CLOSURE REPORT
Former Temporary Accumulation Area 673
Former Marine Corps Air Station
El Toro, California

Environmental Remedial Action
Contract No. N62474-98-D-2076
Contract Task Order 0024

Document Control Number 5907
Revision 0

May 21, 2003

Submitted to:

U.S. Department of the Navy
Southwest Division
Naval Facilities Engineering Command
Environmental Division
1220 Pacific Highway
San Diego, California 92132-5190

Submitted by:

Shaw Environmental, Inc.
4005 Port Chicago Highway
Concord, California 94520-1120

CLOSURE REPORT
Former Temporary Accumulation Area 673
Former Marine Corps Air Station
El Toro, California

Environmental Remedial Action
Contract No. N62474-98-D-2076
Contract Task Order 0024

Document Control Number 5907
Revision 0

May 21, 2003

Prepared by: Julie Dahl Date: 5/21/03
Julie Dahl, REA I
Environmental Scientist

Approved by: Dhananjay Rawal Date: 5/21/03
Dhananjay Rawal, REM
Project Manager

Table of Contents

List of Figures i
List of Tables ii
List of Appendices ii
Abbreviations and Acronyms iii
1.0 Introduction 1-1
1.1 Site Location and Background 1-1
1.2 Project Objectives 1-2
1.3 Regulatory Background and Cleanup Goals 1-2
2.0 Previous Inspections and Site Background 2-1
2.1 Environmental Program Records 2-1
2.2 Site Inspection 2-3
3.0 Field Activities 3-1
3.1 Confirmation Soil Sampling 3-1
4.0 Sampling Analytical Results and Data Quality Assessment 4-1
4.1 Field Sampling Summary 4-1
4.1.1 Confirmation Soil Sampling 4-1
4.1.2 Quality Control 4-2
4.1.3 Equipment Decontamination 4-2
4.2 Analytical Methods 4-2
4.3 Laboratory Analytical Results 4-3
4.3.1 Soil Sample Analytical Results 4-4
4.3.2 QC Sample Analytical Results 4-4
4.4 Data Quality Assessment 4-5
4.5 Data Validation 4-5
5.0 Risk Characterization and Hazard Index Calculation 5-1
5.1 Physical Characteristics 5-1
5.2 Exposure Assessment 5-1
5.3 Toxicity Assessment 5-2
5.4 Risk Characterization 5-2
6.0 Conclusions and Recommendations 6-1
7.0 References 7-1

List of Figures

Figure 1 Location Map – Former TAA 673
Figure 2 Site Plan – Former TAA 673
Figure 3 Conceptual Site Model – Former TAA 673
Figure 4 Potential Migration Pathways, Exposure Routes and Receptors – Former TAA 673

List of Tables

Table 1 Summary of Analytical Results for Confirmation Soil Samples – TAA 673
Table 2 Summary of Analytical Results for QC Sample – TAA 673
Table 3 Residential Risk Screening Worksheet for Soil – TAA 673

List of Appendices

Appendix A Great Park Land Use Plan
Appendix B RFA Background Information
Appendix C Excerpts from SWPPP
Appendix D Excerpts from HM/HWMP
Appendix E Excerpts from EBS
Appendix F MCAS, El Toro Plant Account Records
Appendix G Photolog
Appendix H Land Survey Data
Appendix I Analytical Report
Appendix J DV Report

Abbreviations and Acronyms

BNI	Bechtel National Inc.
BRAC	Base Realignment and Closure
CA LUFT	California Leaking Underground Fuel Tank
CCR	California Code of Regulations
CFR	Code of Federal Regulations
CRDL	contract required detection limit
DO	delivery order
DSA	drum storage area
DTSC	Department of Toxic Substances Control
DV	The DV Group, Inc.
EPA	United States Environmental Protection Agency
HI	hazard index
HSP	Health and Safety Plan
IRP	Installation Restoration Program
IT	IT Corporation
JEG	Jacobs Engineering Group Inc
LCS	laboratory control sample
LCSD	laboratory control sample duplicate
m/z	mass-to-change
MCAS	Marine Corps Air Station
MDL	method detection limit
mg/kg	milligram per kilogram
MS	matrix spike
MSD	matrix spike duplicate
NFA	no further action
OHM	OHM Remediation Services Corp.
PR	preliminary review
PRG	Preliminary Remediation Goal
QA	quality assurance
QC	quality control
RCRA	Resource Conservation and Recovery Act
RDL	reporting detection limit
RFA	RCRA facility assessment
RPD	relative percent difference
RRF	relative response factor
SIM	selected ion monitoring
SVOC	semi-volatile organic compound
SWDIV	Southwest Division Naval Facilities Engineering Command
SWMU	Solid Waste Management Unit
TAA	temporary accumulation area
TCL	target analyte compound
TPH	total petroleum hydrocarbons
VOC	volatile organic compound

Abbreviations and Acronyms (continued)

VSI	Visual Site Inspection
%D	percent difference
%R	percent recovery
µg/kg	micrograms per kilogram

1.0 Introduction

This closure report summarizes the confirmation soil sampling activities performed at former Temporary Accumulation Area (TAA) 673, at the former Marine Corps Air Station (MCAS) El Toro (hereinafter referred to as the "Station"), California. Shaw Environmental, Inc. performed the work for the Southwest Division Naval Facilities Engineering Command (SWDIV) under EFA West Contract No. N62474-98-D-2076, Contract Task Order (CTO) 0024.

Soil Sampling activities were conducted in accordance with the Navy, Station, and Department of Toxic Substance Control (DTSC)-approved *Final Supplemental Work Plan, Closure of Various Temporary Accumulation Areas and RCRA Facility Assessment Sites, Marine Corps Air Station El Toro, California* (OHM, 1997a) and approved *Revised Addendum to the Draft Supplemental Work Plan, Marine Corps Air Station El Toro, California* (IT, 2002).

1.1 Site Location and Background

The Station is located approximately 45 miles southeast of the city of Los Angeles in Orange County, California, 1 mile north of the intersection of Interstate 5 (Santa Ana) and Interstate 405 (San Diego) freeways. The Station covers approximately 4,738 acres. A Location Map for TAA 673 is provided in Figure 1. Former TAA 673 is located in the southeast quadrant of the Station, southeast of Building 673, a former Ground Support Equipment Facility.

The Station closed on 1 July 1999 in accordance with the Base Realignment and Closure Act of 1993 (BRAC III). Former TAA 673 was investigated as Solid Waste Management Unit (SWMU) 186 during the Resource Conservation and Recovery Act Facility Assessment (RFA). Former TAA 673 consists of a concrete pad with berm, sump, access ramp, and an aluminum roof with the approximate dimensions of 12 feet by 12 feet.

Former TAA 673 is located within a parcel designated for future use as Open Space: Golf with Residential Overlay, according to the Great Park Land Use Plan that was issued by the City of Irvine in June 2002. The Great Park Land Use Plan is provided in Appendix A.

The depth to groundwater in the vicinity of the former TAA 673 site is based on available water level data collected from the nearest groundwater monitoring well 18_BGMW02E, located approximately 350 feet southeast of former TAA 673. Based on this data, the depth to the groundwater at former TAA 673 is approximately 165 feet below ground surface (CDM, 1997).

Based on the screening level risk assessment for TAA 673, the net carcinogenic risk for a residential scenario is less than 10^{-6}. The summed non-cancer hazard index for soil under a

potential future residential scenario is less than 1.0. Therefore, former TAA 673 should be identified as "closed" in the next Base Realignment and Closure Business Plan update.

1.2 Project Objectives

The objectives of this project were the following:

- Verify that all stored hazardous wastes, residues, and constituents that may pose a potential health risk have been removed from former TAA 673 in accordance with the MCAS El Toro Detailed Plan (IT, 2002).
- Perform verification soil sampling and analysis to obtain "closure status" of former TAA 673.

1.3 Regulatory Background and Cleanup Goals

The closure activities at former TAA 673 were completed in accordance with the appropriate federal and state requirements. TAA ~~700~~ 673 is characterized as "*hazardous waste accumulation areas*" according to the Code of Federal Regulations (CFR), Title 40, Part 262.34, and the California Code of Regulations (CCR), Title 22, Section 66262.34. Because hazardous wastes have been stored at the site, closure of TAA 673 is also subject to federal and state regulations for closure of less than 90 days hazardous waste management facilities (CFR 40, part 264, Subpart G; and CCR 22, Section 66264, Article 7, respectively).

The cleanup goals established for former TAA 673 are based on the following:

Soil

- United States Environmental Protection Agency (EPA) Region IX Preliminary Remediation Goals (PRGs) dated November 1, 2002 for residential land use for organic contaminants
- Background concentrations for metals contaminants (Bechtel National Inc. [BNI], 1996b)
- 5,000-milligrams per kilogram (mg/kg) concentration limit for TPH-purgeable
- 10,000-mg/kg concentration limit for TPH-extractable.

2.0 Previous Inspections and Site Background

The following section summarizes results from previous investigations and background history at the former TAA 673 site. Background information regarding former TAA 673 was obtained from the following documents:

- *Final RCRA Facility Assessment Report, Marine Corps Air Station El Toro, California (Jacobs Engineering Group Inc., [JEG] 1993)*
- *Final Addendum RCRA Facility Assessment Report, Marine Corps Air Station El Toro, California (BNI, 1996a)*
- *Storm Water Pollution Prevention Plan (SWPPP) for Marine Corps Air Station, El Toro, El Toro, California (IEM, 1997)*
- *Final, Marine Corps Air Station, El Toro, Hazardous Material/Hazardous Waste Management Plan (SAIC, 1994)*
- *Marine Corps Air Station El Toro, El Toro, California, Final Environmental Baseline Survey Report (JEG, 1995)*
- *Base Realignment and Closure Business Plan for Marine Corps Air Station, El Toro, California (SWDIV, 2002)*
- *MCAS El Toro Plant Account Records (SWDIV, 1997).*

2.1 Environmental Program Records

Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA)

In 1991, JEG, as part of the Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA), performed a Preliminary Review (PR) and a Visual Site Inspection (VSI) of the 307 SWMUs within the Station. JEG also conducted a site visit to observe the current conditions of the SWMUs and/or TAAs, and performed limited sampling. During a field RFA visit in April 1991, JEG identified SWMU 186 (also known as TAA 673) as an inactive temporary hazardous waste storage area, to the southeast of Building 673.

Per JEG's VSI Evaluation form, SWMU 186 (TAA 673) is described as a 12-ft by 12-ft concrete storage surface surrounded by a concrete berm with an aluminum roof. An approximately 250-gallon waste oil bowser, and numerous 55-gallon drums were stored on the concrete pad at the time of the visit. Two 55-gallon drums were observed on the asphalt surface outside of the storage area. Stains were observed on the concrete storage surface and on the asphalt outside of the concrete storage surface. Because the TAA was used as a HWSA in the past, SWMU 186 (TAA 673) was recommended for a sampling visit (JEG, 1993).

During a sampling visit in 1992, JEG advanced one angle boring (186A1) on the northwest side of SWMU 186 (TAA 673), and one hand-auger boring (186H1) was advanced on the southeast side of SWMU 186. Soil boring 186A1 was drilled using a hollow-stem auger rig to a depth of 62 feet below ground surface. A total of six soil samples were collected at 10-foot intervals to 60 feet below ground surface. Total petroleum hydrocarbons (TPH), total fuel hydrocarbons (TFH), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), and pesticides were not detected above laboratory reporting limits in any of the soil samples collected from the two borings. Metal concentrations were not detected above background levels for the Station.

Because the concentrations of detected compounds were below established cleanup goals for the site and/or below the contract required detection limit (CRDL) from the RFA, JEG recommended *"No Further Action (NFA)"* for SWMU 186 (TAA 673)(JEG, 1993).

After review of the JEG RFA report, DTSC requested additional information about TAAs to determine the closure requirements. BNI performed visual assessments at 73 TAAs to provide additional information for a closure strategy for the TAAs.

During the BNI VSI on December 1994, former TAA 673 was observed to be a 10-foot by 10-foot, concrete pad with berm, sump and roof. Hazardous waste, synthetic grease, and cleaning compound were stored on the concrete pad. Stains were observed on the concrete storage area (BNI, 1996). BNI did not recommend sampling for the TAA. Copies of the former TAA 673 VSI evaluation forms from the BNI Final RFA Addendum report and the JEG RFA report are included in Appendix B.

Storm Water Pollution Prevention Plan (SWPPP)

The Storm Water Pollution Prevention Plan (SWPPP) includes visual inspections of areas where hazardous materials and hazardous wastes were stored. The SWPPP indicated that Building 673 was a building of concern to the quality of storm water discharges. Best Management Practices recommended in the SWPPP included educate personnel; spill prevention, control and countermeasures plan; construct berm or provide secondary containment; properly label and store waste; and place spill kit in area. Building 673 was described as a Ground Support Equipment Shop. The SWPPP also includes a spill history table in Section 5, and this table does not identify historic spills at Building 673 (IEM, 1997). Excerpts from the SWPPP are included in Appendix C.

Hazardous Materials/Hazardous Waste Engineering Management Plan (HM/HWMP)

The Station's environmental compliance program management plans were acquired and reviewed in order to identify any locations at or near former TAA 673 that may have been designated for storage of hazardous wastes. The Hazardous Material/Hazardous Waste

Management Plan (HM/HWMP) identifies Building 673 as a hazardous waste accumulation area (SAIC, 1994). Extracts from the plan are presented in Appendix D.

