-2	µg/L	10	<0.55	U	P		99M1541L	03/26/99	03/26/99	1	6010
ZINC	7440-66-6	µg/L	5	<0.96	U	P		99M1541L	03/26/99	03/26/99	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

61218

U. S. EPA - CLP
3
BLANKS

Lab Name: Applied P & Ch Lab Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 99-2557

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration units: UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	-2.0	B	1.5	U	1.5	U	1.5	U			P
Arsenic	1.4	B	1.8	B	1.2	U	1.2	U			P
Barium	0.7	U	0.7	U	0.7	U	0.7	U			P
Beryllium	0.1	U	0.1	U	0.1	U	0.1	U			P
Cadmium	0.2	B	0.2	B	0.2	U	0.2	U			P
Calcium											NR
Chromium	0.4	U	0.4	U	0.4	U	0.4	U			P
Cobalt	0.3	U	0.3	U	0.3	U	0.3	U			P
Copper	2.0	B	3.8	B	2.3	B	2.8	B			P
Iron											NR
Lead	0.9	U	0.9	U	0.9	U	0.9	U			P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel	0.4	U	0.4	U	0.5	B	0.6	B			P
Potassium											NR
Selenium	2.9	U	-3.5	B	-2.9	B	-4.1	B			P
Silver	0.8	U	0.8	U	0.8	U	0.8	U			P
Sodium											NR
Thallium	1.6	U	4.9	B	1.6	U	2.1	B			P
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U			P
Zinc	1.0	U	1.0	U	1.0	U	1.0	U			P
Strontium											NR
Molybdenum	0.7	B	2.0	B	1.6	B	1.8	B			P
Tin											NR
Lithium											NR

61238

U. S. EPA - CLP
3
BLANKS

Lab Name: Applied P & Ch Lab Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 99-2557

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration units: UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony	1.5	U	1.5	U	1.5	U	1.5	U			P
Arsenic	-1.3	B	-1.6	B	1.2	U	1.2	U			P
Barium	0.7	U	0.8	B	0.7	U	0.7	U			P
Beryllium	0.1	U	0.1	U	0.1	U	0.1	U			P
Cadmium	0.2	U	0.2	B	0.2	U	0.2	U			P
Calcium											NR
Chromium	0.4	U	0.4	U	0.4	U	0.4	U			P
Cobalt	0.3	U	0.3	U	0.3	U	0.3	U			P
Copper	3.1	B	3.6	B	1.2	B	3.4	B			P
Iron											NR
Lead	0.9	U	0.9	U	0.9	U	0.9	U			P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel	0.4	B	0.4	U	0.4	U	0.4	U			P
Potassium											NR
Selenium	2.9	U	3.6	B	2.9	U	2.9	U			P
Silver	0.8	U	0.8	U	0.8	U	0.8	U			P
Sodium											NR
Thallium	1.6	U	3.0	B	1.6	U	1.6	U			P
Vanadium	0.6	U	0.6	U	0.6	U	0.6	U			P
Zinc	1.0	U	1.0	U	2.6	B	2.4	B			P
Strontium											NR
Molybdenum	1	B	1.2	B	0.5	B	0.6	B			P
Tin											NR
Lithium											NR

61239

U. S. EPA - CLP
3
BLANKS

Lab Name: Applied P & Ch Lab Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 99-2557

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration units: UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony			-2.0	B							P
Arsenic			1.2	U							P
Barium			0.7	U							P
Beryllium			0.1	U							P
Cadmium			0.2	B							P
Calcium											NR
Chromium			0.4	U							P
Cobalt			0.3	U							P
Copper			-1.4	B							P
Iron											NR
Lead			0.9	U							P
Magnesium											NR
Manganese											NR
Mercury											NR
Nickel			0.4	U							P
Potassium											NR
Selenium			2.9	U							P
Silver			0.8	U							P
Sodium											NR
Thallium			2.2	B							P
Vanadium			0.6	U							P
Zinc			-1.2	B							P
Strontium											NR
Molybdenum			0.4	U							P
Tin											NR
Lithium											NR

61240

U. S. EPA - CLP
3
BLANKS

Lab Name: Applied P & Ch Lab Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 99-2557

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration units: UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury	0.1	U	0.1	U	-0.1	B	-0.1	B			CV
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Strontium											NR
Molybdenum											NR
Tin											NR
Lithium											NR

61241

U. S. EPA - CLP
3
BLANKS

Lab Name: Applied P & Ch Lab Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: 99-2557

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration units: UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Prepa-ration Blank	C	M
Aluminum											NR
Antimony											NR
Arsenic											NR
Barium											NR
Beryllium											NR
Cadmium											NR
Calcium											NR
Chromium											NR
Cobalt											NR
Copper											NR
Iron											NR
Lead											NR
Magnesium											NR
Manganese											NR
Mercury	0.1	U	-0.1	B	-0.2	B	0.1	B			CV
Nickel											NR
Potassium											NR
Selenium											NR
Silver											NR
Sodium											NR
Thallium											NR
Vanadium											NR
Zinc											NR
Strontium											NR
Molybdenum											NR
Tin											NR
Lithium											NR

61242

U. S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Applied P & Ch Lab Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG: 99-2557

ICP ID Number: L ICS Source: Aldrich

Concentration units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	480376	471588.8	94.3	463736	432209.8	86.4
Antimony	0	1000	10	922.3	92.2	9	866.2	86.6
Arsenic	0	1000	2	965.9	96.6	8	915.9	91.6
Barium	0	500	0	492.4	98.5	0	454.4	90.9
Beryllium	0	500	0	476.2	95.2	0	466.3	93.3
Cadmium	0	1000	-1	985.1	98.5	-1	938.2	93.8
Calcium	500000	500000	485542	493032.4	98.6	501448	463369.9	92.7
Chromium	0	500	7	485.9	97.2	6	478.4	95.7
Cobalt	0	500	4	449.3	89.9	3	426.4	85.3
Copper	0	500	0	486.0	97.2	1	468.5	93.7
Iron	200000	200000	184338	178217.3	89.1	207386	191967.0	96.0
Lead	0	1000	0	921.8	92.2	0	834.5	83.5
Magnesium	500000	500000	469406	461139.7	92.2	456504	427058.6	85.4
Manganese	0	500	0	483.5	96.7	1	486.3	97.3
Mercury	0							
Nickel	0	1000	1	901.2	90.1	1	857.0	85.7
Potassium	0							
Selenium	0	1000	-1	966.0	96.6	2	876.4	87.6
Silver	0	1000	0	958.5	95.8	-1	1036.5	103.6
Sodium	0							
Thallium	0	1000	-20	978.8	97.9	-12	836.4	83.6
Vanadium	0	500	-5	468.3	93.7	-6	452.8	90.6
Zinc	0	1000	8	977.5	97.7	8	924.2	92.4
Strontium	0							
Molybdenum	0	1000	-9	935.8	93.6	-6	817.7	81.8
Tin	0							
Lithium	0							

61243

U. S. EPA - CLP
4
ICP INTERFERENCE CHECK SAMPLE

Lab Name: Applied P & Ch Lab Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG: 99-2557

ICP ID Number: L ICS Source: Aldrich

Concentration units: ug/L

Analyte	True Sol. A	True Sol. AB	Initial Found Sol. A	Initial Found Sol. AB	Initial Found %R	Final Found Sol. A	Final Found Sol. AB	Final Found %R
Aluminum	500000	500000	477811	492638.3	98.5	484190	473291.5	94.7
Antimony	0	1000	8	949.9	95.0	17	972.0	97.2
Arsenic	0	1000	-4	987.5	98.8	4	1004.8	100.5
Barium	0	500	4	518.7	103.7	6	520.3	104.1
Beryllium	0	500	0	508.8	101.8	0	487.9	97.6
Cadmium	0	1000	-1	993.5	99.3	-2	984.5	98.5
Calcium	500000	500000	485816	493399.8	98.7	497388	494514.7	98.9
Chromium	0	500	10	485.7	97.1	12	480.5	96.1
Cobalt	0	500	4	449.1	89.8	3	447.2	89.4
Copper	0	500	-7	509.4	101.9	23	497.6	99.5
Iron	200000	200000	185515	188078.5	94.0	184749	177564.7	88.8
Lead	0	1000	2	941.6	94.2	-1	951.2	95.1
Magnesium	500000	500000	467077	482512.6	96.5	474436	464329.2	92.9
Manganese	0	500	0	518.5	103.7	-1	493.0	98.6
Mercury	0							
Nickel	0	1000	3	905.3	90.5	3	894.4	89.4
Potassium	0							
Selenium	0	1000	0	1007.1	100.7	-9	1019.9	102.0
Silver	0	1000	4	1023.3	102.3	2	962.2	96.2
Sodium	0							
Thallium	0	1000	-14	973.1	97.3	-25	983.9	98.4
Vanadium	0	500	0	475.0	95.0	-1	466.6	93.3
Zinc	0	1000	7	1010.1	101.0	58	993.0	99.3
Strontium	0							
Molybdenum	0	1000	-4	944.3	94.4	-9	939.7	94.0
Tin	0							
Lithium	0							

61244

FORM-5A Metal

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1507L		
MS Filename:	-	Date Analyzed:	032299	Time Analyzed:	11:59
MSD Filename:	-	Date Analyzed:	032299	Time Analyzed:	12:02
MS Sample No:	18609-2097	Sample Lab ID:	99-2557-4		