Environmental Baseline Survey (EBS)
The EBS describes former TAA 673 as SAA 673. The EBS indicates that former TAA 673 was active at the time the EBS was prepared in 1995. The EBS identifies an environmental condition of area type 2 as: *areas where only storage of hazardous substances or petroleum products has occurred (but no release, disposal, or migration from adjacent areas has occurred)*. Extract from the EBS are presented in Appendix E.

Oil Water Separators (OWSs)
OWS 673A was located southwest of TAA 673. The Regional Water Quality Control Board (RWQCB) closed OWS 673A in January 2001(SWDIV, 2002).

MCAS, El Toro Plant Account Records
According to the MCAS, El Toro Plant Account Records, Building 673 was constructed in 1974 as a Ground Support Equipment Facility, and is 115 feet by 120 feet in size. A copy of the record for Building 856 is provided in Appendix F.

2.2 Site Inspection

Former TAA 673 was inspected by OHM/Shaw Environmental, Inc. in 1999. Former TAA 673 was observed to be an inactive TAA, consisting of a concrete pad with concrete berm, sump, access ramp, and aluminum roof. The surface of the concrete pad was clean and intact without any major cracks. No evidence of a release was observed around the former TAA 673. A photo log of former TAA 673 is included in Appendix G.

During a site visit at various TAA sites on February 12, 2003, representatives from SWDIV, Station, Shaw Environmental, Inc. and the DTSC visited former TAA 673 site and during the site visit no evidence of a release was observed on or adjacent to the concrete pad. Also, it was mutually agreed that two hand auger soil borings should be advanced in close proximity to the TAA to collect six soil samples at a depth of 18 inches and 36 inches below ground surface, with one sample located next to the sump.

Six or Four ?

3.0 Field Activities

The following subsections describe the activities that were performed by Shaw Environmental, Inc. at former TAA 673. Field activities were conducted in accordance with the approved *Final Supplemental Work Plan* (OHM, 1997a) and approved *Revised Addendum to the Draft Supplemental Work Plan, Marine Corps Air Station El Toro, California* (IT, 2002). Field activities conducted at former TAA 673 included confirmation soil sampling and land surveying activities.

3.1 Confirmation Soil Sampling

Flow ?

As agreed during the February 12, 2003 visit, six confirmation soil samples, including duplicates, were collected on March 25, and April 2, 2003 from two hand-auger locations at former TAA 673. A Site Plan with the hand auger locations is provided on Figure 2.

Soil samples were collected in standard stainless steel sleeves at two different depths: 18 and 36 inches below ground surface. Details on the analytical methods, data quality assessment, and laboratory analytical results and data validation are discussed in Section 4.

After completing the confirmation soil sampling, former TAA 673 was surveyed by Cal Vada Surveying Inc., a California-licensed land surveyor. The surveyed locations was measured to ±0.01 foot horizontally and tied to the California State Plane Coordinate Systems, North American Datum 1983. The surveyed elevations were measured to ±0.01 foot vertically and tied to mean sea level datum. The land surveying data for former TAA 673 are presented as Appendix H.

4.0 Sampling Analytical Results and Data Quality Assessment

The objective of confirmation soil sampling and selected analytical methods were to provide analytical data to characterize the soil condition in the vicinity of former TAA 673. The sampling methodology, analytical methods, analytical results, and interpretation of confirmation soil sampling have been performed in accordance with the analytical strategy presented in the DTSC-approved *Final Supplemental Work Plan* (OHM, 1997a) and are described in the following text and approved *Revised Addendum to the Draft Supplemental Work Plan, Marine Corps Air Station El Toro, California* (IT, 2002) and are described in the following text.

The laboratory analyses were performed according to test methods specified in EPA Solid Waste-846 (Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods, June 1997) and California Leaking Underground Fuel Tank (CA LUFT) Manual (State Water Resources Control Board, 1989). The test methods used for analyses were selected on the basis of their ability to detect the chemicals of potential concern with suitable detection limits to verify that no significant release of chemicals in surrounding soil at former TAA 673 and to provide data for assessment of risk to human health and the environment. A list of all the analytical methods that were performed for former TAA 673 is provided in Section 4.2.

All samples were analyzed by EMAX Laboratories, Inc., which is a state of California certified and Naval Facilities Engineering Services Center-approved analytical laboratory.

4.1 Field Sampling Summary

4.1.1 Confirmation Soil Sampling

The sampling strategy for former TAA 673 focused on two aspects of the site: possible releases to the surface of the TAA or possible releases to the soil surrounding the TAA. Soil samples were collected and analyzed for the constituents contained in the wastes that may have been stored at former TAA 673.

The sample location was selected based on a site visit discussion on February 12, 2003. A total of six confirmation soil samples, including two duplicates (sample numbers 818655-3255 through 818655-3257 and 818655-3216 through 818655-3218) were collected at former TAA 673 from two hand auger borings (TAA673-SB-A and TAA673-SB-B).

A hand auger was used to bore into the soil. Soil samples were collected at 18 and 36 inches below ground surface using a hammer-driven split core sampler that contained a stainless steel sleeve. Following the collection of the soil samples, the excess soil was placed back in the open boreholes (no airborne volatile organic compounds (VOCs) were identified by the photoionization detector). The surface was then finished to match the existing ground surface.

4.1.2 Quality Control

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

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

One equipment rinsate sample (sample number 818655-3223) and one trip blank (sample number 818655-3215) were collected on March 24, 2003 and one equipment rinsate sample (818655-3260) and one trip blank sample (818655-3254) were collected on April 2, 2003.

EMAX Laboratories, Inc. performed the following laboratory QA/QC sample analysis:

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

4.1.3 Equipment Decontamination

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

4.2 Analytical Methods

Analytical methods were selected to encompass all the chemicals of potential concern at former TAA 673. The following methods were performed to characterize samples collected from former TAA 673:

- Volatile organic compounds (VOCs) by EPA Method 5035/8260B
- Semi-volatile organic compounds (SVOCs) by EPA Method 8270C
- Total petroleum hydrocarbons (TPH) as gasoline by EPA Method 5035 and CA LUFT 8015 Modified
- TPH as gas and diesel by CA LUFT 8015 Modified (extraction)

- Pesticides EPA Method 8081A
- Metals by EPA Method 6010B/7000.

Additionally, the Selected Ion Monitoring (SIM) technique was used on the following seven semi-volatile organic compounds in order to achieve detection limits lower than the Region IX PRGs (EPA, 2002):

- Benzo(a)pyrene
- bis(2-Chloroethyl)ether
- Dibenzo(a,h)anthracene
- Hexachlorobenzene
- Indeno(1,2,3-cd)pyrene
- n-Nitrosodi-n-propylamine
- Pentachlorophenol.

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

For each component or compound separated by the gas chromatograph, the mass spectrometer produces a characteristic mass spectrum. The mass spectrometer ionizes the sample molecules and separates any resulting fragments by mass-to-charge (m/z) ratios. The fragmentation pattern is used to determine the structure of the original molecule. The intensity of one or more of the fragments is used to quantitate the identified compound.

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

4.3 Laboratory Analytical Results

This section provides summary and assessment of the analytical results from the sampling performed at former TAA 673. The analytical results for the confirmation soil samples at former

TAA 673 with comparison to the standard background concentrations and PRGs are presented in Table 1. QC sample analytical data for former TAA 673 are presented in Table 2. The hard copies of the analytical results with QA/QC data obtained from EMAX Analytical Laboratory are included in Appendix I.

4.3.1 Soil Sample Analytical Results

Total Petroleum Hydrocarbons — TPH as gasoline, and diesel were not detected above the laboratory reporting limits in any confirmation soil samples collected from former TAA 673.

Volatile Organic Compounds — VOCs were not detected in any confirmation soil samples above laboratory reporting limits.

Pesticides — Pesticide compounds were not detected above the laboratory reporting limits in any of the confirmation soil samples collected from former TAA 673.

Semi-Volatile Organic Compounds — No SVOCs were detected above the laboratory reporting limits in the confirmation soil samples collected from former TAA 673.

To ensure that the laboratory reporting limits were lower than the residential PRGs, the following seven SVOCs were analyzed using the SIM technique:

- Benzo(a)pyrene
- bis(2-Chloroethyl)ether
- Dibenzo(a,h)anthracene
- Hexachlorobenzene
- Indeno(1,2,3-cd)pyrene
- n-Nitrosodi-n-propylamine
- Pentachlorophenol.

The Shaw Environmental, Inc. criterion for acceptance of this SIM data was that the laboratory method detection limit (MDL) must be equal to or less than half of the PRG.

Metals — The following metals were reported above the reporting limit in the confirmation soil samples as presented in Table 1: aluminum, antimony, arsenic, barium, beryllium, cadmium, calcium, chromium, cobalt, copper, iron, lead, magnesium, manganese, nickel, potassium, sodium, thallium, vanadium, and zinc. The reporting limits and positive results for several analytes exceeded the established background values. These results are flagged with a B in Table 1.

4.3.2 QC Sample Analytical Results

Two trip blanks were collected for former TAA 673 (818655-3215 and 818655-3254). The trip blanks were analyzed for VOCs, and no analytes were reported above the reporting limits.

Two equipment rinsate samples (818655-3223 and 818655-3260) were collected and analyzed for TPH, Pesticides, VOCs, SVOCs, and Metals. None of the analytes were detected above the laboratory reporting limits for the equipment rinsate sample.

4.4 Data Quality Assessment

Former TAA 673 analytical data were reviewed and validated with respect to the QA/QC parameters specified in the work plan. The following were evaluated:

- EPA recommended holding times
- Cooler condition upon receipt by the laboratory
- Initial and continuing calibration standards
- Method blanks
- Surrogate recoveries
- Matrix spike/matrix spike duplicate (MS/MSD) recoveries and
- Laboratory control samples (LCS) recoveries.

All samples were prepared and analyzed within EPA recommended holding times. The sample cooler was received intact and within the required temperature range of 4±2 degrees Celsius. Any sample results associated with QC parameters that were out of compliance with the Work Plan have been flagged and annotated in Tables 1 and 2. All data are useable as qualified.

4.5 Data Validation

Analytical data were reviewed and validated in accordance with the EPA *National Functional Guidelines for Organic and Inorganic Data Review* (EPA, 1994). The DV Group, Inc. (DV), an independent data validation company, performed Level III validation on the data. A hard copy of the DV report is provided in Appendix J.

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

The data were qualified by DV to indicate whether the data has been affected by any deviation from the analytical protocols established in the *Final Supplemental Work Plan, Closure of Various Temporary Accumulation Areas and RCRA Facility Assessment Sites, Marine Corps Air Station El Toro, California* (OHM, 1997a) and *Revised Addendum to the Draft Supplemental Work Plan, Marine Corps Air Station El Toro, California* (IT, 2002).

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

Summary — All data associated with former TAA 673 were usable and acceptable as qualified. Overall precision and accuracy were met. The analytical results and associated qualifiers are summarized in Tables 1 and 2.

5.0 Risk Characterization and Hazard Index Calculation

This section briefly describes the approach used to estimate risk and summarizes the baseline screening level risk assessment results for former TAA 673. A screening level risk assessment for human health was conducted following the guidance provided in the EPA Region IX PRGs Memorandum dated November 1, 2002 (EPA, 2002). The analytical results of Shaw Environmental, Inc. confirmation soil borings (TAA673-SB-A and TAA673-SB-B) and the RCRA Facility Assessment (RFA) angle boring (TAA186A1) and hand auger boring (186H1) conducted at former TAA 673 were used to calculate risks.

5.1 Physical Characteristics

Based on the review of the RFA boring log (186A1), the subsurface lithology at former TAA 673 consists of primarily of silts, sands, and clays. These units appear typical of the channel and overbank deposits in comprising the Holocene deposits on the Tustin Plain. The groundwater is present at a depth of approximately 165 feet below ground surface (CDM, 2002).

5.2 Exposure Assessment

Former TAA 673 was used as a temporary hazardous waste storage area. Areas surrounding former TAA 673 are paved.

The Station officially closed on July 2, 1999 in accordance with the Base Closure and Realignment Act of 1993 (BRAC III). Former TAA 673 is located within a parcel designated for future use as Open Space; Golf with Residential Overlay according to the Great Park Land Use Plan that was issued by the City of Irvine in June 2002.

For screening purposes, the ingestion, dermal contact, and inhalation exposure pathways are assumed to be complete for former TAA 673, as if the area were unpaved. Should the screening fail, further evaluation of the exposure pathways would be required. A site conceptual model for former TAA 673 is shown on Figure 3.

Under a residential land use scenario at former TAA 673, workers or humans could be potentially exposed to surrounding soil by ingestion, dermal contact, or inhalation of dust or volatilized contaminants. These are the same exposure pathways evaluated by the EPA PRGs (EPA, 2002). Figure 4 presents the potential migration pathways at TAA 673.

For the purposes of this risk screening evaluation, the residential scenario is used as the worst-case scenario.

5.3 Toxicity Assessment

The PRGs incorporate the toxicity values from the Integrated Risk Information System, the Health Effects Assessment Summary Tables, and the National Center for Environmental Assessment. Cancer PRGs incorporate cancer toxicity values and the noncancer PRGs incorporate the toxicity values for chronic health affects other than cancer (EPA, 2002). Both cancer risk and noncancer hazards were evaluated in this screening risk assessment.

5.4 Risk Characterization

The PRGs are concentrations calculated using standard exposure factors that are protective of humans, including sensitive groups, over a lifetime. These PRG concentrations pose acceptable cancer risk or non-cancer hazard under the exposure scenarios evaluated. Generally, a cancer risk of 10^{-6} and a non-cancer hazard index (HI) of 1.0 or less are considered acceptable levels of exposure. Therefore, the PRG concentrations are calculated to the lower end of the acceptable cancer risk range of 10^{-6} and to a non-cancer hazard index of 1.0.