Spiked Components	Unit	Spike Added	Concentration Unspiked	MS	MS Rec% #	QC Limit, % REC
ANTIMONY	µg/L	500	6.3	558	110	75-125
ARSENIC	µg/L	500	3.7	553	110	75-125
BARIUM	µg/L	4000	352	4560	105	75-125
BERYLLIUM	µg/L	200	0	218	109	75-125
CADMIUM	µg/L	250	0	274	110	75-125
CHROMIUM	µg/L	3000	1.3	3170	106	75-125
COBALT	µg/L	1000	0.38	1090	109	75-125
COPPER	µg/L	1000	5.3	1050	104	75-125
LEAD	µg/L	3000	4.4	3120	104	75-125
MOLYBDENUM	µg/L	2000	4.5	2110	105	75-125
NICKEL	µg/L	1000	4.9	1080	108	75-125
SELENIUM	µg/L	500	0	526	105	75-125
SILVER	µg/L	1000	0	1020	102	75-125
THALLIUM	µg/L	4000	4.7	4090	102	75-125
VANADIUM	µg/L	2000	0.91	2110	105	75-125
ZINC	µg/L	500	57.2	589	106	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
ANTIMONY	µg/L	500	568	112	2	20	75-125
ARSENIC	µg/L	500	562	112	2	20	75-125
BARIUM	µg/L	4000	4730	109	4	20	75-125
BERYLLIUM	µg/L	200	226	113	4	20	75-125
CADMIUM	µg/L	250	278	111	1	20	75-125
CHROMIUM	µg/L	3000	3290	110	4	20	75-125
COBALT	µg/L	1000	1130	113	4	20	75-125
COPPER	µg/L	1000	1090	108	4	20	75-125
LEAD	µg/L	3000	3230	108	4	20	75-125
MOLYBDENUM	µg/L	2000	2200	110	5	20	75-125
NICKEL	µg/L	1000	1120	112	4	20	75-125
SELENIUM	µg/L	500	533	107	2	20	75-125
SILVER	µg/L	1000	1060	106	4	20	75-125
THALLIUM	µg/L	4000	4150	104	2	20	75-125

61245

FORM-5A Metal

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1507L		
MS Filename:	-	Date Analyzed:	032299	Time Analyzed:	11:59
MSD Filename:	-	Date Analyzed:	032299	Time Analyzed:	12:02
MS Sample No:	18609-2097	Sample Lab ID:	99-2557-4		

Continued *Batch No.: 99M1507L Method: 6010 Page: 2*

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
VANADIUM	μg/L	2000	2200	110	5	20	75-125
ZINC	μg/L	500	613	111	5	20	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61246

FORM-5A Metal

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1541L		
MS Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:45
MSD Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:48
MS Sample No:	**M1401-13**	Sample Lab ID:	99-2670-10		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
ANTIMONY	µg/L	500	0	519	104	75-125
ARSENIC	µg/L	500	0	530	106	75-125
BARIUM	µg/L	4000	107	4240	103	75-125
BERYLLIUM	µg/L	200	0	211	106	75-125
CADMIUM	µg/L	250	0	256	102	75-125
CHROMIUM	µg/L	3000	0	2990	100	75-125
COBALT	µg/L	1000	0	1020	102	75-125
COPPER	µg/L	1000	0	967	97	75-125
LEAD	µg/L	3000	0	2940	98	75-125
MOLYBDENUM	µg/L	2000	0	1980	99	75-125
NICKEL	µg/L	1000	0	1030	103	75-125
SELENIUM	µg/L	500	0	523	105	75-125
SILVER	µg/L	1000	0	990	99	75-125
THALLIUM	µg/L	4000	0	3700	93	75-125
VANADIUM	µg/L	2000	0	2010	101	75-125
ZINC	µg/L	500	0	515	103	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
ANTIMONY	µg/L	500	510	102	2	20	75-125
ARSENIC	µg/L	500	521	104	2	20	75-125
BARIUM	µg/L	4000	4140	101	2	20	75-125
BERYLLIUM	µg/L	200	206	103	3	20	75-125
CADMIUM	µg/L	250	252	101	1	20	75-125
CHROMIUM	µg/L	3000	2920	97	3	20	75-125
COBALT	µg/L	1000	1000	100	2	20	75-125
COPPER	µg/L	1000	947	95	2	20	75-125
LEAD	µg/L	3000	2890	96	2	20	75-125
MOLYBDENUM	µg/L	2000	1950	98	1	20	75-125
NICKEL	µg/L	1000	1000	100	3	20	75-125
SELENIUM	µg/L	500	516	103	2	20	75-125
SILVER	µg/L	1000	936	94	5	20	75-125
THALLIUM	µg/L	4000	3640	91	2	20	75-125

6147

FORM-5A Metal

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1541L		
MS Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:45
MSD Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:48
MS Sample No:	M1401-13	Sample Lab ID:	99-2670-10		

Continued *Batch No.: 99M1541L Method: 6010 Page: 2*

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
VANADIUM	µg/L	2000	1970	99	2	20	75-125
ZINC	µg/L	500	502	100	3	20	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

61248

FORM-5A Metal

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 7470

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1513N		
MS Filename:	-	Date Analyzed:	032299	Time Analyzed:	13:46
MSD Filename:	-	Date Analyzed:	032299	Time Analyzed:	13:48
MS Sample No:	18609-2099	Sample Lab ID:	99-2557-6		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
MERCURY	µg/L	5.0	0.24	5.20	99	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
MERCURY	µg/L	5.0	4.90	93	6	18	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

61249

FORM-5A Metal

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 7470

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1545N		
MS Filename:	-	Date Analyzed:	032999	Time Analyzed:	11:08
MSD Filename:	-	Date Analyzed:	032999	Time Analyzed:	11:11
MS Sample No:	**MW-1**	Sample Lab ID:	99-2684-1		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
MERCURY	μg/L	5.0	0	4.65	93	75-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
MERCURY	μg/L	5.0	4.83	97	4	18	75-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

61250

U. S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
18609-2097

Lab Name: Applied P & Ch Lab Contract:

Lab Code: Case No.: SAS No.: SDG No.: 99-2557

Matrix (soil/water): WATER Level (low/med): LOW

Concentration units: ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									NR
Antimony		553.93		6.28	B	500.0	109.5		P
Arsenic		551.26		3.70	B	500.0	109.5		P
Barium		4567.62		351.61		4000.0	105.4		P
Beryllium		217.68		0.03	U	200.0	108.8		P
Cadmium		272.78		-0.02	U	250.0	109.1		P
Calcium									NR
Chromium		3159.93		1.26	B	3000.0	105.3		P
Cobalt		1083.92		0.38	B	1000.0	108.4		P
Copper		1053.22		5.28	B	1000.0	104.8		P
Iron									NR
Lead		3132.76		4.36	B	3000.0	104.3		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel		1086.06		4.93	B	1000.0	108.1		P
Potassium									NR
Selenium		527.12		-2.17	U	500.0	105.4		P
Silver		1010.41		0.34	U	1000.0	101.0		P
Sodium									NR
Thallium		4092.81		4.71	B	4000.0	102.2		P
Vanadium		2111.15		0.91	B	2000.0	105.5		P
Zinc		591.91		57.15		500.0	107.0		P
Strontium									NR
Molybdenu		2121.96		4.53	B	2000.0	105.9		P
Tin									NR
Lithium									NR

Comments:

61251

U. S. EPA - CLP
5B
POST DIGEST SPIKE SAMPLE RECOVERY

EPA SAMPLE NO.
2670-10

Lab Name: Applied P & Ch Lab Contract:

Lab Code: Case No.: SAS No.: SDG No.: 99-2557

Matrix (soil/water): WATER Level (low/med): LOW

Concentration units: ug/L

Analyte	Control Limit % R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Aluminum									P
Antimony		507.38		-2.51	U	500.0	101.5		P
Arsenic		516.42		0.25	U	500.0	103.3		P
Barium		4113.73		107.29		4000.0	100.2		P
Beryllium		204.80		-0.02	U	200.0	102.4		P
Cadmium		250.19		-0.19	U	250.0	100.1		P
Calcium									NR
Chromium		2903.87		-0.22	U	3000.0	96.8		P
Cobalt		992.98		0.15	U	1000.0	99.3		P
Copper		945.27		6.22	B	1000.0	93.9		P
Iron									NR
Lead		2868.30		1.05	B	3000.0	95.6		P
Magnesium									NR
Manganese									NR
Mercury									NR
Nickel		996.09		0.48	B	1000.0	99.6		P
Potassium									NR
Selenium		518.35		8.38	B	500.0	102.0		P
Silver		923.62		0.69	U	1000.0	92.4		P
Sodium									NR
Thallium		3614.71		-5.10	U	4000.0	90.4		P
Vanadium		1960.75		2.15	B	2000.0	97.9		P
Zinc		499.62		-0.74	U	500.0	99.9		P
Strontium									NR
Molybdenu		1935.57		3.68	B	2000.0	96.6		P
Tin									NR
Lithium									NR

Comments:

61252

U. S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

18609-2097

Lab Name: Applied P & Ch Lab Contract:

Lab Code: Case No.: SAS No.: SDG No.: 99-2557

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate	C	RPD	Q	M
Aluminum								NR
Antimony		6.2765	B	4.3739	B	35.7		P
Arsenic		3.6986	B	2.0780	B	56.1		P
Barium		351.6135		349.1511		0.7		P
Beryllium		0.0306	U	-0.0103	U			P
Cadmium		-0.0202	U	0.2567	B	200.0		P
Calcium								NR
Chromium		1.2645	B	1.2634	B	0.1		P
Cobalt		0.3813	B	0.5014	B	27.2		P
Copper		5.2827	B	2.2743	B	79.6		P
Iron								NR
Lead		4.3612	B	1.0812	B	120.5		P
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel		4.9258	B	4.8691	B	1.2		P
Potassium								NR
Selenium		-2.1724	U	0.2770	U			P
Silver		0.3433	U	0.2906	U			P
Sodium								NR
Thallium		4.7073	B	2.8663	B	48.6		P
Vanadium		0.9092	B	0.6123	B	39.0		P
Zinc		57.1496		54.9228		4.0		P
Strontium								NR
Molybdenum		4.5324	B	3.8353	B	16.7		P
Tin								NR
Lithium								NR

61253

U. S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.
2670-10

Lab Name: Applied P & Ch Lab Contract:

Lab Code: Case No.: SAS No.: SDG No.: 99-2557

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate	C	RPD	Q	M
Aluminum								NR
Antimony		-2.5121	U	-5.3975	U			P
Arsenic		0.2539	U	0.3338	U			P
Barium		107.2894		105.7096		1.5		P
Beryllium		-0.0194	U	-0.0600	U			P
Cadmium		-0.1901	U	-0.2998	U			P
Calcium								NR
Chromium		-0.2227	U	-0.3782	U			P
Cobalt		0.1460	U	-0.0255	U			P
Copper		6.2189	B	4.6463	B	28.9		P
Iron								NR
Lead		1.0473	B	0.2230	U	200.0		P
Magnesium								NR
Manganese								NR
Mercury								NR
Nickel		0.4751	B	0.0881	U	200.0		P
Potassium								NR
Selenium		8.3845	B	8.7256	B	4.0		P
Silver		0.6911	U	1.0492	B	200.0		P
Sodium								NR
Thallium		-5.1027	U	-5.3305	U			P
Vanadium		2.1481	B	2.0307	B	5.6		P
Zinc		-0.7437	U	-0.8045	U			P
Strontium								NR
Molybdenum		3.6789	B	3.3402	B	9.6		P
Tin								NR
Lithium								NR

61254

U. S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

18609-2099

Lab Name: Applied P & Ch Lab Contract:

Lab Code: Case No.: SAS No.: SDG No.: 99-2557

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury		0.2364	B	0.1148	B	69.2		CV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Strontium								NR
Molybdenum								NR
Tin								NR
Lithium								NR

61255

U. S. EPA - CLP
6
DUPLICATES

EPA SAMPLE NO.

2684-01

Lab Name: Applied P & Ch Lab Contract:

Lab Code: Case No.: SAS No.: SDG No.: 99-2557

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate	C	RPD	Q	M
Aluminum								NR
Antimony								NR
Arsenic								NR
Barium								NR
Beryllium								NR
Cadmium								NR
Calcium								NR
Chromium								NR
Cobalt								NR
Copper								NR
Iron								NR
Lead								NR
Magnesium								NR
Manganese								NR
Mercury		0.4532	B	0.3483	B	26.2		CV
Nickel								NR
Potassium								NR
Selenium								NR
Silver								NR
Sodium								NR
Thallium								NR
Vanadium								NR
Zinc								NR
Strontium								NR
Molybdenum								NR
Tin								NR
Lithium								NR

61256

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1507L		
LCS Filename:	-	Date Analyzed:	032299	Time Analyzed:	11:40
LCSD Filename:	-	Date Analyzed:	032299	Time Analyzed:	11:44

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
ANTIMONY	µg/L	500	0	512	102	80-120
ARSENIC	µg/L	500	0	504	101	80-120
BARIUM	µg/L	4000	0	4030	101	80-120
BERYLLIUM	µg/L	200	0	204	102	80-120
CADMIUM	µg/L	250	0	261	104	80-120
CHROMIUM	µg/L	3000	0	3050	102	80-120
COBALT	µg/L	1000	0	1020	102	80-120
COPPER	µg/L	1000	0	981	98	80-120
LEAD	µg/L	3000	0	2990	100	80-120
MOLYBDENUM	µg/L	2000	0	2000	100	80-120
NICKEL	µg/L	1000	0	1030	103	80-120
SELENIUM	µg/L	500	0	502	100	80-120
SILVER	µg/L	1000	0	970	97	80-120
THALLIUM	µg/L	4000	0	3930	98	80-120
VANADIUM	µg/L	2000	0	2000	100	80-120
ZINC	µg/L	500	0	513	103	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
ANTIMONY	µg/L	500	511	102	0	20	80-120
ARSENIC	µg/L	500	507	101	0	20	80-120
BARIUM	µg/L	4000	4090	102	1	20	80-120
BERYLLIUM	µg/L	200	207	104	2	20	80-120
CADMIUM	µg/L	250	261	104	0	20	80-120
CHROMIUM	µg/L	3000	3100	103	1	20	80-120
COBALT	µg/L	1000	1030	103	1	20	80-120
COPPER	µg/L	1000	999	100	2	20	80-120
LEAD	µg/L	3000	2990	100	0	20	80-120
MOLYBDENUM	µg/L	2000	2040	102	2	20	80-120
NICKEL	µg/L	1000	1040	104	1	20	80-120
SELENIUM	µg/L	500	498	100	0	20	80-120
SILVER	µg/L	1000	984	98	1	20	80-120
THALLIUM	µg/L	4000	3930	98	0	20	80-120

61357

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1507L		
LCS Filename:	-	Date Analyzed:	032299	Time Analyzed:	11:40
LCSD Filename:	-	Date Analyzed:	032299	Time Analyzed:	11:44

Continued *Batch No.: 99M1507L Method: 6010 Page: 2*

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
VANADIUM	μg/L	2000	2030	102	2	20	80-120
ZINC	μg/L	500	521	104	1	20	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61258

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1541L		
LCS Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:26
LCSD Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:30

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
ANTIMONY	µg/L	500	0	510	102	80-120
ARSENIC	µg/L	500	0	513	103	80-120
BARIUM	µg/L	4000	0	4140	104	80-120
BERYLLIUM	µg/L	200	0	210	105	80-120
CADMIUM	µg/L	250	0	261	104	80-120
CHROMIUM	µg/L	3000	0	3050	102	80-120
COBALT	µg/L	1000	0	1020	102	80-120
COPPER	µg/L	1000	0	988	99	80-120
LEAD	µg/L	3000	0	3030	101	80-120
MOLYBDENUM	µg/L	2000	0	2000	100	80-120
NICKEL	µg/L	1000	0	1030	103	80-120
SELENIUM	µg/L	500	0	518	104	80-120
SILVER	µg/L	1000	0	990	99	80-120
THALLIUM	µg/L	4000	0	3920	98	80-120
VANADIUM	µg/L	2000	0	2010	101	80-120
ZINC	µg/L	500	0	516	103	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
ANTIMONY	µg/L	500	510	102	0	20	80-120
ARSENIC	µg/L	500	511	102	1	20	80-120
BARIUM	µg/L	4000	4210	105	1	20	80-120
BERYLLIUM	µg/L	200	214	107	2	20	80-120
CADMIUM	µg/L	250	260	104	0	20	80-120
CHROMIUM	µg/L	3000	3100	103	1	20	80-120
COBALT	µg/L	1000	1030	103	1	20	80-120
COPPER	µg/L	1000	1000	100	1	20	80-120
LEAD	µg/L	3000	3020	101	0	20	80-120
MOLYBDENUM	µg/L	2000	2000	100	0	20	80-120
NICKEL	µg/L	1000	1040	104	1	20	80-120
SELENIUM	µg/L	500	515	103	1	20	80-120
SILVER	µg/L	1000	1000	100	1	20	80-120
THALLIUM	µg/L	4000	3920	98	0	20	80-120

01250

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 6010

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1541L		
LCS Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:26
LCSD Filename:	-	Date Analyzed:	032699	Time Analyzed:	14:30

Continued *Batch No.: 99M1541L Method: 6010 Page: 2*

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
VANADIUM	µg/L	2000	2040	102	1	20	80-120
ZINC	µg/L	500	524	105	2	20	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

61260

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 7470

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1513N		
LCS Filename:	-	Date Analyzed:	032299	Time Analyzed:	13:36
LCSD Filename:	-	Date Analyzed:	032299	Time Analyzed:	13:38

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
MERCURY	µg/L	5.0	0	5.00	100	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
MERCURY	µg/L	5.0	5.00	100	0	18	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

61261

FORM-7 Metal

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 7470

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992557
Project ID:	MCAS El Toro	Project No:	18609	Sample Matrix:	Water
		Batch No:	99M1545N		
LCS Filename:	-	Date Analyzed:	032999	Time Analyzed:	10:56
LCSD Filename:	-	Date Analyzed:	032999	Time Analyzed:	10:58

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
MERCURY	µg/L	5.0	0	5.22	104	80-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
MERCURY	µg/L	5.0	5.30	106	2	18	80-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

61262

Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/04/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2183-MB-01	Received Date:	04/04/1999
Sample ID:	**99G2183-MB-01**	Sample Matrix	Soil	Moisture %:	
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/04/99	Anal. Date:	04/04/99
Batch No:	99G2183	Prep. No:	–	Anal. Time:	16:20
Data File Name:	G2183K01	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	–				
Test Level:	Low	Sparge Size:	5 ml	Heated Purge: (Y/N) Y	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	100	<100	U
2	BENZENE	71-43-2	µg/kg	5	<5	U
3	BROMOBENZENE	108-86-1	µg/kg	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	5	<5	U
6	BROMOFORM	75-25-2	µg/kg	5	<5	U
7	BROMOMETHANE	74-83-9	µg/kg	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/kg	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/kg	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	5	<5	U
16	CHLOROETHANE	75-00-3	µg/kg	5	<5	U
17	CHLOROFORM	67-66-3	µg/kg	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/kg	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/kg	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/kg	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/kg	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/kg	5	< 5	U
48	STYRENE	100-42-5	µg/kg	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	5	< 5	U
52	TOLUENE	108-88-3	µg/kg	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/kg	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/kg	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	5	< 5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	107
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	107
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	116
4	TOLUENE-D8	2037-26-5	80-119	90
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	85
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	85
3	FLUOROBENZENE	462-06-6	50-200	77
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/07/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2217-MB-01	Received Date:	04/07/1999
Sample ID:	**99G2217-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/07/99	Anal. Date:	04/07/99
Batch No:	99G2217	Prep. No:	-	Anal. Time:	16:05
Data File Name:	G2217K01	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N) Y	