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

Although maximum concentrations for chemicals detected at the site are used for this risk screening, comparisons are not made to maximum detected background concentrations. To maintain a conservative estimate of background risk, the 95th quantile background concentrations calculated for the Station (BNI, 1996b) are used to calculate background contributions to cancer risk.

At former TAA 673, the only detected carcinogen in soil was arsenic, chromium, and cobalt that were detected below background levels for the base. The summed cancer risk for soil under the potential future residential scenario after subtracting background is less than 10^{-6} (Table 3).

Compounds that were detected at former TAA 673 that contribute to the non-cancer HI include acetone, aluminum, antimony, arsenic, barium, beryllium, cadmium, cobalt, copper, iron, lead, manganese, nickel, thallium, vanadium and zinc. The summed non-cancer hazard index for soil under the potential future residential scenario after subtracting background is less than 1.0 (Table 3). This is a conservative HI because it includes background contributions, assumes that maximum detected concentrations are representative of the entire site, and is summed across all toxicological endpoints.

Summary

The site-related incremental cancer risk and non-cancer hazard index at former TAA 673 are acceptable for the following reasons:

- The net carcinogenic risk is less than 10^{-6} for the residential scenario.
- The non-cancer hazard index for detected chemicals is less than 1.0 for the residential scenario.

6.0 Conclusions and Recommendations

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

- Former TAA 673 consists of an approximately 12-foot by 12-foot concrete pad with berm, sump, roof, and access pad. No cracks or stains were observed on the surface of the TAA.
- TAA 673 was investigated as SWMU 186 during the RFA.
- During a field RFA visit in 1991, JEG identified SWMU 186 (also known as TAA 673) as a temporary hazardous waste storage area. Because the TAA was used as a HWSA in the past, SWMU 186 (TAA 673) was recommended for a sampling visit (JEG, 1993).
- JEG advanced one angle boring (186A1) on the northwest side and one hand-auger boring 186H1 on the southeast side of SWMU 186 (TAA 673). Soil boring 186A1 was drilled using a hollow-stem auger rig to a depth of 62 feet below ground surface. Because the concentrations of detected compounds were below established cleanup goals for the site and/or below the contract required detection limit (CRDL) from the RFA, JEG recommended "No Further Action (NFA)" for SWMU 186 (TAA 673).
- In 1994, as part of the RFA, Bechtel National Inc. (BNI) visited former TAA 673, and observed a 10-foot by 10-foot concrete pad with berm, sump, and roof. Hazardous waste, synthetic grease, and cleaning compound were stored on the concrete pad. Stains were observed on the concrete storage area. Based on observations during their site visit, BNI did not recommend sampling at the TAA.
- During a site visit at various TAA sites on February 12, 2003, representatives from SWDIV, Station, Shaw Environmental, Inc. and the DTSC visited former TAA 673. No evidence of a release was observed on or adjacent to the concrete pad. Also, it was mutually agreed that two hand auger soil borings would be advanced in close proximity to the TAA and soil samples would be collected from 18 and 36 inches below ground surface.
- On March 25, and April 2, 2003, Shaw Environmental, Inc. collected a total of 6 confirmation soil samples from two hand auger boring locations (TAA673-SB-A and TAA673-SB-B), in close proximity to TAA 673.
- The only detected carcinogens in soil were arsenic, chromium, and cobalt, which were evaluated to determine the risk associated with their presence for present or anticipated future land uses. None of the carcinogens were detected above established background levels for the Station.

- Compounds that were detected at former TAA 673 that contribute to the non-cancer HI include acetone, aluminum, antimony, arsenic, barium, beryllium, cadmium, cobalt, copper, iron, lead, manganese, nickel, thallium, vanadium and zinc
- The residential risk calculations for former TAA 673 resulted in a site-related net cancer risk less background risk of less than 10^{-6}. The residential non-cancer HI less background risk was less than 1.0.

The objectives of this project are considered to be achieved, since former TAA 673 is no longer used for storage of hazardous waste. Confirmation soil sampling was conducted at former TAA 673 to verify that concentrations of contaminants were at or below acceptable background or health-risk based concentrations.

Based upon the absence of evidence of a significant release at former TAA 673, the screening risk calculations, it is recommended that former TAA 673 (SWMU 186) should be identified as "closed" in the next Base Realignment Closure Business Plan update.

7.0 References

Bechtel National, Inc., 1996a, *Final Addendum RCRA Facility Assessment Report, Marine Corps Air Station El Toro, California*, May.

Bechtel National, Inc., 1996b, *Final Technical Memorandum Background and Reference Levels Remedial Investigations, Marine Corps Air Station El Toro, California*, October.

BNI, see Bechtel National, Inc.

Camp Dresser & McKee, Inc. 1997, *Final Groundwater Monitoring Report, July 1997 Sampling Round, Groundwater Monitoring Program for Marine Corps Air Station, El Toro, El Toro, California*, October.

Camp Dresser & McKee, Inc. Federal Programs Corporation, 2002, *Final Groundwater Monitoring Report, March 2002, Monitoring Round 15*, August.

CDM, see Camp Dresser & McKee, Inc.

City of Irvine, 2002, *Great Park Land Use Plan, The Orange County Great Park*, June.

EarthTech, 2002, *Draft Final Site Closure Report, Vadose Zone Remediation, IRP Site 24, Volatile Organic Compounds Source Area, Former Marine Corps Air Station, El Toro, California*, June.

Integrated Environmental Management (IEM), 1997, *Storm Water Pollution Prevention Plan (SWPPP) for Marine Corps Air Station, El Toro, El Toro, California*, July.

Jacobs Engineering Group (JEG), 1995, *Marine Corps Air Station El Toro, El Toro, California, Final Environmental Baseline Survey Report*, April.

Jacobs Engineering Group Inc., 1993, *Final RCRA Facility Assessment Report, Marine Corps Air Station El Toro, California*, July.

JEG, see Jacobs Engineering Group Inc.

OHM Remediation Services Corp., 1995, *Detailed Plan for RCRA Clean Closure of Building 673-T3 MCAS El Toro and Building 248 MCAS Tustin*, June.

OHM Remediation Services Corp., 1997a, *Final Supplemental Work Plan Closure of Various Temporary Accumulation Areas and RCRA Facility Assessment Sites, Marine Corps Air Station El Toro, Santa Ana, California*, March.

OHM Remediation Services Corp., 1997b, *Technical Memorandum Groundwater Monitoring Report, Petroleum Storage Facilities at Various Locations, Marine Corps Air Station El Toro, Santa Ana, California*, November.

OHM, see OHM Remediation Services Corp.

RCRA Part B Permit for MCAS El Toro, California, June 1992.

Science Applications International Corporation (SAIC), 1994, *Final, Marine Corps Air Station, El Toro, Hazardous Material/Hazardous Waste Management Plan*, August.

State of California, Water Resources Control Board, 1989, *Leaking Underground Fuel Tank Field Manual: Guidelines for Site Assessment, Cleanup, and Underground Storage Tank Closure*.

Southwest Division, Naval Facilities Engineering Command, 1997, *MCAS, El Toro Plant Account Records*, 1997.

Southwest Division, Naval Facilities Engineering Command, 2002, *Base Realignment and Closure Business Plan*, March.

Southwest Division, Naval Facilities Engineering Command, 2002, *Closure of Various Temporary Accumulation Areas and RCRA Facility Assessment Sites, Marine Corps Air Station, El Toro, Santa Ana, California*, January.

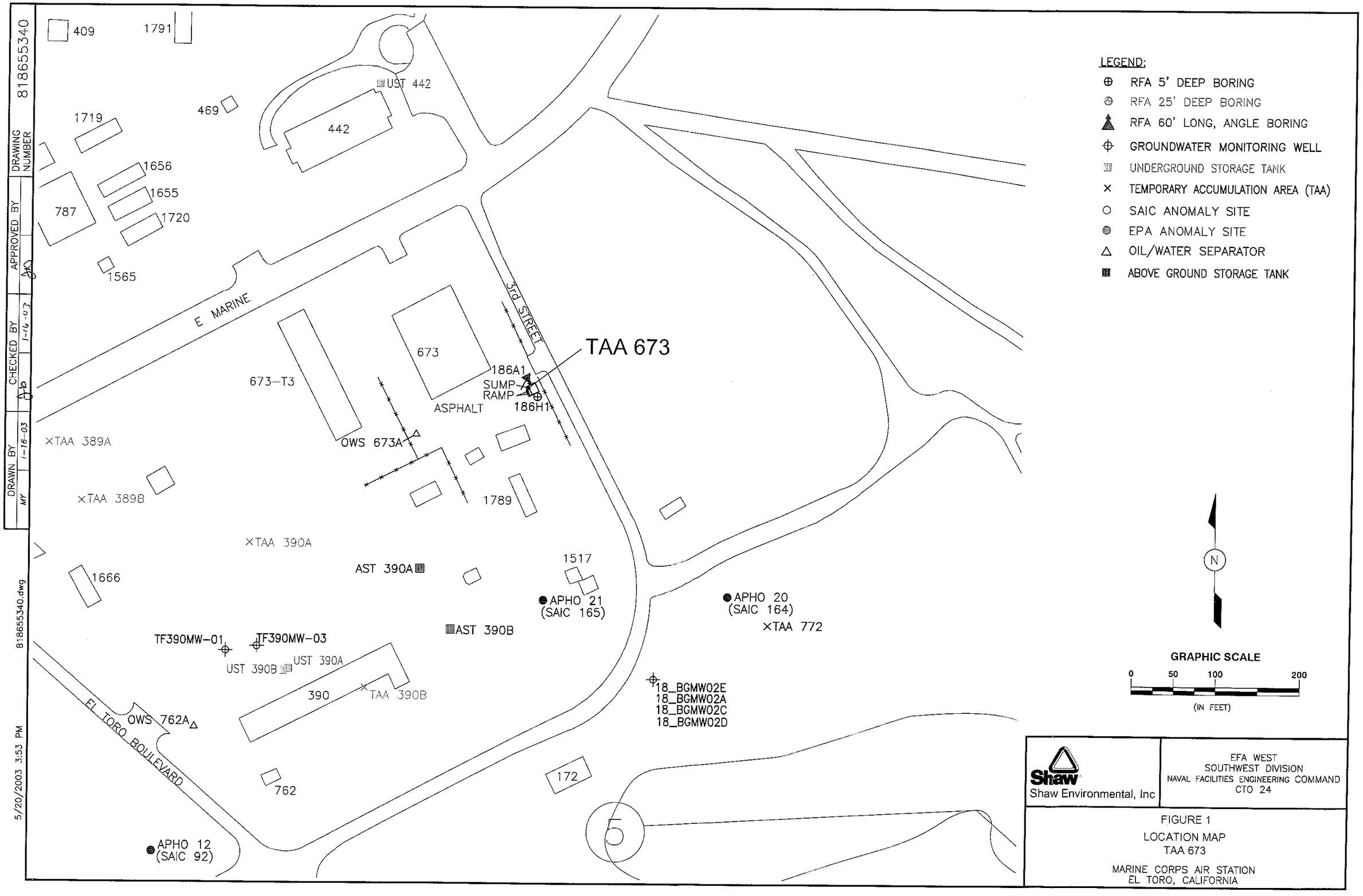
Southwest Division, Naval Facilities Engineering Command, 1994, *Marine Corps Air Station El Toro, El Toro, California, Installation Restoration Program, Remedial Investigation/ Feasibility Study, Final Soil Gas Survey, Technical Memorandum, Sites 24 and 25*, October.

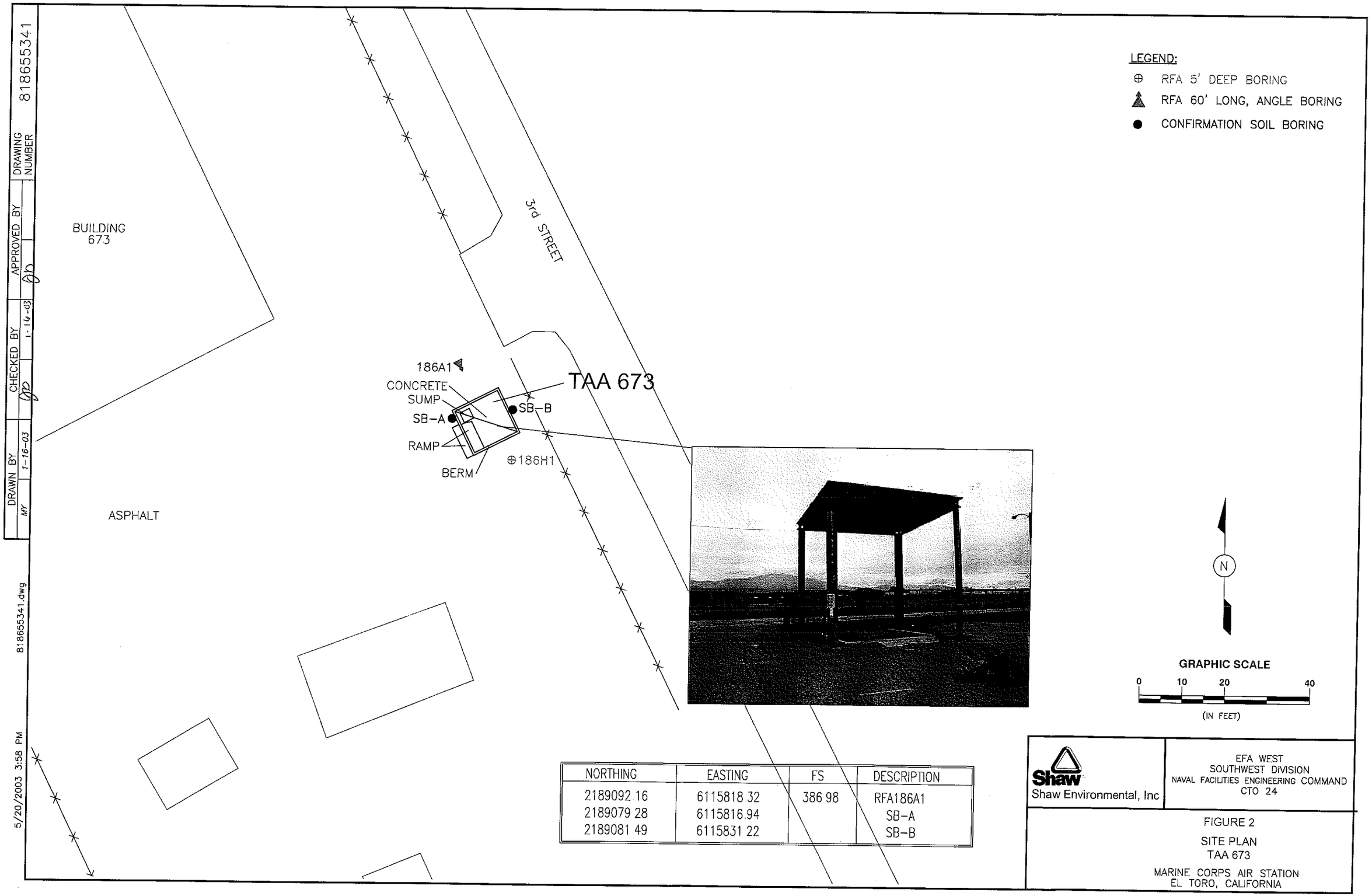
SWDIV, see Southwest Division, Naval Facilities Engineering Command.