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	5	< 5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	102
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	108
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	110
4	TOLUENE-D8	2037-26-5	81-118	86
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	83
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	84
3	FLUOROBENZENE	462-06-6	50-200	68
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/08/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2217-MB-02	Received Date:	04/08/1999
Sample ID:	**99G2217-MB-02**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/08/99	Anal. Date:	04/08/99
Batch No:	99G2217	Prep. No:	-	Anal. Time:	05:01
Data File Name:	G2217K02	Sample Amount:	5 mL	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 ml	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/L	100	<100	U
2	BENZENE	71-43-2	µg/L	5	<5	U
3	BROMOBENZENE	108-86-1	µg/L	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/L	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/L	5	<5	U
6	BROMOFORM	75-25-2	µg/L	5	<5	U
7	BROMOMETHANE	74-83-9	µg/L	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/L	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/L	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/L	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/L	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/L	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/L	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/L	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/L	5	<5	U
16	CHLOROETHANE	75-00-3	µg/L	5	<5	U
17	CHLOROFORM	67-66-3	µg/L	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/L	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/L	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/L	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/L	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/L	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/L	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/L	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/L	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/L	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/L	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/L	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/L	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/L	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/L	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/L	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/L	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/L	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/L	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/L	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/L	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/L	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/L	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/L	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/L	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/L	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/L	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/L	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/L	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/L	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/L	5	< 5	U
48	STYRENE	100-42-5	µg/L	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/L	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/L	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/L	5	< 5	U
52	TOLUENE	108-88-3	µg/L	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/L	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/L	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/L	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/L	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/L	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/L	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/L	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/L	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/L	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/L	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/L	5	< 5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	80-119	104
2	DIBROMOFLUOROMETHANE	1868-53-7	79-120	112
3	1,2-DICHLOROETHANE-D4	17060-07-0	81-119	118
4	TOLUENE-D8	2037-26-5	81-118	87
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	79
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	80
3	FLUOROBENZENE	462-06-6	50-200	70
# 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

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Applied P & Ch Laboratory

Organic Analysis Results for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/09/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2235-MB-01	Received Date:	04/09/1999
Sample ID:	**99G2235-MB-01**	Sample Matrix	Soil	Moisture %:	
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC/MS: X
Anal. Method:	8260	Prep. Date:	04/09/99	Anal. Date:	04/09/99
Batch No:	99G2235	Prep. No:	-	Anal. Time:	08:24
Data File Name:	G2235K01	Sample Amount:	5 g	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	ACETONE	67-64-1	µg/kg	100	<100	U
2	BENZENE	71-43-2	µg/kg	5	<5	U
3	BROMOBENZENE	108-86-1	µg/kg	5	<5	U
4	BROMOCHLOROMETHANE	74-97-5	µg/kg	5	<5	U
5	BROMODICHLOROMETHANE	75-27-4	µg/kg	5	<5	U
6	BROMOFORM	75-25-2	µg/kg	5	<5	U
7	BROMOMETHANE	74-83-9	µg/kg	5	<5	U
8	2-BUTANONE (MEK)	78-93-3	µg/kg	100	<100	U
9	N-BUTYLBENZENE	104-51-8	µg/kg	5	<5	U
10	SEC-BUTYLBENZENE	135-98-8	µg/kg	5	<5	U
11	TERT-BUTYLBENZENE	98-06-6	µg/kg	5	<5	U
12	CARBON DISULFIDE	75-15-0	µg/kg	5	<5	U
13	CARBON TETRACHLORIDE	56-23-5	µg/kg	5	<5	U
14	CHLOROBENZENE	108-90-7	µg/kg	5	<5	U
15	DIBROMOCHLOROMETHANE	124-48-1	µg/kg	5	<5	U
16	CHLOROETHANE	75-00-3	µg/kg	5	<5	U
17	CHLOROFORM	67-66-3	µg/kg	5	<5	U
18	CHLOROMETHANE	74-87-3	µg/kg	5	<5	U
19	2-CHLOROTOLUENE	95-49-8	µg/kg	5	<5	U
20	4-CHLOROTOLUENE	106-43-4	µg/kg	5	<5	U
21	1,2-DIBROMO-3-CHLOROPROPANE	96-12-8	µg/kg	5	<5	U
22	1,2-DIBROMOETHANE (EDB)	106-93-4	µg/kg	5	<5	U
23	DIBROMOMETHANE	74-95-3	µg/kg	5	<5	U
24	1,2-DICHLOROBENZENE	95-50-1	µg/kg	5	<5	U
25	1,3-DICHLOROBENZENE	541-73-1	µg/kg	5	<5	U
26	1,4-DICHLOROBENZENE	106-46-7	µg/kg	5	<5	U
27	DICHLORODIFLUOROMETHANE	75-71-8	µg/kg	5	<5	U
28	1,1-DICHLOROETHANE	75-34-3	µg/kg	5	<5	U
29	1,2-DICHLOROETHANE	107-06-2	µg/kg	5	<5	U
30	1,1-DICHLOROETHENE	75-35-4	µg/kg	5	<5	U
31	CIS-1,2-DICHLOROETHENE	156-59-2	µg/kg	5	<5	U
32	TRANS-1,2-DICHLOROETHENE	156-60-5	µg/kg	5	<5	U
33	1,2-DICHLOROPROPANE	78-87-5	µg/kg	5	<5	U
34	1,3-DICHLOROPROPANE	142-28-9	µg/kg	5	<5	U
35	2,2-DICHLOROPROPANE	594-20-7	µg/kg	5	<5	U
36	1,1-DICHLOROPROPENE	563-58-6	µg/kg	5	<5	U
37	CIS-1,3-DICHLOROPROPENE	10061-01-5	µg/kg	5	<5	U
38	TRANS-1,3-DICHLOROPROPENE	10061-02-6	µg/kg	5	<5	U
39	ETHYLBENZENE	100-41-4	µg/kg	5	<5	U

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#	Component Name	CAS No	Unit	RL	Result	Qualifier
40	HEXACHLOROBUTADIENE	87-68-3	µg/kg	5	< 5	U
41	ISOPROPYLBENZENE (CUMENE)	98-82-8	µg/kg	5	< 5	U
42	P-ISOPROPYLTOLUENE	99-87-6	µg/kg	5	< 5	U
43	METHYLENE CHLORIDE	75-09-2	µg/kg	5	< 5	U
44	4-METHYL-2-PENTANONE (MIBK)	108-10-1	µg/kg	50	< 50	U
45	METHYL TERT-BUTYL ETHER	1634-04-4	µg/kg	10	< 10	U
46	NAPHTHALENE	91-20-3	µg/kg	5	< 5	U
47	N-PROPYLBENZENE	103-65-1	µg/kg	5	< 5	U
48	STYRENE	100-42-5	µg/kg	5	< 5	U
49	1,1,1,2-TETRACHLOROETHANE	630-20-6	µg/kg	5	< 5	U
50	1,1,2,2-TETRACHLOROETHANE	79-34-5	µg/kg	5	< 5	U
51	TETRACHLOROETHENE	127-18-4	µg/kg	5	< 5	U
52	TOLUENE	108-88-3	µg/kg	5	< 5	U
53	1,2,3-TRICHLOROBENZENE	87-61-6	µg/kg	5	< 5	U
54	1,2,4-TRICHLOROBENZENE	120-82-1	µg/kg	5	< 5	U
55	1,1,1-TRICHLOROETHANE	71-55-6	µg/kg	5	< 5	U
56	1,1,2-TRICHLOROETHANE	79-00-5	µg/kg	5	< 5	U
57	TRICHLOROETHENE	79-01-6	µg/kg	5	< 5	U
58	TRICHLOROFLUOROMETHANE	75-69-4	µg/kg	5	< 5	U
59	1,2,3-TRICHLOROPROPANE	96-18-4	µg/kg	5	< 5	U
60	1,2,4-TRIMETHYLBENZENE	95-63-6	µg/kg	5	< 5	U
61	1,3,5-TRIMETHYLBENZENE	108-67-8	µg/kg	5	< 5	U
62	VINYL CHLORIDE	75-01-4	µg/kg	5	< 5	U
63	XYLENES (TOTAL)	1330-20-7	µg/kg	5	< 5	U

Surrogates			Control Limit, %	Surro. Rec.%
1	4-BROMO-FLUOROBENZENE (BFB)	460-00-4	77-119	92
2	DIBROMOFLUOROMETHANE	1868-53-7	75-124	96
3	1,2-DICHLOROETHANE-D4	17060-07-0	75-129	86
4	TOLUENE-D8	2037-26-5	80-119	91
# of out-of-control				0

Internal Standard			Control Limit, %	IS Rec.%
1	CHLOROBENZENE-D5	3114-55-4	50-200	79
2	1,4-DICHLOROBENZENE-D4	3855-82-1	50-200	80
3	FLUOROBENZENE	462-06-6	50-200	69
# 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

66717

FORM-2B

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2183		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	99G2183-MB-01	99G2183-MB-01	107	107	116	90	0
2	99G2183-LCS-01	99G2183-LCS-01	111	104	114	95	0
3	18609-2161-MS	99-2792-3MS	106	97	104	90	0
4	18609-2161-MSD	99-2792-3MSD	114	102	104	98	0
5	18609-2166	99-2792-8	101	98	90	93	0
6	18609-2162	99-2792-4	98	99	89	97	0
7	18609-2163	99-2792-5	99	97	88	95	0
8	18609-2165	99-2792-7	100	101	96	96	0
9	18609-2161	99-2792-3	103	101	97	93	0
10	18609-2167	99-2792-9	96	105	105	91	0
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25							

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (BFB)	77-119
S2 = DIBROMOFLUOROMETHANE	75-124
S3 = 1,2-DICHLOROETHANE-D4	75-129
S4 = TOLUENE-D8	80-119

Column to be used to flag recovery values:

* Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

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FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2217		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	99G2217-MB-01	99G2217-MB-01	102	108	110	86	0
2	99G2217-LCS-01	99G2217-LCS-01	102	103	106	97	0
3	920854-0003-MS	99-2740-3MS	104	104	106	99	0
4	920854-0003-MSD	99-2740-3MSD	110	104	103	100	0
5	18609-2149	99-2792-1	109	106	117	92	0
6	18609-2158	99-2792-2	106	108	115	91	0
7							
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9							
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21							
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23							
24							
25							

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (BFB)	80-119
S2 = DIBROMOFLUOROMETHANE	79-120
S3 = 1,2-DICHLOROETHANE-D4	81-119
S4 = TOLUENE-D8	81-118

Column to be used to flag recovery values:

* Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

66739

FORM-2B

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2235		

#	Client Sample No	Lab Sample ID	S1 % #	S2 % #	S3 % #	S4 % #	TOT OUT
1	99G2235-MB-01	99G2235-MB-01	92	96	86	91	0
2	99G2235-LCS-01	99G2235-LCS-01	93	92	86	94	0
3	18609-2169	99-2792-11	88	102	99	88	0
4							
5							
6							
7							
8							
9							
10							
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16							
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20							
21							
22							
23							
24							
25							

	QC Control Limit
S1 = 4-BROMO-FLUOROBENZENE (BFB)	77-119
S2 = DIBROMOFLUOROMETHANE	75-124
S3 = 1,2-DICHLOROETHANE-D4	75-129
S4 = TOLUENE-D8	80-119

Column to be used to flag recovery values:

* Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

36740

FORM-3B

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2183		
LCS Filename:	G2183L01	Date Analyzed:	040499	Time Analyzed:	16:51
LCSD Filename:	–	Date Analyzed:	–	Time Analyzed:	–

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
BENZENE	µg/kg	50	0	45.6	91	76-118
CHLOROBENZENE	µg/kg	50	0	43.9	88	76-116
1,1-DICHLOROETHENE	µg/kg	50	0	49.6	99	71-125
TOLUENE	µg/kg	50	0	43.8	88	77-114
TRICHLOROETHENE	µg/kg	50	0	45.3	91	69-121
# of Out-of-control					0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

36741

FORM-3B

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2183		
MS Filename:	G2183M01	Date Analyzed:	040499	Time Analyzed:	17:22
MSD Filename:	G2183N01	Date Analyzed:	040499	Time Analyzed:	17:53
MS Sample No:	18609-2161	Sample Lab ID:	99-2792-3	Moisture, %	12.9

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
BENZENE	µg/kg	57.4	0	49.0	85	75-119
CHLOROBENZENE	µg/kg	57.4	0	49.0	85	76-117
1,1-DICHLOROETHENE	µg/kg	57.4	0	50.7	88	69-127
TOLUENE	µg/kg	57.4	0	48.3	84	75-117
TRICHLOROETHENE	µg/kg	57.4	0	48.5	84	66-125
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
BENZENE	µg/kg	57.4	52.7	92	8	22	75-119
CHLOROBENZENE	µg/kg	57.4	53.4	93	9	21	76-117
1,1-DICHLOROETHENE	µg/kg	57.4	52.1	91	3	29	69-127
TOLUENE	µg/kg	57.4	53.1	93	10	21	75-117
TRICHLOROETHENE	µg/kg	57.4	52.9	92	9	29	66-125
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

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66747

FORM-3A

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2217		
LCS Filename:	G2217L01	Date Analyzed:	040799	Time Analyzed:	16:36
LCSD Filename:	-	Date Analyzed:	-	Time Analyzed:	-

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
BENZENE	µg/L	50	0	46.4	93	76-121
CHLOROBENZENE	µg/L	50	0	46.1	92	77-122
1,1-DICHLOROETHENE	µg/L	50	0	50.4	101	71-126
TOLUENE	µg/L	50	0	45.6	91	77-120
TRICHLOROETHENE	µg/L	50	0	49.3	99	73-124
# of Out-of-control					0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

66758

FORM-3A

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2217		
MS Filename:	G2217M01	Date Analyzed:	040799	Time Analyzed:	17:10
MSD Filename:	G2217N01	Date Analyzed:	040799	Time Analyzed:	17:41
MS Sample No:	920854-0003	Sample Lab ID:	99-2740-3		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
BENZENE	µg/L	50	0	46.7	93	72-126
CHLOROBENZENE	µg/L	50	0	47.2	94	69-131
1,1-DICHLOROETHENE	µg/L	50	0	49.7	99	66-133
TOLUENE	µg/L	50	0	45.1	90	70-129
TRICHLOROETHENE	µg/L	50	0	50.5	101	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
BENZENE	µg/L	50	47.2	94	1	27	72-126
CHLOROBENZENE	µg/L	50	47.9	96	2	31	69-131
1,1-DICHLOROETHENE	µg/L	50	48.8	98	1	34	66-133
TOLUENE	µg/L	50	46.0	92	2	30	70-129
TRICHLOROETHENE	µg/L	50	50.5	101	0	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

06759

FORM-3B

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2235		
LCS Filename:	G2235L01	Date Analyzed:	040999	Time Analyzed:	08:55
LCSD Filename:	-	Date Analyzed:	-	Time Analyzed:	-

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
BENZENE	µg/kg	50	0	47.3	95	76-118
CHLOROBENZENE	µg/kg	50	0	53.9	108	76-116
1,1-DICHLOROETHENE	µg/kg	50	0	48.3	97	71-125
TOLUENE	µg/kg	50	0	50.7	101	77-114
TRICHLOROETHENE	µg/kg	50	0	52.1	104	69-121
# of Out-of-control					0	

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

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66760

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/04/99
		Sample Matrix:	Soil	Analysis Time:	16:20
Sample ID:	**99G2183-MB-01**	Batch No:	99G2183	Instrument ID:	GC/MS: X
Lab Sample ID:	99G2183-MB-01	Data File Name:	G2183K01	GC Column:	DB-5.624
		Heated Purge: (Y/N)	Y	Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2183-LCS-01	99G2183-LCS-01	Lab Control Spike	G2183L01	04/04/99	16:51
2	18609-2161-MS	99-2792-3MS	Matrix Spike	G2183M01	04/04/99	17:22
3	18609-2161-MSD	99-2792-3MSD	Matrix Spike Duplicate	G2183N01	04/04/99	17:53
4	18609-2166	99-2792-8	Field Sample	2792-08	04/05/99	00:35
5	18609-2162	99-2792-4	Field Sample	2792-04	04/05/99	01:06
6	18609-2163	99-2792-5	Field Sample	2792-05	04/05/99	01:37
7	18609-2165	99-2792-7	Field Sample	2792-07	04/05/99	02:08
8	18609-2161	99-2792-3	Field Sample	2792-03	04/05/99	02:39
9	18609-2167	99-2792-9	Field Sample	2792-09	04/05/99	03:09
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36761

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/07/99
		Sample Matrix:	Water	Analysis Time:	16:05
Sample ID:	**99G2217-MB-01**	Batch No:	99G2217	Instrument ID:	GC/MS: X
Lab Sample ID:	99G2217-MB-01	Data File Name:	G2217K01	GC Column:	DB-5.624
		Heated Purge: (Y/N)	Y	Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2217-LCS-01	99G2217-LCS-01	Lab Control Spike	G2217L01	04/07/99	16:36
2	920854-0003-MS	99-2740-3MS	Matrix Spike	G2217M01	04/07/99	17:10
3	920854-0003-MSD	99-2740-3MSD	Matrix Spike Duplicate	G2217N01	04/07/99	17:41
4	18609-2149	99-2792-1	Field Sample	2792-01	04/08/99	02:27
5	18609-2158	99-2792-2	Field Sample	2792-02	04/08/99	02:58
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66762

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method 8260

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/09/99
		Sample Matrix:	Soil	Analysis Time:	08:24
Sample ID:	**99G2235-MB-01**	Batch No:	99G2235	Instrument ID:	GC/MS: X
Lab Sample ID:	99G2235-MB-01	Data File Name:	G2235K01	GC Column:	DB-5.624
		Heated Purge: (Y/N)	Y	Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2235-LCS-01	99G2235-LCS-01	Lab Control Spike	G2235L01	04/09/99	08:55
2	18609-2169	99-2792-11	Field Sample	2792-11A	04/09/99	15:08
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06763

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/01/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2154-MB-01	Received Date:	04/01/1999
Sample ID:	**99G2154-MB-01**	Sample Matrix	Soil	Moisture %:	
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC: U
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2154	Prep. No:	–	Anal. Time:	14:31
Data File Name:	2154G.K01	Sample Amount:	5.0 g	Dilution Factor:	1
Methanol Vol.	-				
Test Level:	Low	Sparge Size:	5 mL	Heated Purge: (Y/N)	Y

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

Surrogates		Control Limit, %	Surro. Rec.%
1 4-BROMO-FLUOROBENZENE (FI	460-00-4	70-132	99
# 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

36840

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/01/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2161-MB-01	Received Date:	04/01/1999
Sample ID:	**99G2161-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	5030	Instrument ID:	GC: N
Anal. Method:	M8015V	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2161	Prep. No:	-	Anal. Time:	21:07
Data File Name:	2161G.K01	Sample Amount:	5.0 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 (FI	460-00-4	68-124	112
# 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

66842

FORM-2B

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2154		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1	99G2154-MB-01	99G2154-MB-01	99	0
2	99G2154-LCS-01	99G2154-LCS-01	112	0
3	99G2154-LSD-01	99G2154-LSD-01	103	0
4	18609-2156-MS	99-2792-18MS	98	0
5	18609-2156-MSD	99-2792-18MSD	107	0
6	18609-2161	99-2792-3	102	0
7	18609-2162	99-2792-4	109	0
8	18609-2163	99-2792-5	113	0
9	18609-2167	99-2792-9	98	0
10	18609-2169	99-2792-11	119	0
11	18609-2165	99-2792-7	106	0
12	18609-2166	99-2792-8	107	0
23				
24				
25				