U.S. Environmental Protection Agency, 1994, *National Functional Guidelines for Organic and Inorganic Data Review*, December.

U.S. Environmental Protection Agency, 2002, *Region IX Preliminary Remediation Goals (PRGs)*, 1 November.

Figures

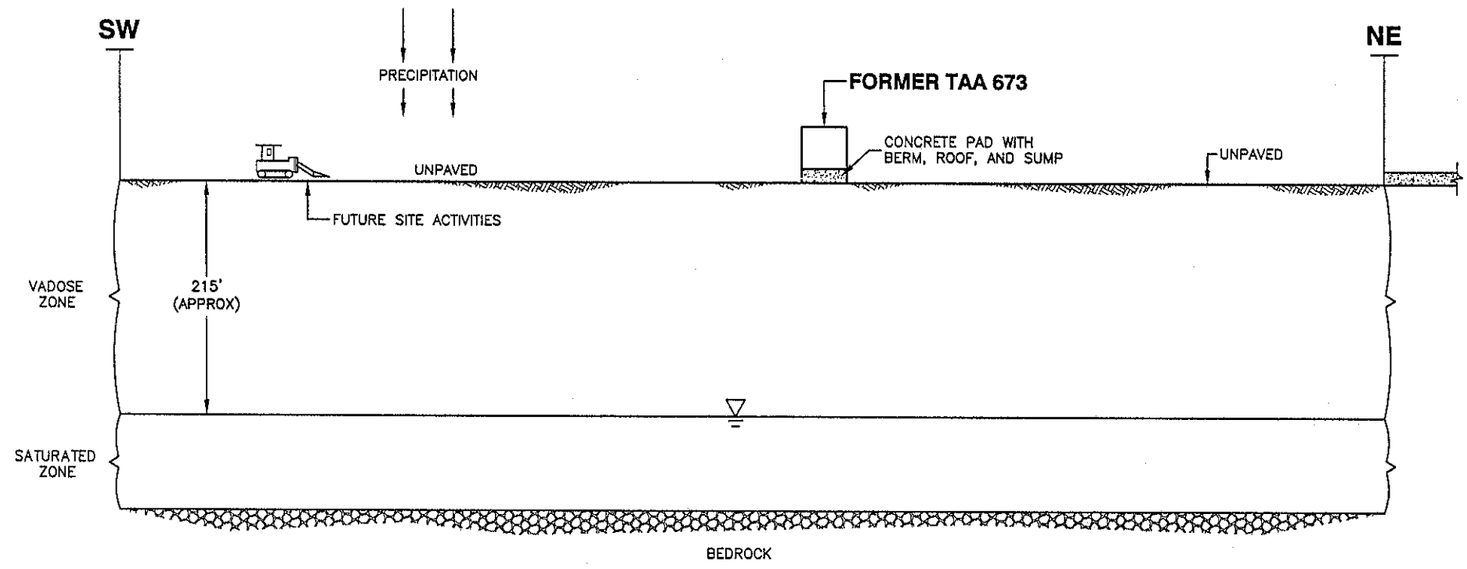

409
1791
UST 442
469
442
1719
1656
1655
1720
787
1565
E MARINE
3rd STREET
TAA 673
673
186A1
SUMP
RAMP
186H1
ASPHALT
673-T3
OWS 673A
XTAA 389A
XTAA 389B
1789
XTAA 390A
AST 390A
1517
1666
APHO 21
(SAIC 165)
APHO 20
(SAIC 164)
XTAA 772
AST 390B
TF390MW-01
TF390MW-03
UST 390B
UST 390A
390
TAA 390B
18_BGMW02E
18_BGMW02A
18_BGMW02C
18_BGMW02D
EL TORO BOULEVARD
OWS 762A
762
172
APHO 12
(SAIC 92)
LEGEND:
RFA 5' DEEP BORING
RFA 25' DEEP BORING
RFA 60' LONG, ANGLE BORING
GROUNDWATER MONITORING WELL
UNDERGROUND STORAGE TANK
TEMPORARY ACCUMULATION AREA (TAA)
SAIC ANOMALY SITE
EPA ANOMALY SITE
OIL/WATER SEPARATOR
ABOVE GROUND STORAGE TANK
N
GRAPHIC SCALE
0
50
100
200
(IN FEET)
Shaw
Shaw Environmental, Inc
EFA WEST
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CTO 24
FIGURE 1
LOCATION MAP
TAA 673
MARINE CORPS AIR STATION
EL TORO, CALIFORNIA
DRAWING NUMBER
81865340
APPROVED BY
CHECKED BY
1-16-03
DRAWN BY
MY
1-16-03
81865340.dwg
5/20/2003 3:53 PM



NORTHING	EASTING	FS	DESCRIPTION
2189092.16	6115818.32	386.98	RFA186A1
2189079.28	6115816.94		SB-A
2189081.49	6115831.22		SB-B

May 14, 2003 - 12:12:50 I:\IT CORP\EFA_West\818655\TAA673\818655A70.dwg

DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER	818655-A70
HDS	5/14/03	gD	5/14/03				



EXPLANATION:

RECEPTORS:

WORKERS

PATHWAYS:

GROUNDWATER

PRECIPITATION

REFERENCE:
103M2088.DWG

Shaw Environmental, Inc.

EFA WEST
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CTO 24

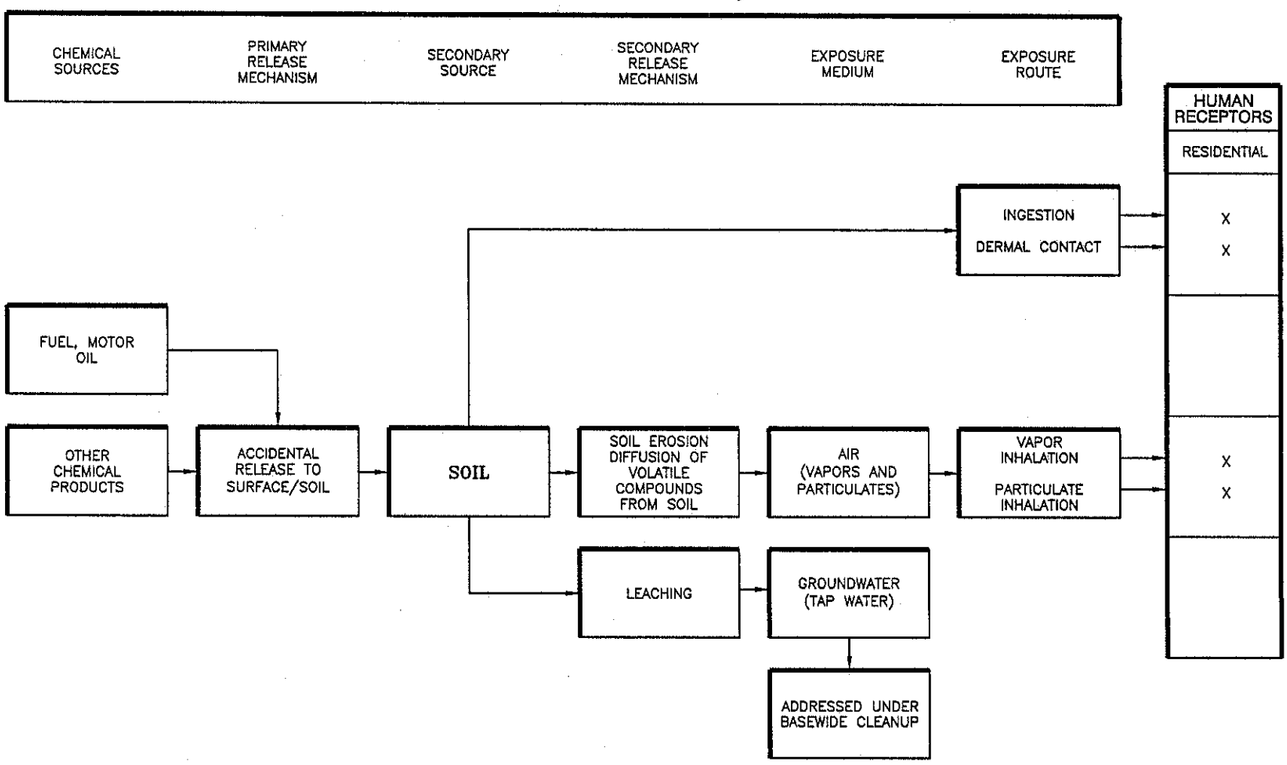
FIGURE 3

CONCEPTUAL SITE MODEL
FORMER TAA 673

MARINE CORPS AIR STATION
EL TORO, CALIFORNIA

May 14, 2003 - 12:14:08 I:\IT CORP\EFA_West\818655\TAA673\818655A69.dwg

DRAWN BY		CHECKED BY		APPROVED BY		DRAWING NUMBER	818655-A69
HDS	5/14/03	GD	5/14/03				



EXPLANATION:

X COMPLETE PATHWAY

REFERENCE:
103C2089.DXF

Shaw™
Shaw Environmental, Inc.

EFA WEST
SOUTHWEST DIVISION
NAVAL FACILITIES ENGINEERING COMMAND
CTO 24

FIGURE 4
POTENTIAL MIGRATION PATHWAYS, EXPOSURE ROUTES AND RECEPTORS
FORMER TAA 673
MARINE CORPS AIR STATION
EL TORO, CALIFORNIA

Tables

Table 1
Summary of Analytical Results for Confirmation Soil Samples — Former TAA 673

Sample Identification					818655-3255	818655-3256 (Dup)	818655-3257	818655-3216	818655-3217	818655-3218 (Dup)
Location Code					TAA673-SB-A	TAA673-SB-A	TAA673-SB-A	TAA673-SB-B	TAA673-SB-B	TAA673-SB-B
Date Sampled					04/02/2003	04/02/2003	04/02/2003	03/25/03	03/25/03	03/25/03
Depth (feet below ground surface)					1.5	2	3	1.5	3	3.5
	Unit	Background	PRG Residential	PRG Industrial						
TPH										
Diesel	mg/kg	NE	NE	NE	11 U	11 U	11 U	11 U	11 U	11 U
Gasoline	mg/kg	NE	NE	NE	10 U	9.7 U	10 U	8.9 U	9.5 U	9.4 U
PESTICIDES										
4,4'-DDD	mg/kg	0.0361	2.4	9.9	.0044 U	.0043 U	.0043 U	.0044 U	.0043 U	.0043 U
4,4'-DDE	mg/kg	0.145	1.7	7.0	.0044 U	.0043 U	.0043 U	.0044 U	.0043 U	.0043 U
4,4'-DDT	mg/kg	0.236	1.7	7.0	.0044 U	.0043 U	.0043 U	.0044 U	.0043 U	.0043 U
Aldrin	mg/kg	NE	0.029	0.10	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Alpha-BHC	mg/kg	NE	0.090	0.36	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Alpha-Chlordane	mg/kg	0.00224	NE	NE	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Beta-BHC	mg/kg	NE	0.32	1.3	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Delta-BHC	mg/kg	NE	NE	NE	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Dieldrin	mg/kg	0.0199	0.030	0.11	.0044 U	.0043 U	.0043 U	.0044 U	.0043 U	.0043 U
Endosulfan I	mg/kg	0.000179	370	3700	.0044 U B	.0043 U B	.0043 U B	.0044 U B	.0043 U B	.0043 U B
Endosulfan II	mg/kg	0.00222	NE	NE	.0044 U B	.0043 U B	.0043 U B	.0044 U B	.0043 U B	.0043 U B
Endosulfan Sulfate	mg/kg	0.0031	NE	NE	.0044 U B	.0043 U B	.0043 U B	.0044 U B	.0043 U B	.0043 U B
Endrin	mg/kg	0.00222	18	185	.0033 U B	.0032 U B	.0032 U B	.0033 U B	.0032 U B	.0032 U B
Endrin Aldehyde	mg/kg	0.00222	NE	NE	.0044 U B	.0043 U B	.0043 U B	.0044 U B	.0043 U B	.0043 U B
Endrin Ketone	mg/kg	NE	NE	NE	.0033 U	.0032 U	.0032 U	.0033 U	.0032 U	.0032 U
Gamma-BHC	mg/kg	NE	0.44	1.74	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Gamma-Chlordane	mg/kg	0.0027	NE	NE	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Heptachlor	mg/kg	NE	0.11	0.38	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Heptachlor Epoxide	mg/kg	NE	0.053	0.19	.0022 U	.0021 U	.0021 U	.0022 U	.0021 U	.0021 U
Methoxychlor	mg/kg	NE	300	3100	.022 U	.021 U	.021 U	.022 U	.021 U	.021 U
Toxaphene	mg/kg	NE	0.44	1.6	.11 U	.11 U	.11 U	.11 U	.11 U	.11 U
VOLATILES										
1,1,1-Trichloroethane	µg/kg	NE	1200000	1200000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
1,1,2,2-Tetrachloroethane	µg/kg	NE	410	930	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
1,1,2-Trichloroethane	µg/kg	NE	730	1600	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
1,1-Dichloroethane	µg/kg	NE	510000 <2800>	1700000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
1,1-Dichloroethene	µg/kg	NE	120000	410000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
1,2-Dichloroethane	µg/kg	NE	280	600	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
1,2-Dichloropropane	µg/kg	NE	340	740	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
2-Butanone	µg/kg	NE	7300000	27000000	51 U	48 U	50 U	45 U	48 U	42 U

Table 1
Summary of Analytical Results for Confirmation Soil Samples — Former TAA 673

Sample Identification					818655-3255	818655-3256 (Dup)	818655-3257	818655-3216	818655-3217	818655-3218 (Dup)
Location Code					TAA673-SB-A	TAA673-SB-A	TAA673-SB-A	TAA673-SB-B	TAA673-SB-B	TAA673-SB-B
Date Sampled					04/02/2003	04/02/2003	04/02/2003	03/25/03	03/25/03	03/25/03
Depth (feet below ground surface)					1.5	2	3	1.5	3	3.5
	Unit	Background	PRG Residential	PRG Industrial						
2-Chloroethyl Vinyl Ether	µg/kg	NE	NE	NE	51 U	48 U	50 U	45 U	48 U	42 U
2-Hexanone	µg/kg	NE	NE	NE	51 U	48 U	50 U	45 U	48 U	42 U
4-Methyl-2-Pentanone	µg/kg	NE	790000	2800000	51 U	48 U	50 U	45 U	48 U	42 U
Acetone	µg/kg	NE	1600000	6000000	19 J	15 J	16 J	19 J	18 J	15 J
Benzene	µg/kg	NE	600	1300	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Bromodichloromethane	µg/kg	NE	820	1800	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Bromoform	µg/kg	NE	62000	220000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Bromomethane	µg/kg	NE	3900	13000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Carbon Disulfide	µg/kg	NE	360000	720000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Carbon Tetrachloride	µg/kg	NE	250	550	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Chlorobenzene	µg/kg	NE	150000	530000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Chloroethane	µg/kg	NE	3000	6500	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Chloroform	µg/kg	NE	3600 <940>	12000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Chloromethane	µg/kg	NE	1200	2600	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Cis-1,2-Dichloroethene	µg/kg	NE	43000	150000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Cis-1,3-Dichloropropene	µg/kg	NE	780	1800	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Dibromochloromethane	µg/kg	NE	1100	2600	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Ethylbenzene	µg/kg	NE	8900	19000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Methyl Tert-Butyl Ether	µg/kg	NE	62000 <17000>	160000	10 U	9.5 U	9.9 U	9 U	9.6 U	8.5 U
Methylene Chloride	µg/kg	NE	9100	21000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Styrene	µg/kg	NE	1700000	1700000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Tetrachloroethene	µg/kg	NE	1500	3400	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Toluene	µg/kg	NE	520000	520000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Trans-1,2-Dichloroethene	µg/kg	NE	69000	230000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Trans-1,3-Dichloropropene	µg/kg	NE	780	1800	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Trichloroethene	µg/kg	NE	53	110	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Vinyl Acetate	µg/kg	NE	420000	1400000	51 U	48 U	50 U	45 U	48 U	42 U
Vinyl Chloride	µg/kg	NE	79	NE	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
Xylene, (Total)	µg/kg	NE	270000	420000	5.1 U	4.8 U	5 U	4.5 U	4.8 U	4.2 U
SEMI-VOLATILES										
1,2,4-Trichlorobenzene	µg/kg	NE	650000	3000000	360 U	350 U	350 U	360 U	350 U	350 U
1,2-Dichlorobenzene	µg/kg	NE	370000	370000	360 U	350 U	350 U	360 U	350 U	350 U
1,3-Dichlorobenzene	µg/kg	NE	16000	63000	360 U	350 U	350 U	360 U	350 U	350 U
1,4-Dichlorobenzene	µg/kg	NE	3400	7900	360 U	350 U	350 U	360 U	350 U	350 U

Table 1
Summary of Analytical Results for Confirmation Soil Samples — Former TAA 673

Sample Identification					818655-3255	818655-3256 (Dup)	818655-3257	818655-3216	818655-3217	818655-3218 (Dup)
Location Code					TAA673-SB-A	TAA673-SB-A	TAA673-SB-A	TAA673-SB-B	TAA673-SB-B	TAA673-SB-B
Date Sampled					04/02/2003	04/02/2003	04/02/2003	03/25/03	03/25/03	03/25/03
Depth (feet below ground surface)					1.5	2	3	1.5	3	3.5
	Unit	Background	PRG Residential	PRG Industrial						
2,4,5-Trichlorophenol	µg/kg	NE	6100000	62000000	910 U	890 U	890 U	910 U	890 U	890 U
2,4,6-Trichlorophenol	µg/kg	NE	6100 <6900>	62000	360 U	350 U	350 U	360 U	350 U	350 U
2,4-Dichlorophenol	µg/kg	NE	180000	1900000	360 U	350 U	350 U	360 U	350 U	350 U
2,4-Dimethylphenol	µg/kg	NE	1200000	12000000	360 U	350 U	350 U	360 U	350 U	350 U
2,4-Dinitrophenol	µg/kg	NE	120000	1200000	910 UJ	890 UJ	890 UJ	910 UJ	890 UJ	890 UJ
2,4-Dinitrotoluene	µg/kg	NE	120000	1200000	360 U	350 U	350 U	360 U	350 U	350 U
2,6-Dinitrotoluene	µg/kg	NE	61000	620000	360 U	350 U	350 U	360 U	350 U	350 U
2-Chloronaphthalene	µg/kg	NE	4900000	23000000	360 U	350 U	350 U	360 U	350 U	350 U
2-Chlorophenol	µg/kg	NE	63000	240000	360 U	350 U	350 U	360 U	350 U	350 U
2-Methylnaphthalene	µg/kg	NE	NE	NE	360 U	350 U	350 U	360 U	350 U	350 U
2-Methylphenol	µg/kg	NE	3000000	31000000	360 U	350 U	350 U	360 U	350 U	350 U
2-Nitroaniline	µg/kg	NE	1700	18000	910 U	890 U	890 U	910 U	890 U	890 U
2-Nitrophenol	µg/kg	NE	NE	NE	360 U	350 U	350 U	360 U	350 U	350 U
3,3'-Dichlorobenzidine	µg/kg	NE	1100	3800	360 U	350 U	350 U	360 U	350 U	350 U
3-Nitroaniline	µg/kg	NE	NE	NE	910 U	890 U	890 U	910 U	890 U	890 U
4,6-Dinitro-2-Methylphenol	µg/kg	NE	NE	NE	910 UJ	890 UJ	890 UJ	910 U	890 U	890 U
4-Bromophenyl Phenyl Ether	µg/kg	NE	NE	NE	360 U	350 U	350 U	360 U	350 U	350 U
4-Chloro-3-Methylphenol	µg/kg	NE	NE	NE	360 U	350 U	350 U	360 U	350 U	350 U
4-Chloroaniline	µg/kg	NE	240000	2500000	360 U	350 U	350 U	360 U	350 U	350 U
4-Chlorophenyl Phenyl Ether	µg/kg	NE	NE	NE	360 U	350 U	350 U	360 U	350 U	350 U
4-Methylphenol	µg/kg	NE	310000	3100000	360 U	350 U	350 U	360 U	350 U	350 U
4-Nitroaniline	µg/kg	NE	NE	NE	910 U	890 U	890 U	910 U	890 U	890 U
4-Nitrophenol	µg/kg	NE	NE	NE	910 U	890 U	890 U	910 U	890 U	890 U
Acenaphthene	µg/kg	NE	3700000	29000000	360 U	350 U	350 U	360 U	350 U	350 U
Acenaphthylene	µg/kg	NE	NE	NE	360 U	350 U	350 U	360 U	350 U	350 U
Anthracene	µg/kg	NE	22000000	100000000	360 U	350 U	350 U	360 U	350 U	350 U
Benzo(a)Anthracene	µg/kg	22	620	2100	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
Benzo(a)Pyrene	µg/kg	27	62	210	36 U B	35 U B	35 U B	36 U B	35 U B	35 U B
Benzo(b)Fluoranthene	µg/kg	28	620	2100	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
Benzo(ghi)Perylene	µg/kg	29	NE	NE	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
Benzo(k)Fluoranthene	µg/kg	24	6200 <380>	21000	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
Bis(2-Chloroethoxy)Methane	µg/kg	NE	NE	NE	360 U	350 U	350 U	360 U	350 U	350 U
Bis(2-Chloroethyl)Ether	µg/kg	NE	210	550	36 U	35 U	35 U	36 U	35 U	35 U
Bis(2-Chloroisopropyl)Ether	µg/kg	NE	2900	7400	360 U	350 U	350 U	360 U	350 U	350 U

Table 1
Summary of Analytical Results for Confirmation Soil Samples — Former TAA 673

Sample Identification					818655-3255	818655-3256 (Dup)	818655-3257	818655-3216	818655-3217	818655-3218 (Dup)
Location Code					TAA673-SB-A	TAA673-SB-A	TAA673-SB-A	TAA673-SB-B	TAA673-SB-B	TAA673-SB-B
Date Sampled					04/02/2003	04/02/2003	04/02/2003	03/25/03	03/25/03	03/25/03
Depth (feet below ground surface)					1.5	2	3	1.5	3	3.5
	Unit	Background	PRG Residential	PRG Industrial						
Bis(2-Ethylhexyl)Phthalate	µg/kg	NE	35000	120000	360 U	350 U	350 U	360 U	350 U	350 U
Butyl Benzyl Phthalate	µg/kg	NE	12000000	100000000	360 U	350 U	350 U	360 U	350 U	350 U
Chrysene	µg/kg	31	62000 <3900>	210000	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
Di-n-butyl phthalate	µg/kg	NE	6100000	62000000	360 U	350 U	350 U	360 U	350 U	350 U
Di-n-octyl phthalate	µg/kg	NE	2400000	25000000	360 U	350 U	350 U	360 U	350 U	350 U
Dibenzo(a,h)anthracene	µg/kg	8	62	210	36 U B	35 U B	35 U B	36 U B	35 U B	35 U B
Dibenzofuran	µg/kg	NE	290000	3100000	360 U	350 U	350 U	360 U	350 U	350 U
Diethyl phthalate	µg/kg	NE	49000000	100000000	360 U	350 U	350 U	360 U	350 U	350 U
Dimethyl phthalate	µg/kg	NE	100000000	100000000	360 U	350 U	350 U	360 U	350 U	350 U
Fluoranthene	µg/kg	45	2300000	22000000	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
Fluorene	µg/kg	NE	2700000	26000000	360 U	350 U	350 U	360 U	350 U	350 U
Hexachlorobenzene	µg/kg	NE	300	1100	82 U	80 U	80 U	82 U	81 U	80 U
Hexachlorobutadiene	µg/kg	NE	6200	22000	360 U	350 U	350 U	360 U	350 U	350 U
Hexachlorocyclopentadiene	µg/kg	NE	370000	3700000	360 UJ	350 UJ	350 UJ	360 U	350 U	350 U
Hexachloroethane	µg/kg	NE	35000	120000	360 U	350 U	350 U	360 U	350 U	350 U
Indeno(1,2,3-cd)Pyrene	µg/kg	21	620	2100	38 U B	37 U B	37 U B	38 U B	38 U B	37 U B
N-Nitroso-di-n-propylamine	µg/kg	NE	69	250	36 U	35 U	35 U	36 U	35 U	35 U
N-Nitrosodiphenylamine	µg/kg	NE	99000	350000	360 U	350 U	350 U	360 U	350 U	350 U
Naphthalene	µg/kg	NE	60000	190000	360 U	350 U	350 U	360 U	350 U	350 U
Nitrobenzene	µg/kg	NE	20000	100000	360 U	350 U	350 U	360 U	350 U	350 U
Pentachlorophenol	µg/kg	NE	3000	9000	220 U	210 U	210 U	220 U	210 U	210 U
Phenanthrene	µg/kg	18	NE	NE	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
Phenol	µg/kg	NE	37000000	100000000	360 U	350 U	350 U	360 U	350 U	350 U
Pyrene	µg/kg	41	2300000	29000000	360 U B	350 U B	350 U B	360 U B	350 U B	350 U B
METALS										
Aluminum	mg/kg	14800	76000	100000	8970 J	6620	6880	7570	6720	5570
Antimony	mg/kg	3.06	31	410	5 U B	5 U B	2.97 J	5.47 U B	5.37 U B	4.07 J B
Arsenic	mg/kg	6.86	0.39	1.6	2.56 YX	1.11 Y	1.18 Y	1.31 Y	1.41 Y	1.21 Y
Barium	mg/kg	173	5400	67000	46.1	35.6	33	54.2	45.5	39.1
Beryllium	mg/kg	0.669	150	1900	.322	.247	.251	.328	.271	.224
Cadmium	mg/kg	2.35	37 <1.7>	450	.533 U	.5 U	.5 U	.512 J	.537 U	.535 U
Calcium	mg/kg	46000	NE	NE	2010	1610	1790	2000	1750	1820
Chromium	mg/kg	26.9	210	450	5.84	4.44	3.96	6.81	6.41	5.19
Cobalt	mg/kg	6.98	900	1900	3.07	2.52	2.71	3.1	2.42	2.87