QC Control Limit

S1 = 4-BROMO-FLUOROBENZENE (FID) 70-132

Column to be used to flag recovery values:

* Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

66857

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		SDG Number:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2161		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1	99G2161-MB-01	99G2161-MB-01	112	0
2	99G2161-LCS-01	99G2161-LCS-01	111	0
3	99G2161-LSD-01	99G2161-LSD-01	112	0
4	18609-2149	99-2792-1	112	0
5	18609-2158	99-2792-2	106	0
6	NABP-89-GW1-001-MS	99-2797-1MS	121	0
7	NABP-89-GW1-001-MSD	99-2797-1MSD	120	0
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

QC Control Limit

S1 = 4-BROMO-FLUOROBENZENE (FID) 68-124

Column to be used to flag recovery values:

* Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

66858

FORM-3B

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2154		
LCS Filename:	2154G.L01	Date Analyzed:	040199	Time Analyzed:	14:54
LCSD Filename:	2154G.J01	Date Analyzed:	040199	Time Analyzed:	15:17

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
GASOLINE	mg/kg	1	0	1.13	113	77-122
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
GASOLINE	mg/kg	1	1.08	108	5	23	77-122
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

66859

FORM-3B

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2154		
MS Filename:	2154G.M01	Date Analyzed:	040199	Time Analyzed:	15:40
MSD Filename:	2154G.N01	Date Analyzed:	040199	Time Analyzed:	16:02
MS Sample No:	**18609-2156**	Sample Lab ID:	99-2792-18	Moisture, %	15.1

Spiked Components	Unit	Spike Added	Concentration Unspiked	MS	MS Rec% #	QC Limit, % REC
GASOLINE	mg/kg	1.18	0.1	1.07	83	65-127
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	REC
GASOLINE	mg/kg	1.18	1.04	81	2	31	65-127
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits. D – Spiked components diluted out

Comments: _____

66862

FORM-3A

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2161		
LCS Filename:	2161G.L01	Date Analyzed:	040199	Time Analyzed:	21:32
LCSD Filename:	2161G.J01	Date Analyzed:	040199	Time Analyzed:	21:56

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
GASOLINE	mg/L	1	0	1.20	120	75-122
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
GASOLINE	mg/L	1	1.11	111	8	23	75-122
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

66865

FORM-3A

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2161		
MS Filename:	2161G.M02	Date Analyzed:	040299	Time Analyzed:	09:57
MSD Filename:	2161G.N02	Date Analyzed:	040299	Time Analyzed:	10:22
MS Sample No:	**NABP-89-GW1-001**	Sample Lab ID:	99-2797-1		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
GASOLINE	mg/L	1	1.80	2.93	113	75-120
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
GASOLINE	mg/L	1	2.92	112	1	23	75-120
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

66866

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/01/99
		Sample Matrix:	Soil	Analysis Time:	14:31
Sample ID:	**99G2154-MB-01**	Batch No:	99G2154	Instrument ID:	GC: U
Lab Sample ID:	99G2154-MB-01	Data File Name:	2154G.K01	GC Column:	DB-1
		Heated Purge: (Y/N)	Y	Column ID:	0.53 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2154-LCS-01	99G2154-LCS-01	Lab Control Spike	2154G.L01	04/01/99	14:54
2	99G2154-LSD-01	99G2154-LSD-01	Lab Control Spike Duplicate	2154G.J01	04/01/99	15:17
3	18609-2156-MS	99-2792-18MS	Matrix Spike	2154G.M01	04/01/99	15:40
4	18609-2156-MSD	99-2792-18MSD	Matrix Spike Duplicate	2154G.N01	04/01/99	16:02
5	18609-2161	99-2792-3	Field Sample	2792.003	04/01/99	16:25
6	18609-2162	99-2792-4	Field Sample	2792.004	04/01/99	16:48
7	18609-2163	99-2792-5	Field Sample	2792.005	04/01/99	17:10
8	18609-2167	99-2792-9	Field Sample	2792.009	04/01/99	17:33
9	18609-2169	99-2792-11	Field Sample	2792.011	04/01/99	17:56
10	18609-2165	99-2792-7	Field Sample	2792.007	04/01/99	19:27
11	18609-2166	99-2792-8	Field Sample	2792.008	04/01/99	19:49
22						
23						
24						
25						

66867

FORM-4A

Applied P & Ch Laboratory

Method Blank Summary for Method M8015V

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/01/99
		Sample Matrix:	Water	Analysis Time:	21:07
Sample ID:	**99G2161-MB-01**	Batch No:	99G2161	Instrument ID:	GC: N
Lab Sample ID:	99G2161-MB-01	Data File Name:	2161G.K01	GC Column:	DB-1
		Heated Purge: (Y/N)	N	Column ID:	0.53 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2161-LCS-01	99G2161-LCS-01	Lab Control Spike	2161G.L01	04/01/99	21:32
2	99G2161-LSD-01	99G2161-LSD-01	Lab Control Spike Duplicate	2161G.J01	04/01/99	21:56
3	18609-2149	99-2792-1	Field Sample	2792.001	04/01/99	22:21
4	18609-2158	99-2792-2	Field Sample	2792.002	04/01/99	22:46
5	NABP-89-GW1-001-MS	99-2797-1MS	Matrix Spike	2161G.M02	04/02/99	09:57
6	NABP-89-GW1-001-MSD	99-2797-1MSD	Matrix Spike Duplicate	2161G.N02	04/02/99	10:22
7						
8						
9						
10						
11						
12						
13						
14						
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16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

66868

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/01/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2158-MB-01	Received Date:	04/01/1999
Sample ID:	**99G2158-MB-01**	Sample Matrix	Soil	Moisture %:	
Sample Type:	Method Blank	Prep. Method:	3550	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/01/99	Anal. Date:	04/01/99
Batch No:	99G2158	Prep. No:	1 of 1	Anal. Time:	20:48
Data File Name:	2158G.K01	Sample Amount:	20.0 g	Dilution Factor:	1
Extract Vol.	1.0 mL				

#	Component Name	CAS No	Unit	RL	Result	Qualifier
1	TPH AS DIESEL	68334-30-5	mg/kg	10	<10	U
2	TPH AS MOTOR OIL	TBD-0002	mg/kg	10	<10	U

Surrogates			Control Limit, %	Surro. Rec.%
1	OCTACOSANE, C_{28}	630-02-4	50-146	99
# 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

66899

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/02/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2166-MB-01	Received Date:	04/02/1999
Sample ID:	**99G2166-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	3510	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/02/99	Anal. Date:	04/02/99
Batch No:	99G2166	Prep. No:	1 of 1	Anal. Time:	19:51
Data File Name:	2166G.K01	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	<0.5	U
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	109
# 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

66901

Applied P & Ch Laboratory

Organic Analysis Results for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Project No:		Collection Date:	04/13/1999
Project ID:	OWS 672/897 Verification Drilling	Service ID:	992792A	Collected by:	
		Lab Sample ID:	99G2265-MB-01	Received Date:	04/13/1999
Sample ID:	**99G2265-MB-01**	Sample Matrix	Water	Moisture %:	-
Sample Type:	Method Blank	Prep. Method:	3510	Instrument ID:	GC: W
Anal. Method:	M8015E	Prep. Date:	04/13/99	Anal. Date:	04/13/99
Batch No:	99G2265	Prep. No:	1 of 1	Anal. Time:	16:23
Data File Name:	2265G.K01	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	<0.5	U
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	87
# 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

66902

FORM-2B

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2158		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1	99G2158-MB-01	99G2158-MB-01	99	0
2	99G2158-LCS-01	99G2158-LCS-01	95	0
3	99G2158-LSD-01	99G2158-LSD-01	100	0
4	18609-2157-MS	99-2792-19MS	71	0
5	18609-2157-MSD	99-2792-19MSD	67	0
6	18609-2161	99-2792-3	69	0
7	18609-2162	99-2792-4	69	0
8	18609-2163	99-2792-5	74	0
9	18609-2165	99-2792-7	70	0
10	18609-2166	99-2792-8	69	0
11	18609-2167	99-2792-9	73	0
22	18609-2169	99-2792-11	82	0
23				
24				
25				

S1 = OCTACOSANE, C_{28}

QC Control Limit
50-146

Column to be used to flag recovery values:

* Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

36917

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2166		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1	99G2166-MB-01	99G2166-MB-01	109	0
2	99G2166-LCS-01	99G2166-LCS-01	105	0
3	99G2166-LSD-01	99G2166-LSD-01	103	0
4	NABP-89-GW1-001-MS	99-2797-1MS	58	0
5	NABP-89-GW1-001-MSD	99-2797-1MSD	75	0
6	18609-2158	99-2792-2	51	0
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

QC Control Limit

S1 = OCTACOSANE, C_{28} 50-149

Column to be used to flag recovery values:

* Values outside of contract required QC Limits D – Surrogate diluted out I – Matrix Interference

6691

FORM-2A

Applied P & Ch Laboratory

Surrogate Recovery Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2265		

#	Client Sample No	Lab Sample ID	S1 % #	TOT OUT
1	99G2265-MB-01	99G2265-MB-01	87	0
2	99G2265-LCS-01	99G2265-LCS-01	89	0
3	99G2265-LSD-01	99G2265-LSD-01	65	0
4	18609-2169-MS	99-2792-11MS	94	0
5	18609-2169-MSD	99-2792-11MSD	99	0
6	18609-2169	99-2792-11	87	0
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				

S1 = OCTACOSANE, C_{28}

QC Control Limit
50-149

Column to be used to flag recovery values:

* - Values outside of contract required QC Limits D - Surrogate diluted out I - Matrix Interference

66919

FORM-3D

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2158		
LCS Filename:	2158G.L01	Date Analyzed:	040199	Time Analyzed:	21:13
LCSD Filename:	2158G.J01	Date Analyzed:	040199	Time Analyzed:	21:38

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
TPH AS DIESEL	mg/kg	50	0	60.0	120	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/kg	50	59.3	119	1	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* – Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