Table 1
Summary of Analytical Results for Confirmation Soil Samples — Former TAA 673

Sample Identification					818655-3255	818655-3256 (Dup)	818655-3257	818655-3216	818655-3217	818655-3218 (Dup)
Location Code					TAA673-SB-A	TAA673-SB-A	TAA673-SB-A	TAA673-SB-B	TAA673-SB-B	TAA673-SB-B
Date Sampled					04/02/2003	04/02/2003	04/02/2003	03/25/03	03/25/03	03/25/03
Depth (feet below ground surface)					1.5	2	3	1.5	3	3.5
	Unit	Background	PRG Residential	PRG Industrial						
Copper	mg/kg	10.5	3100	41000	4.48	3.05	4.03	5.35	4.44	3.47
Iron	mg/kg	18400	23000	100000	7990 J	6060	6150	7910	6750	5950
Lead	mg/kg	15.1	400 <150>	750	2.2	1.56	1.72	2.54	2.16	2.21
Magnesium	mg/kg	8370	NE	NE	2860	2220	2280	2860	2560	2270
Manganese	mg/kg	291	1800	19000	143	123	113	138	122	113
Mercury	mg/kg	0.22	NE	NE	.11 U	.107 U	.107 U	.109 U	.107 U	.107 U
Molybdenum	mg/kg	NE	390	5100	5 U	5 U	5 U	5.47 U	5.37 U	5.35 U
Nickel	mg/kg	15.3	1600	20000	3.78	2.9	2.8	4.89	4.45	3.66
Potassium	mg/kg	4890	NE	NE	2230	1750	1670	2260	1920	1630
Selenium	mg/kg	0.32	390	5100	1 U B	1 U B	1 U B	.467 U B	1.07 U B	1.07 U B
Silver	mg/kg	0.539	390	5100	2 U B	2 U B	2 U B	2.19 U B	2.15 U B	2.14 U B
Sodium	mg/kg	405	NE	NE	144	140	132	290 U	285	248
Thallium	mg/kg	0.42	5.2	67.0	.52 J B	1 U B	1 U B	.347 U B	1.07 U B	1.07 U B
Vanadium	mg/kg	71.8	550	7200	20.3	15.8	15.8	20	18.3	15.6
Zinc	mg/kg	77.9	23000	100000	24.4	18.6	17.7	24.3	23	18.1

Table 1
Summary of Analytical Results for Confirmation Soil Samples — Former TAA 673

B - result exceeds background
J - estimated value
M - modified
MCAS - Marine Corps Air Station
mg/kg - milligrams per kilogram
NE - not established
TPH - total petroleum hydrocarbons
U - not detected at or above the stated reporting limit
UJ - estimated reporting limit
X - result exceeds industrial PRGs
Y - result exceeds residential PRGs
µg/kg - micrograms per kilogram
< > - California preliminary remediation goal
** - Background level @ MCAS El Toro*

Table 2
Summary of Analytical Results for QC Samples — Former TAA 673

Sample Identification Location Code Date Sampled	Unit	818655-3223 Equipment Rinsate 03/25/03	818655-3215 Trip Blank 03/25/03	818655-3260 Equipment Rinsate 04/02/2003	818655-3254 Trip Blank 04/02/2003
TPH					
Diesel	mg/L	.094 U	NA	.094 U	NA
Gasoline	mg/L	.1 U	NA	.1 U	NA
PESTICIDES					
4,4'-DDD	µg/L	.19 U	NA	.19 U	NA
4,4'-DDE	µg/L	.19 U	NA	.19 U	NA
4,4'-DDT	µg/L	.19 U	NA	.19 U	NA
Aldrin	µg/L	.096 U	NA	.094 U	NA
Alpha-BHC	µg/L	.096 U	NA	.094 U	NA
Alpha-Chlordane	µg/L	.096 U	NA	.094 U	NA
Beta-BHC	µg/L	.096 U	NA	.094 U	NA
Delta-BHC	µg/L	.096 U	NA	.094 U	NA
Dieldrin	µg/L	.19 U	NA	.19 U	NA
Endosulfan I	µg/L	.096 U	NA	.094 U	NA
Endosulfan II	µg/L	.19 U	NA	.19 U	NA
Endosulfan Sulfate	µg/L	.19 U	NA	.19 U	NA
Endrin	µg/L	.096 U	NA	.094 U	NA
Endrin Aldehyde	µg/L	.19 U	NA	.19 U	NA
Endrin Ketone	µg/L	.096 U	NA	.094 U	NA
Gamma-BHC	µg/L	.096 U	NA	.094 U	NA
Gamma-Chlordane	µg/L	.096 U	NA	.094 U	NA
Heptachlor	µg/L	.096 U	NA	.094 U	NA
Heptachlor Epoxide	µg/L	.096 U	NA	.094 U	NA
Methoxychlor	µg/L	.96 U	NA	.94 U	NA
Toxaphene	µg/L	2.9 U	NA	2.8 U	NA
VOLATILES					
1,1,1-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2,2-Tetrachloroethane	µg/L	5 U	5 U	5 U	5 U
1,1,2-Trichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,1-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloroethane	µg/L	5 U	5 U	5 U	5 U
1,2-Dichloropropane	µg/L	5 U	5 U	5 U	5 U
2-Butanone	µg/L	50 U	50 U	50 U	50 U
2-Chloroethyl Vinyl Ether	µg/L	50 U	50 U	50 U	50 U

Table 2
Summary of Analytical Results for QC Samples — Former TAA 673

Sample Identification Location Code Date Sampled	Unit	818655-3223 Equipment Rinsate 03/25/03	818655-3215 Trip Blank 03/25/03	818655-3260 Equipment Rinsate 04/02/2003	818655-3254 Trip Blank 04/02/2003
2-Hexanone	µg/L	50 U	50 U	50 U	50 U
4-Methyl-2-Pentanone	µg/L	50 U	50 U	50 U	50 U
Acetone	µg/L	50 U	50 U	50 U	50 U
Benzene	µg/L	5 U	5 U	5 U	5 U
Bromodichloromethane	µg/L	5 U	5 U	5 U	5 U
Bromoform	µg/L	5 U	5 U	5 U	5 U
Bromomethane	µg/L	5 U	5 U	5 U	5 U
Carbon Disulfide	µg/L	5 U	5 U	5 U	5 U
Carbon Tetrachloride	µg/L	5 U	5 U	5 U	5 U
Chlorobenzene	µg/L	5 U	5 U	5 U	5 U
Chloroethane	µg/L	5 U	5 U	5 U	5 U
Chloroform	µg/L	5 U	5 U	5 U	5 U
Chloromethane	µg/L	5 U	5 U	5 U	5 U
Cis-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
Cis-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Dibromochloromethane	µg/L	5 U	5 U	5 U	5 U
Ethylbenzene	µg/L	5 U	5 U	5 U	5 U
Methyl Tert-Butyl Ether	µg/L	10 U	10 U	10 U	10 U
Methylene Chloride	µg/L	5 U	5 U	5 U	5 U
Styrene	µg/L	5 U	5 U	5 U	5 U
Tetrachloroethene	µg/L	5 U	5 U	5 U	5 U
Toluene	µg/L	5 U	5 U	5 U	5 U
Trans-1,2-Dichloroethene	µg/L	5 U	5 U	5 U	5 U
Trans-1,3-Dichloropropene	µg/L	5 U	5 U	5 U	5 U
Trichloroethene	µg/L	5 U	5 U	5 U	5 U
Vinyl Acetate	µg/L	50 U	50 U	50 U	50 U
Vinyl Chloride	µg/L	5 U	5 U	5 U	5 U
Xylene, (Total)	µg/L	5 U	5 U	5 U	5 U
SEMI-VOLATILES					
1,2,4-Trichlorobenzene	µg/L	9.6 U	NA	10 U	NA
1,2-Dichlorobenzene	µg/L	9.6 U	NA	10 U	NA
1,3-Dichlorobenzene	µg/L	9.6 U	NA	10 U	NA
1,4-Dichlorobenzene	µg/L	9.6 U	NA	10 U	NA
2,4,5-Trichlorophenol	µg/L	24 U	NA	25 U	NA
2,4,6-Trichlorophenol	µg/L	9.6 U	NA	10 U	NA

Table 2
Summary of Analytical Results for QC Samples — Former TAA 673

Sample Identification Location Code Date Sampled	Unit	818655-3223 Equipment Rinsate 03/25/03	818655-3215 Trip Blank 03/25/03	818655-3260 Equipment Rinsate 04/02/2003	818655-3254 Trip Blank 04/02/2003
2,4-Dichlorophenol	µg/L	9.6 U	NA	10 U	NA
2,4-Dimethylphenol	µg/L	9.6 U	NA	10 U	NA
2,4-Dinitrophenol	µg/L	24 UJ	NA	25 UJ	NA
2,4-Dinitrotoluene	µg/L	9.6 U	NA	10 U	NA
2,6-Dinitrotoluene	µg/L	9.6 U	NA	10 U	NA
2-Chloronaphthalene	µg/L	9.6 U	NA	10 U	NA
2-Chlorophenol	µg/L	9.6 U	NA	10 U	NA
2-Methylnaphthalene	µg/L	9.6 U	NA	10 U	NA
2-Methylphenol	µg/L	9.6 U	NA	10 U	NA
2-Nitroaniline	µg/L	24 U	NA	25 U	NA
2-Nitrophenol	µg/L	9.6 U	NA	10 U	NA
3,3'-Dichlorobenzidine	µg/L	9.6 U	NA	10 U	NA
3-Nitroaniline	µg/L	24 U	NA	25 U	NA
4,6-Dinitro-2-Methylphenol	µg/L	24 U	NA	25 U	NA
4-Bromophenyl Phenyl Ether	µg/L	9.6 U	NA	10 U	NA
4-Chloro-3-Methylphenol	µg/L	9.6 U	NA	10 U	NA
4-Chloroaniline	µg/L	9.6 U	NA	10 U	NA
4-Chlorophenyl Phenyl Ether	µg/L	9.6 U	NA	10 U	NA
4-Methylphenol	µg/L	9.6 U	NA	10 U	NA
4-Nitroaniline	µg/L	24 U	NA	25 U	NA
4-Nitrophenol	µg/L	24 U	NA	25 U	NA
Acenaphthene	µg/L	9.6 U	NA	10 U	NA
Acenaphthylene	µg/L	9.6 U	NA	10 U	NA
Anthracene	µg/L	9.6 U	NA	10 U	NA
Benzo(a)Anthracene	µg/L	9.6 U	NA	10 U	NA
Benzo(a)Pyrene	µg/L	9.6 U	NA	10 U	NA
Benzo(b)Fluoranthene	µg/L	9.6 U	NA	10 U	NA
Benzo(ghi)Perylene	µg/L	9.6 U	NA	10 U	NA
Benzo(k)Fluoranthene	µg/L	9.6 U	NA	10 U	NA
Bis(2-Chloroethoxy)Methane	µg/L	9.6 U	NA	10 U	NA
Bis(2-Chloroethyl)Ether	µg/L	9.6 U	NA	10 U	NA
Bis(2-Chloroisopropyl)Ether	µg/L	9.6 U	NA	10 U	NA
Bis(2-Ethylhexyl)Phthalate	µg/L	19 U	NA	20 U	NA
Butyl Benzyl Phthalate	µg/L	9.6 U	NA	10 U	NA
Chrysene	µg/L	9.6 U	NA	10 U	NA

Table 2
Summary of Analytical Results for QC Samples — Former TAA 673

Sample Identification Location Code Date Sampled	Unit	818655-3223 Equipment Rinsate 03/25/03	818655-3215 Trip Blank 03/25/03	818655-3260 Equipment Rinsate 04/02/2003	818655-3254 Trip Blank 04/02/2003
Di-n-butyl phthalate	µg/L	9.6 U	NA	10 U	NA
Di-n-octyl phthalate	µg/L	9.6 U	NA	10 U	NA
Dibenzo(a,h)anthracene	µg/L	9.6 U	NA	10 U	NA
Dibenzofuran	µg/L	9.6 U	NA	10 U	NA
Diethyl phthalate	µg/L	9.6 U	NA	10 U	NA
Dimethyl phthalate	µg/L	9.6 U	NA	10 U	NA
Fluoranthene	µg/L	9.6 U	NA	10 U	NA
Fluorene	µg/L	9.6 U	NA	10 U	NA
Hexachlorobenzene	µg/L	9.6 U	NA	10 U	NA
Hexachlorobutadiene	µg/L	9.6 U	NA	10 U	NA
Hexachlorocyclopentadiene	µg/L	9.6 UJ	NA	10 UJ	NA
Hexachloroethane	µg/L	9.6 U	NA	10 U	NA
Indeno(1,2,3-cd)Pyrene	µg/L	9.6 U	NA	10 U	NA
N-Nitroso-di-n-propylamine	µg/L	9.6 U	NA	10 U	NA
N-Nitrosodiphenylamine	µg/L	9.6 U	NA	10 U	NA
Naphthalene	µg/L	9.6 U	NA	10 U	NA
Nitrobenzene	µg/L	9.6 U	NA	10 U	NA
Pentachlorophenol	µg/L	9.6 U	NA	10 U	NA
Phenanthrene	µg/L	9.6 U	NA	10 U	NA
Phenol	µg/L	9.6 U	NA	10 U	NA
Pyrene	µg/L	9.6 U	NA	10 U	NA
METALS					
Aluminum	µg/L	500 U	NA	500 U	NA
Antimony	µg/L	500 U	NA	500 U	NA
Arsenic	µg/L	5 U	NA	5 U	NA
Barium	µg/L	100 U	NA	100 U	NA
Beryllium	µg/L	10 U	NA	10 U	NA
Cadmium	µg/L	5 U	NA	2.33 J	NA
Calcium	µg/L	101 J	NA	1000 U	NA
Chromium	µg/L	50 U	NA	50 U	NA
Cobalt	µg/L	50 U	NA	50 U	NA
Copper	µg/L	8.05 J	NA	50 U	NA
Iron	µg/L	33.5 J	NA	1000 U	NA
Lead	µg/L	5 U	NA	5 U	NA
Magnesium	µg/L	1000 U	NA	1000 U	NA

Table 2
Summary of Analytical Results for QC Samples — Former TAA 673

Sample Identification Location Code Date Sampled	Unit	818655-3223 Equipment Rinsate 03/25/03	818655-3215 Trip Blank 03/25/03	818655-3260 Equipment Rinsate 04/02/2003	818655-3254 Trip Blank 04/02/2003
Manganese	µg/L	20 U	NA	20 U	NA
Mercury	µg/L	.2 U	NA	.2 U	NA
Molybdenum	µg/L	100 U	NA	100 U	NA
Nickel	µg/L	150 U	NA	150 U	NA
Potassium	µg/L	5000 U	NA	5000 U	NA
Selenium	µg/L	5 U	NA	5 U	NA
Silver	µg/L	50 U	NA	50 U	NA
Sodium	µg/L	843 U	NA	133 U	NA
Thallium	µg/L	7.29 U	NA	10 U	NA
Vanadium	µg/L	100 U	NA	100 U	NA
Zinc	µg/L	20 U	NA	20 U	NA

Table 2
Summary of Analytical Results for QC Samples — Former TAA 673

J - estimated value
M - modified
MCAS - Marine Corps Air Station
mg/L - milligrams per liter
NE - not established
NA - not analyzed
QC -quality control
TPH - total petroleum hydrocarbons
U - not detected at or above the stated reporting limit
UJ - estimated reporting limit
µg/L - micrograms per liter

Table 3
Residential Risk Screening Worksheet for Soil
Former TAA 673

Detected Chemical	Maximum TAA 673 Soil Concentration (mg/kg)	MCAS El Toro Background Concentration[a] (mg/kg)	CANCER			NON-CANCER		
			Residential PRG[b] (mg/kg)	TAA 673 Maximum Ratio[c]	MCAS El Toro Background Ratio[d]	Residential PRG[e] (mg/kg)	TAA 673 Maximum Ratio[f]	MCAS El Toro Background Ratio[f]
Volatiles								
Acetone	0.019	NE	NE	NE	NE	1.6E+03	1.19E-05	NE
Metals								
Aluminum	8970	14800	NE	NE	NE	7.6E+04	1.18E-01	1.95E-01
Antimony	4.07	3.06	NE	NE	NE	3.1E+01	1.31E-01	9.87E-02
Arsenic	2.56	6.86	3.9E-01	6.56E+00	6.56E+00	2.2E+01	1.16E-01	3.12E-01
Barium	54.2	173	NE	NE	NE	5.4E+03	1.00E-02	3.20E-02
Beryllium	0.328	0.669	NE	NE	NE	1.5E+02	2.19E-03	4.46E-03
Cadmium	0.512	2.35	NE	NE	NE	3.7E+01	1.38E-02	6.35E-02
Chromium	6.81	26.9	2.1E+02	3.24E-02	3.24E-02	NE	NE	NE
Cobalt	3.1	6.98	9.0E+02	3.44E-03	3.44E-03	1.4E+03	2.21E-03	4.99E-03
Copper	5.35	10.5	NE	NE	NE	3.1E+03	1.73E-03	3.39E-03
Iron	7990	18400	NE	NE	NE	2.3E+04	3.47E-01	8.00E-01
Lead	2.54	15.1	NE	NE	NE	1.5E+02	1.69E-02	1.01E-01
Manganese	143	291	NE	NE	NE	1.8E+03	7.94E-02	1.62E-01
Nickel	4.89	15.3	NE	NE	NE	1.6E+03	3.06E-03	9.56E-03
Thallium	0.54	0.42	NE	NE	NE	5.2E+00	1.04E-01	8.08E-02
Vanadium	20.3	71.8	NE	NE	NE	5.5E+02	3.69E-02	1.31E-01
Zinc	24.4	77.9	NE	NE	NE	2.3E+04	1.06E-03	3.39E-03
Subtotal sum of ratios				6.60E+00	6.60E+00		6.19E-01	2.00E+00
MCAS EL TORO BACKGROUND RISK RATIOS			CANCER RISK		6.60E-06	NON-CANCER HAZARD INDEX		2.00
TAA 673 SUMMED RISK			CANCER RISK	6.60E-06		NON-CANCER HAZARD INDEX	0.62	
TAA 673 RISK LESS BACKGROUND RISK (NET RISK)			NET CANCER RISK	$<1 \times 10^{-6}$				

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

[b] Residential soil PRG for cancer from the EPA Region 9, November, 2002 list.

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

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

[e] Residential soil PRG for non-cancer from the EPA Region 9, November, 2002 list.

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

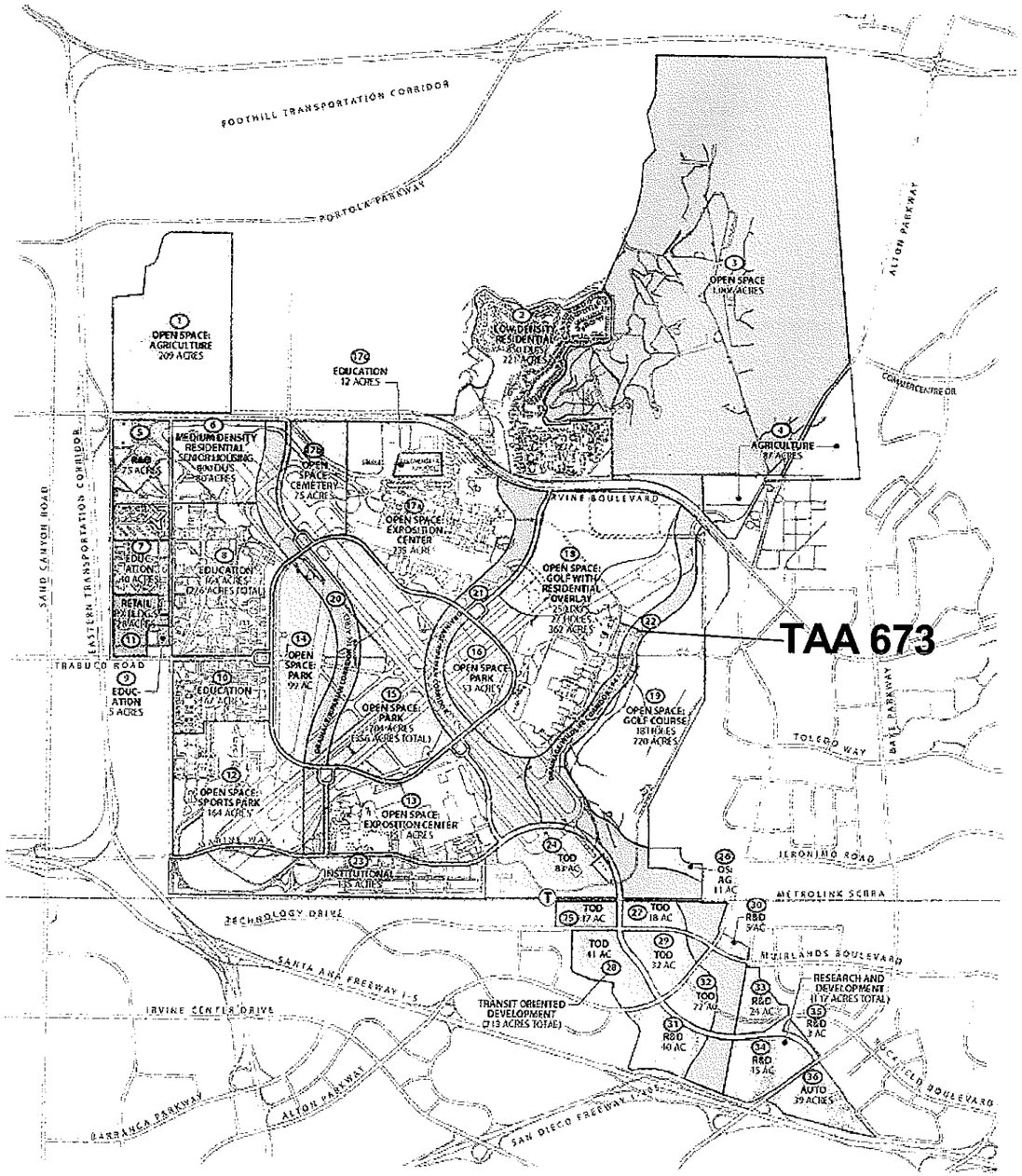
mg/kg - Milligrams per kilogram.

NE - Not established/No entry.

PRG - Preliminary remediation goal.

Maximum detected values used were taken from IT, 2002 and JEG, 1992 RFA soil borings.

Appendix A
Great Park Land Use Plan



Great Park Land Use Plan

The Orange County Great Park

June 12, 2002

Appendix B
RFA Background Information

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

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

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

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

In association with:
International Technology Corporation
CH2M HILL

M. W. Arends 7/16/93
Mike Arends, P.E. — Date
CLEAN Project Manager
CH2M HILL, Inc.

Raoul Portillo 15 July 1993
Raoul Portillo — Date
CLEAN Technical Reviewer
Jacobs Engineering Group Inc.

Evaluation Form
SWMU/Area of Concern
Number 186

Name: Hazardous Waste Storage Area 673T3

Location: East of Building 673

Size: 144 sq ft

Date of Site Visit: 02 May 1991

Period of Operation

Currently active

Evaluation Form
SWMU/Area of Concern
Number 186

Unit Characteristics

The HWSA 673T3 is located southeast of Building 673. The HWSA consists of a 12-ft x 12-ft concrete pad. The pad has concrete berms and an access ramp on the western side. A sump is located in the northwestern corner of the pad. The HWSA has an aluminum roof covering. An approximately 250-gallon waste oil bowser was stored in the HWSA along with numerous 55-gallon drums. The concrete pad and berm have many dark stains. It was evident that releases over the berm have occurred in the past. The HWSA is bordered on all four sides by asphalt pavement. The surrounding asphalt has many stains, especially near the southeastern and northwestern corners of the HWSA. Two full 55-gallon drums of unknown contents were present on the asphalt adjacent to the southeastern side of the concrete pad.

Waste Characteristics

Waste oil
Turbine shaft oil
Hydraulic fluid

Possible Migration Pathways

Soil

Evidence of Release

Stains on the concrete storage pad, berm, and asphalt pavement bordering the concrete pad

Exposure Potential

Authorized on-Station personnel

Recommendations

Drums of hazardous waste have historically been stored outside of this HWSA. Evidence of a release is indicated by the stains on the asphalt. It is not known if soil has been impacted by past releases. This HWSA is recommended for a sampling visit.