66920

FORM-3D

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2158		
MS Filename:	2158G.M01	Date Analyzed:	040199	Time Analyzed:	22:03
MSD Filename:	2158G.N01	Date Analyzed:	040199	Time Analyzed:	22:29
MS Sample No:	**18609-2157**	Sample Lab ID:	99-2792-19	Moisture, %	6.2

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
TPH AS DIESEL	mg/kg	53.3	0	43.6	82	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/kg	53.3	42.1	79	4	30	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

_____

06923

FORM-3C

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2166		
LCS Filename:	2166G.L01	Date Analyzed:	040299	Time Analyzed:	20:16
LCSD Filename:	2166G.J01	Date Analyzed:	040299	Time Analyzed:	20:41

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0	1.18	118	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/L	1	1.17	117	1	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

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66926

FORM-3C

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2166		
MS Filename:	2166G.M02	Date Analyzed:	040299	Time Analyzed:	21:57
MSD Filename:	2166G.N02	Date Analyzed:	040299	Time Analyzed:	22:22
MS Sample No:	**NABP-89-GW1-001**	Sample Lab ID:	99-2797-1		

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec%	#	QC Limit, % REC
TPH AS DIESEL	mg/L	2.0	7.53	8.47	47	*	65-134
# of Out-of-control					1		

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec%	#	RPD%	#	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/L	2.0	8.51	49	*	4		30	65-134
# of Out-of-control				1		0			

Column to be used to flag recovery and RPD values:

* Values outside of contract required QC Limits D – Spiked components diluted out

Comments: _____

36927

FORM-3C

Applied P & Ch Laboratory

Lab Control Spike/Lab Control Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Water
		Batch No:	99G2265		
LCS Filename:	2265G.L01	Date Analyzed:	041399	Time Analyzed:	16:48
LCSD Filename:	2265G.J01	Date Analyzed:	041399	Time Analyzed:	17:13

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration LCS	LCS Rec% #	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0	0.739	74	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	LCSD Concentration	LCSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
TPH AS DIESEL	mg/L	1	0.655	66	11	35	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

66928

FORM-3C

Applied P & Ch Laboratory

Matrix Spike/Matrix Spike Duplicate Recovery for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Sample Matrix:	Soil
		Batch No:	99G2265	Leach Method:	SPLP
MS Filename:	2265G.M01	Date Analyzed:	041399	Time Analyzed:	17:38
MSD Filename:	2265G.N01	Date Analyzed:	041399	Time Analyzed:	18:03
MS Sample No:	**18609-2169**	Sample Lab ID:	99-2792-11	Moisture, %	11.3

Spiked Components	Unit	Spike Added	Concentration Unspiked	Concentration MS	MS Rec% #	QC Limit, % REC
SPLP TPH AS DIESEL	mg/L	4.0	1.7	6.99	132	65-134
# of Out-of-control					0	

Spiked Components	Unit	Spike Added	MSD Concentration	MSD Rec% #	RPD% #	QC Limit, % RPD	QC Limit, % REC
SPLP TPH AS DIESEL	mg/L	4.0	5.75	101	27	30	65-134
# of Out-of-control				0	0		

Column to be used to flag recovery and RPD values:

* - Values outside of contract required QC Limits D - Spiked components diluted out

Comments: _____

06929

FORM-4B

Applied P & Ch Laboratory

Method Blank Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/01/99
		Sample Matrix:	Soil	Analysis Time:	20:48
Sample ID:	**99G2158-MB-01**	Batch No:	99G2158	Instrument ID:	GC: W
Lab Sample ID:	99G2158-MB-01	Data File Name:	2158G.K01	GC Column:	DB-1
				Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2158-LCS-01	99G2158-LCS-01	Lab Control Spike	2158G.L01	04/01/99	21:13
2	99G2158-LSD-01	99G2158-LSD-01	Lab Control Spike Duplicate	2158G.J01	04/01/99	21:38
3	18609-2157-MS	99-2792-19MS	Matrix Spike	2158G.M01	04/01/99	22:03
4	18609-2157-MSD	99-2792-19MSD	Matrix Spike Duplicate	2158G.N01	04/01/99	22:29
5	18609-2161	99-2792-3	Field Sample	2792.003	04/01/99	22:54
6	18609-2162	99-2792-4	Field Sample	2792.004	04/01/99	23:19
7	18609-2163	99-2792-5	Field Sample	2792.005	04/01/99	23:44
8	18609-2165	99-2792-7	Field Sample	2792.007	04/02/99	00:09
9	18609-2166	99-2792-8	Field Sample	2792.008	04/02/99	00:34
10	18609-2167	99-2792-9	Field Sample	2792.009	04/02/99	01:49
21	18609-2169	99-2792-11	Field Sample	2792.111	04/05/99	18:52
22						
23						
24						
25						

66930

FORM-4B

Applied P & Ch Laboratory

Method Blank Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/02/99
		Sample Matrix:	Water	Analysis Time:	19:51
Sample ID:	**99G2166-MB-01**	Batch No:	99G2166	Instrument ID:	GC: W
Lab Sample ID:	99G2166-MB-01	Data File Name:	2166G.K01	GC Column:	DB-1
				Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2166-LCS-01	99G2166-LCS-01	Lab Control Spike	2166G.L01	04/02/99	20:16
2	99G2166-LSD-01	99G2166-LSD-01	Lab Control Spike Duplicate	2166G.J01	04/02/99	20:41
3	NABP-89-GW1-001-MS	99-2797-1MS	Matrix Spike	2166G.M02	04/02/99	21:57
4	NABP-89-GW1-001-MSD	99-2797-1MSD	Matrix Spike Duplicate	2166G.N02	04/02/99	22:22
5	18609-2158	99-2792-2	Field Sample	2792.002	04/02/99	22:46
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

66931

FORM-4B

Applied P & Ch Laboratory

Method Blank Summary for Method M8015E

Client Name:	OHM Remediation Services (Irvine)	Contract No:		Lab Code:	APCL
Case No:		SAS No:		Service ID:	992792A
Project ID:	OWS 672/897 Verification Drilling	Project No:		Analysis Date:	04/13/99
		Sample Matrix:	Water	Analysis Time:	16:23
Sample ID:	**99G2265-MB-01**	Batch No:	99G2265	Instrument ID:	GC: W
Lab Sample ID:	99G2265-MB-01	Data File Name:	2265G.K01	GC Column:	DB-1
				Column ID:	0.32 mm

This Method Blank applies to the following samples and QC samples:

#	Client Sample No	Lab Sample ID	Sample Type	Data Filename	Analysis Date	Analysis Time
1	99G2265-LCS-01	99G2265-LCS-01	Lab Control Spike	2265G.L01	04/13/99	16:48
2	99G2265-LSD-01	99G2265-LSD-01	Lab Control Spike Duplicate	2265G.J01	04/13/99	17:13
3	18609-2169-MS	99-2792-11MS	Matrix Spike	2265G.M01	04/13/99	17:38
4	18609-2169-MSD	99-2792-11MSD	Matrix Spike Duplicate	2265G.N01	04/13/99	18:03
5	18609-2169	99-2792-11	Field Sample	2792.i1	04/13/99	18:28
6						
7						
8						
9						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						

Appendix K
Field Soil Boring Logs

OHM REMEDIATION SERVICES CORP.

Geologic Log

BOREHOLE NUMBER: 672-SB-01

SHEET 1 OF

PROJECT NO. 918609 DATE: 8-31-99

CLIENT: SWDIV - MCAS - El Toro

LOCATION: OWS - 672

LOGGED BY: G. Berger

DRILLNG CO.: BC2

DRILL RIG MODEL: CME 75 - limited access

DRILLER: Ramon Zepeda

DRILLING METHOD: HSA / SS HOLE DIAMETER: 8"

BORING COMPLETION DATA:

DEPTH TO WATER:				
TIME				
DATE				

TIME	DEPTH	PID/FID HNU OVA (PPM)	BLOWS/ 6 IN PRESSURE (PSI)	RECOVERY	SAMPLE NUMBER	SAMPLE INTERVAL	WELL DETAIL	SOIL/ROCK SYMBOL	GRAPHIC LOG	
										Handaugered to 8'. HSA to 8', then collect 10' sample. After this hand auger to 15', then drill out.
	5									
		PID - 12.5 FID - 0.0			1 918609 2161					
										(SC)
1315	10		NA					SC		10 - 10.5 sandy Clay / clayey SAND: 10YR 5/4; 50% silty Clay 50% silty SAND. Dry & moist. Infilled burrows?
							?	SM		
							?	SM		11.5' silty SAND (SM): 10YR 5/4; 80% sand - fine grained; ~20% silt - Saturated!! poss perched zone - Wet!
	15									
	20									

UHM
REMEDIATION
SERVICES CORP.

LOCATION: OWS-672
DATE: 3-31-99

BOREHOLE NUMBER: 672-SB-01
SHEET ___ OF ___

TIME	DEPTH	PID/FID HNU OVA (PPM)	BLOWS/ 6 IN PRESSURE (PSI)	RECOVERY	SAMPLE NUMBER	SAMPLE INTERVAL	WELL DETAIL	SOIL/ROCK SYSMBOL	GRAPHIC LOG	FIELD SOIL DESCRIPTION
1345	20	0	21		18609					20-21.5 Silty SAND (SM): 10YR 4/4; ~80% fine Sand ~20% Silt; saturated
		23	22		21662					
		0	25							
X			X			X		X		
		PID								
		FID								
	5									
		1.42 PID								
		0.4								
1445	30		24		18609					30-31 Silty Clay (CH-CL): 10YR 4/3; Silty Clay - dense over-consolidated, plastic estimate 10% silt.
			50		21662					
										Boring ends at 30.00
	5									
	0									
	5									

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672-SB-01

672-SB-02

OHM REMEDIATION SERVICES CORP.

Geologic Log

BOREHOLE NUMBER: 672-SB-02

SHEET 1 OF 3

PROJECT NO. 918609 DATE: 3-31-99

CLIENT: SWDIV - MCAS - El Toro

LOCATION: OWS 672

LOGGED BY: Guy Barger

DRILLNG CO.: BC2

DRILL RIG MODEL: CME 75 (limited access rig)

DRILLER: Ramon Zeneda

DRILLING METHOD: HSA / SS HOLE DIAMETER: 8"

BORING COMPLETION DATA:

DEPTH TO WATER:				
TIME				
DATE				

TIME	DEPTH	PID/FID HNU OVA (PPM)	BLOWS/ 6 IN PRESSURE (PSI)	RECOVERY	SAMPLE NUMBER	SAMPLE INTERVAL	WELL DETAIL	SOIL/ROCK SYMBOL	GRAPHIC LOG
	5								
1350	10	PID 0.0 / FID 0.0			918609-2164				
	15								
	20								

10-10.5 (clayey) Silty SAND (SM-SC): 60-80% fine sand; 20-40% clayey silt; sample was wet - saturated; no odor.

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OHM REMEDIATION SERVICES CORP.

LOCATION: 672-SB02
DATE: 3-31-99

BOREHOLE NUMBER: 672-SB-02
SHEET 2 OF 3

TIME	DEPTH	PID/FID HNU OVA (PPM)	BLOWS/ 6 IN PRESSURE (PSI)	RECOVERY	SAMPLE NUMBER	SAMPLE INTERVAL	WELL DETAIL	SOIL/ROCK SYSMBOL	GRAPHIC LOG	FIELD SOIL DESCRIPTION
	20	15 PID 16 PID	21 22 27		9			SM		20-21.5 Silty SAND (SM): 10YR 3/4; ~80% fine SAND ~20% silt; Saturated sample! no odor slight olive color - may be partly reduced (HCs?). very slight odor
					18609 2166					
	5									
					18609 2167					
	30	3 30	27 5					CL-SC		30-31 Sandy Clay (CL-SC): 2.5Y 3/3; ~80-~~[illegible]~~ ~~CL~~ silty Clay - blocky - 20% sand Definite petroleum odor - sample glistens from entrained oily water. olive color synonimous with HC.
		PID 435 FID 185								
	5									
		97 FID 20 PID								
	40		31 50		18610 2168			CL	SC	40-41. Sandy silty Clay (~~SC-CL~~ CL-SC) 10GY 3/1 to 2.5Y 3/3; 80% silty Clay blocky; 10-20% fine sand. Very strong pet (diesel) odor.
	5									

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672-SB02

OHM
REMEDIATION
SERVICES CORP.

LOCATION: 672-SB-02
DATE: 3-31-99

BOREHOLE NUMBER: SB-02
SHEET 3 OF 3

TIME	DEPTH	PID/FID HNU OVA (PPM)	BLOWS/ 6 IN PRESSURE (PSI)	RECOVERY	SAMPLE NUMBER	SAMPLE INTERVAL	WELL DETAIL	SOIL/ROCK SYSMBOL	GRAPHIC LOG	FIELD SOIL DESCRIPTION
		1050 PID 670 FID								
	50		47 50		186009 9169			SC		50-51 Clayey SAND (SC): 2.5Y 4/2; +80% fine sand + 20% clayey silt; Saturated definite odor petroleum (diesel).
										Boring was terminated at 50' as indications for increase. (BC² Drill rig nearly out of fuel (with guest. amount left to extract augers).
	5									
	0									
	5									
	0									

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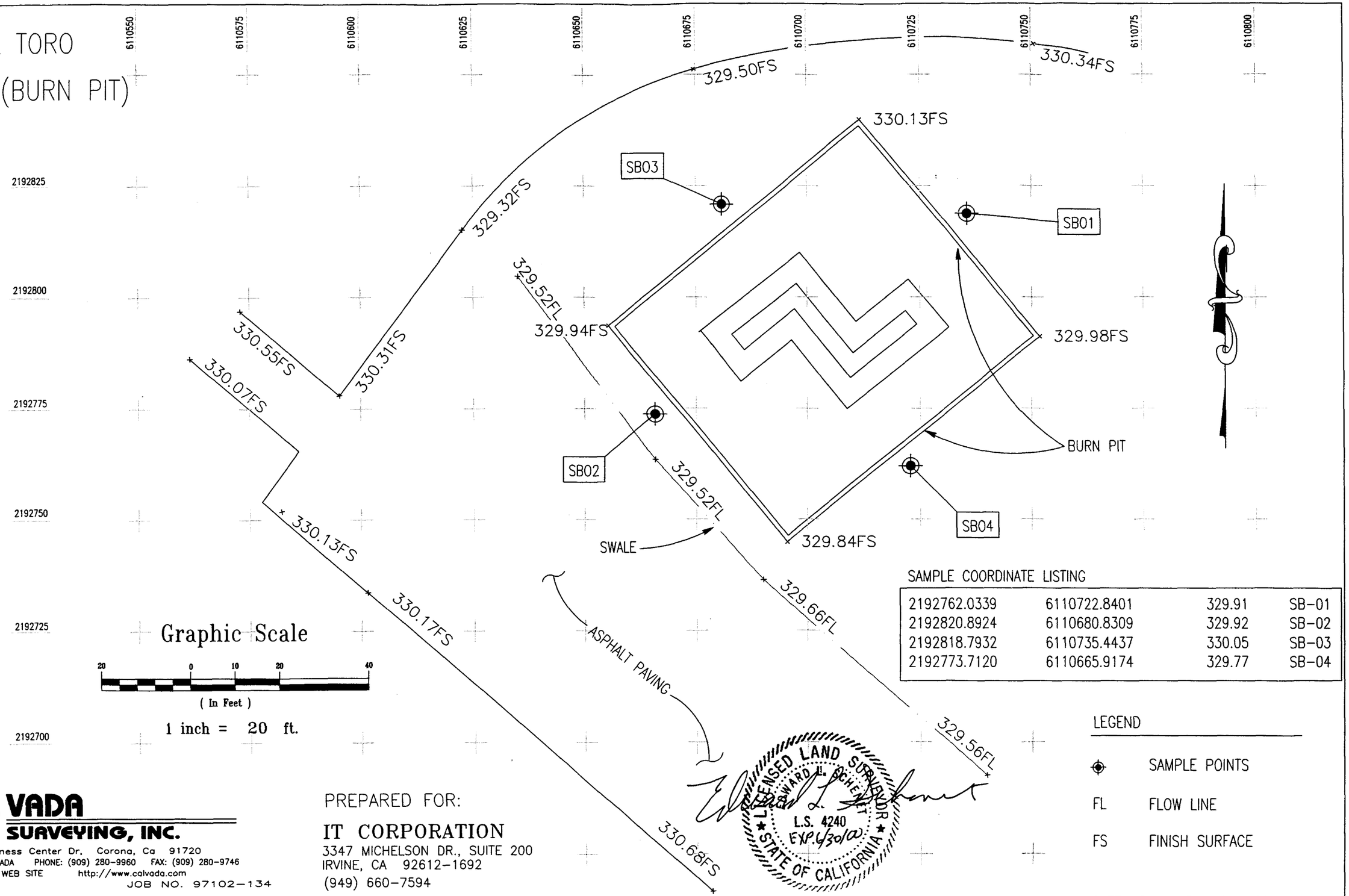
672-SB-02

Appendix L
Land Survey Data

MCAS, EL TORO
MSC B2 (BURN PIT)



SAMPLE COORDINATE LISTING

2192762.0339	6110722.8401	329.91	SB-01
2192820.8924	6110680.8309	329.92	SB-02
2192818.7932	6110735.4437	330.05	SB-03
2192773.7120	6110665.9174	329.77	SB-04

LEGEND

- ⊕ SAMPLE POINTS
- FL FLOW LINE
- FS FINISH SURFACE

DATE OF SURVEY: 6-1-99

LICENSED LAND SURVEYOR
EDWARD L. SCHEFT
L.S. 4240
EXP. 6/30/00
STATE OF CALIFORNIA

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. 97102-134

PREPARED FOR:

IT CORPORATION
3347 MICHELSON DR., SUITE 200
IRVINE, CA 92612-1692
(949) 660-7594

Appendix M
OWS Contents Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C A 6 1 7 0 0 2 3 2 0 8

Manifest Document No.

2. Page 1 of 1

3. Generator's Name and Mailing Address
Commanding General (1AU)
MCAS-El Toro, P.O. Box 95001
Santa Ana, CA 92709-5001
4. Generator's Phone (714) 726-2772

18609-OWS1

5. Transporter 1 Company Name: Ecology Control Industries
6. US EPA ID Number
A. Transporter's Phone: (310) 320-2555

7. Transporter 2 Company Name
8. US EPA ID Number
B. Transporter's Phone

9. Designated Facility Name and Site Address
Crosby & Overton
1630 West 17th Street
Long Beach, CA. 90813
10. US EPA ID Number: C A D 0 2 8 4 0 9 0 1 9
C. Facility's Phone: (562) 432-5445

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-hazardous waste, liquid	001	T T	05000	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
oil/water separator rinsates (OWS 672, OWS 744, & OWS 896)
Crosby & Overton Profile #18746

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
FAX facility signed manifest to ATTN: Steve Chandler at fax number (949) 474-8309, Project #918609, ERG # n/a, Emergency Number (949) 726-3917, "bill disposal costs to Ecology Control, Inc."

16. **GENERATOR'S CERTIFICATION:** I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.

Printed/Typed Name: Eddie Benavente
Signature:
Month 05 Day 13 Year 99

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Fred Flores
Signature: Fred Flores
Month 05 Day 13 Year 99

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name
Signature
Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.

Printed/Typed Name
Signature
Month Day Year

GENERATOR
TRANSPORTER
FACILITY

ORIGINAL – RETURN TO GENERATOR