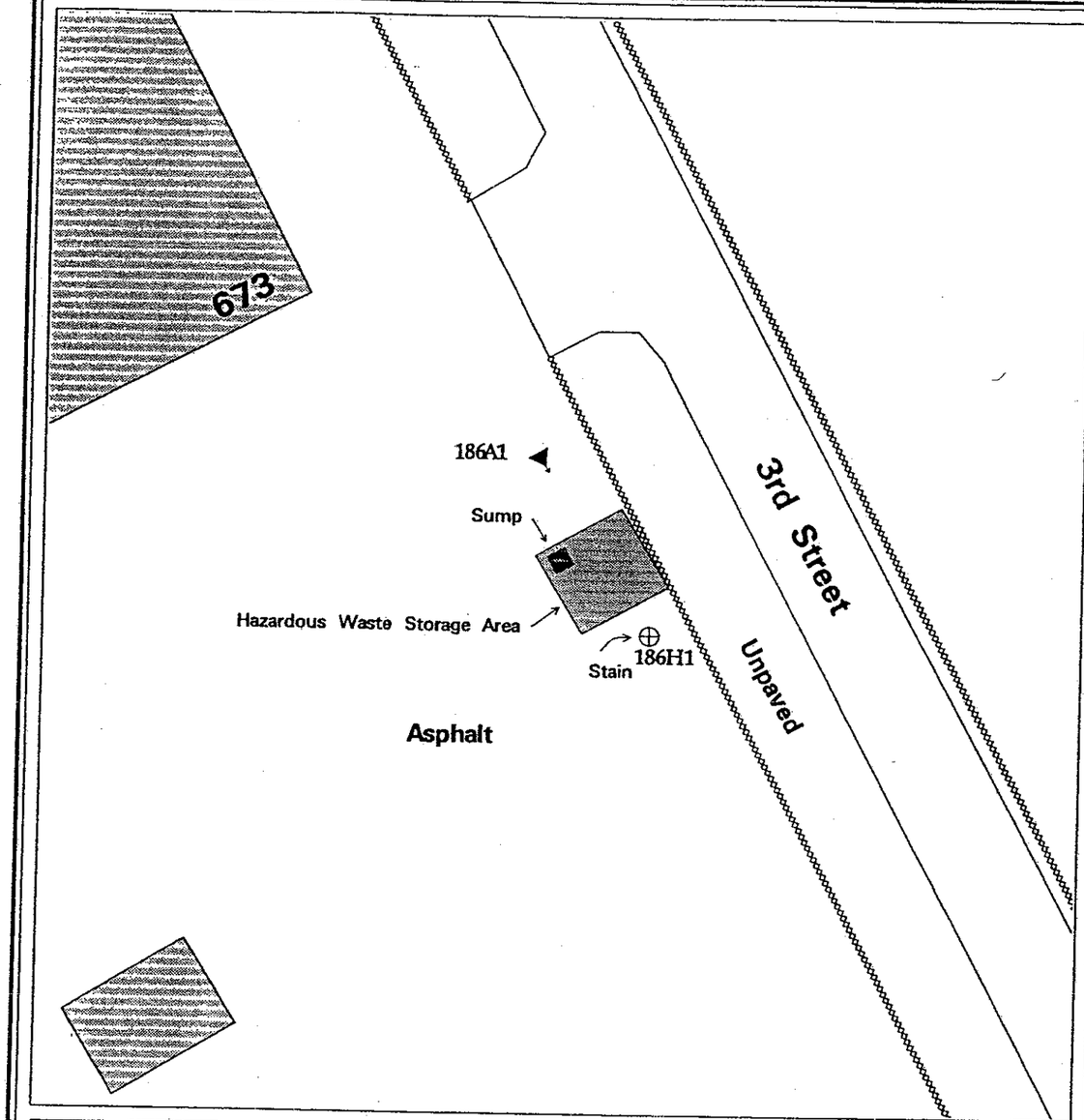


Figure 57 Sample Location Map

SWMU/AOC Number and Type:
186 - Hazardous Waste Storage Area

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

MCAS EL TORO RCRA FACILITY ASSESSMENT -- SAMPLING VISIT RESULTS

SWMU/AOC NUMBER	SWMU/AOC TYPE (FIGURE)	BORING NUMBER	SAMPLE DEPTH (FEET)	ANALYTICAL TEST RESULTS							RECOMMENDATIONS	
				TPH (mg/kg)	TFH (mg/kg)		VOCs (ug/kg)	SVOCs (ug/kg)	PESTICIDES/PCBs (ug/kg)	METALS (mg/kg)	Action	Rationale
					Gasoline	Diesel						
186	Hazardous Waste Storage Area (57)	A1	10	ND	ND	ND	Methylene Chloride-7 BJ * Acetone-8 BJ *	Diethylphthalate-47 J Di-n-butylphthalate-45 BJ *	ND	NAB	NFA	TPH/TFH < 100 ppm VOCs < CRDL SVOCs < CRDL Pest/PCB < CRDL Metals < BGT CRDL - Contract Required Detection Limit BGT - Background Threshold Value
			20	ND	ND	ND	Methylene Chloride-7 BJ * Acetone-8 BJ *	Diethylphthalate-40 J	ND	NAB		
			30	ND	ND	ND	Methylene Chloride-7 BJ * Acetone-8 BJ *	Diethylphthalate-40 J	ND	NAB		
			40	ND	ND	ND	Methylene Chloride-7 BJ * Acetone-8 BJ *	Diethylphthalate-37 J Di-n-butylphthalate-32 BJ *	ND	NAB		
			50	ND	ND	ND	Methylene Chloride-7 BJ *	Diethylphthalate-52 J	ND	NAB		
			60	ND	ND	ND	Methylene Chloride-9 BJ * Acetone-4 BJ *	Diethylphthalate-41 J	ND	NAB		
		H1	2	ND	ND	ND	Methylene Chloride-2 BJ * Acetone-6 BJ *	Di-n-butylphthalate-20 BJ * Bis(2-Ethylhexyl)phthalate-22 BJ * Naphthalene-87 J	ND	NAB		
			5	ND	ND	ND	Methylene Chloride-26 B * Toluene-2 J	Diethylphthalate-18 J Di-n-butylphthalate-24 J Bis(2-Ethylhexyl)phthalate-18 BJ *	Dieldrin-6.2 J	NAB		
			5 (Duplicate)	ND	ND	ND	Methylene Chloride-30 B * Toluene-1 J	Naphthalene-61 J	ND	NAB		

SWMU186.XLS

MCAS EL TORO RCRA FACILITY ASSESSMENT -- SAMPLING VISIT RESULTS

SWMU/AOC NUMBER	SWMU/AOC TYPE	BORING NUMBER	SAMPLE DEPTH (FEET)	ANALYTICAL TEST RESULTS: TPH (mg/kg)	TPH (mg/kg): Gasoline	TPH (mg/kg): Diesel	VOCs (ug/kg)	SVOCs (ug/kg)	PESTICIDES/PCBs (ug/kg)	METALS (mg/kg)	RECOMMENDATIONS: Action	RECOMMENDATIONS: Rationale
This column gives the SWMU/AOC number.	This column briefly describes the purpose or type of area sampled. (The Figure number associated with the SWMU/AOC is presented here. The figures are located in Appendix B.)	This column identifies the boring number, which consists of a letter and a number. The letters represent the following: H = Hand Auger B = 25-ft Vertical Boring A = 60-ft Angle Boring The numbers designate the boring number at the site.	Depth below the ground surface, in feet, at which the sample was collected. Duplicate samples are listed directly below the original samples.	Total petroleum hydrocarbon concentration, in mg/kg, as measured by Method 418.1. ND - Not detected above detection limit of Method 418.1. NA - Not analyzed for TPH.	Total fuel hydrocarbon concentrations in mg/kg, as measured by Method 8015 for diesel and for gasoline. ND - Not detected above detection limit of Method 8015. NA - Not analyzed for TFH. Z - Unknown hydrocarbons.		This column presents the Volatile Organic Compounds detected at each depth. The concentrations are presented in ug/kg. ND - No VOCs were detected above the CRDLs. If compounds are listed, then all other compounds not listed are below detection limks. Qualifiers are defined as follows: B = Analyte is found in associated blank as well as the sample. J = Indicates an estimated value. E = Compound may be above or below linear range of instrument. D = Indicates compound has been diluted to bring the concentration into linear range. X = Indicates the compound concentration has been manually modified or the EPA qualifier has been manually modified or added. * = Indicates compound was eliminated from further consideration due to laboratory contamination.	This column presents the Semivolatile Organic Compounds detected at each depth. The concentrations are presented in ug/kg. ND - No SVOCs were detected above the CRDLs. If compounds are listed, then all other compounds not listed are below detection limits. NA - Not analyzed for SVOCs. Qualifiers are defined as follows: B = Analyte is found in associated blank as well as the sample. J = Indicates an estimated value. E = Compound may be above or below linear range of instrument. D = Indicates compound has been diluted to bring the concentration into linear range. X = Indicates the compound concentration has been manually modified or the EPA qualifier has been manually modified or added. * = Indicates compound was eliminated from further consideration due to laboratory contamination.	This column presents the Pesticides/PCBs detected at each depth. The concentrations are presented in ug/kg. ND - No Pesticides/PCBs were detected above the CRDLs. If compounds are listed, then all other compounds not listed are below detection limits. NA - Not analyzed for Pesticides/PCBs Qualifiers are defined as follows: B = Analyte is found in associated blank as well as the sample. J = Indicates an estimated value. E = Compound may be above or below linear range of instrument. D = Indicates compound has been diluted to bring the concentration into linear range. C = Presence of compound has been confirmed by GC/MS analysis.	This column presents the results of the metals analyses. Concentrations are only presented if at least one sample is above background threshold concentrations. The concentrations are presented in mg/kg. NA - Indicates that samples were not analyzed for metals. NAB - Indicates that metals were analyzed, but concentrations are not above background threshold concentrations. Qualifiers are defined as follows: B = Reported value was less than the CRDL but greater than the IDL. E = Value was estimated due to interference. M = Duplicate injection precision not met. N = Spiked sample recovery not within control limits.	This column presents the recommended action for each site and describes the rationale that led to the recommendation. NFA = No Further Action. CRDL = Contract Required Limit. BGT = Background Threshold Value. ETM = El Toro Model. PRG = Preliminary Remedial Goals.	

CH2M HILL

PROJECT NUMBER	BORING NUMBER
LA070022.S0.10	186A-1 SHEET 1 OF 2

SOIL BORING LOG

PROJECT NAVY CLEAN RCRA FACILITY ASSESSMENT LOCATION MCAS-EL TORO

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

DRILLING METHOD AND EQUIPMENT HSA, 3-1/4 ID, 6-1/2 OD, INGERSOL-RAND TH-10

WATER LEVELS _____ START 10/19/92 FINISH 10/19/92 LOGGER A. GIMURTU

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY, SOIL STRUCTURE, MINERALOGY	COMMENTS: DEPTH OF CASING, DRILLING RATE, DRILLING FLUID LOSS, TESTS AND INSTRUMENTATION
					Surficial material consisting of 2 inch bituminous pavement and approximately 2 inches of subgrade stone. 1-2' SANDY SILT (ML), dark brown, moist, fine grained sand, clay present.	Start drilling at 09:00.
5.0						
10.0	10.0 – 12.0	1-MC	2.0	8-14-15-17	SILT (ML), reddish brown, moist, very stiff, some fine sand rich layers, distinctive remnant soil structure	Sample headspace 2.0 ppm with OVA and HNu from sleeve at 11.5 feet.
15.0						
20.0	20.0 – 22.0	2-MC	1.8	6-16-17-25	WELL GRADED SAND (SW), light brown to gray, moist, medium dense, sample grades coarser with depth.	Sample headspace 2.0 ppm with OVA and HNu from sleeve at 21.5 feet.
25.0						
30.0	30.0 – 32.0	3-MC	1.9	20-35-60-55	Similar to 2-MC, very dense.	Sample headspace 2.0 ppm with OVA and HNu from sample at 30.0 feet.

CH2M HILL

PROJECT NUMBER	BORING NUMBER
LA070022 S0.10	186A-1 SHEET 2 OF 2

SOIL BORING LOG

PROJECT NAVY CLEAN RCRA FACILITY ASSESSMENT LOCATION MCAS-EL TORO

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

DRILLING METHOD AND EQUIPMENT HSA, 3-1/4 ID, 6-1/2 OD, INGERSOL-RAND TH-10

WATER LEVELS _____ START 10/19/92 FINISH 10/19/92 LOGGER A. GIMURTU

DEPTH BELOW SURFACE (FT)	SAMPLE INTERVAL	SAMPLE TYPE AND NUMBER	SAMPLE RECOVERY (FT)	STANDARD PENETRATION TEST RESULTS 6"-6"-6" (N)	SOIL DESCRIPTION: SOIL NAME, USCS GROUP SYMBOL, COLOR, MOISTURE CONTENT, RELATIVE DENSITY OR CONSISTENCY SOIL STRUCTURE MINERALOGY	COMMENTS: DEPTH OF CASING, DRILLING RATE DRILLING FLUID LOSS TESTS AND INSTRUMENTATION
40.0	40.0–42.0	4-MC	1.9	15-26-35-40	Similar to 3-MC.	Sample headspace 3.0 ppm with OVA from sample at 41.5 feet
45.0						
50.0	50.0–52.0	5-MC	2.0	14-23-25-40	SILTY SAND (SM), brown moist, dense fine to medium grained.	Sample headspace 9.0 ppm with OVA from sample at 51.5 feet
55.0						
60.0	60.0–62.0	6-MC	1.8	14-100-100	Similar to 5-mc, very dense.	Sample headspace 1.0 ppm at 60.0 feet
65.0					Total Depth at 62.0 Feet.	

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

Contract No. N68711-92-D-4670

COMPREHENSIVE LONG-TERM ENVIRONMENTAL ACTION NAVY

CLEAN II

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

CTO-0065/0170

May 1996

Prepared by:

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

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

ACCUMULATION AREA EVALUATION CHECKLIST

(CIRCLE AS APPROPRIATE AND FILL IN COMPLETELY)

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

GENERAL DESCRIPTION:

SWMU #: **186** Accumulation Area (AA) #: **673**
Location (bldg): **HWSA/Bldg. 673**
Site Contact: **Leta Suarez** Ext: **2772**
Permission for Access? ~~Y~~ N If yes, explain:
Type of Wastes Observed: **None**

TYPE: (CIRCLE AS APPROPRIATE)

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

CONDITION:

~~Stain(s)~~ ~~Odor(s)~~ ~~Crack(s)~~
Placards/Labels: Y ~~N~~ If Yes, list: **Hazwaste**
Synthetic Grease
Cleaning Compound.
Observations: **Moderate oily stains. Typical parking lot type - not a candidate for decontamination. Roof over berm, sump in berm. Photo taken 12-14-94 shows possible response to spill in progress.**
Status: **Area clean and vacant as of 11-10-95.**

DIMENSIONS: (ESTIMATED SIZE OR AREA IN FT)

AA/SWMU: **10x10 ft.**
"Stain(s)": **Minor (8 sq. Ft.) Area clean as of 11/10/95**
Any Restrictions To Access?: **Fence to one side, roof and poles.**

EVALUATION OF REMOVAL/DECONTAMINATION STRATEGY (CIRCLE AS APPROPRIATE)

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

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

DATE/TIME OF SURVEILLANCE: 12-6-94/12:35
UPDATED: 11-10-95/13:35
SURVEILLANCE PERFORMED BY: Larry Bauman

PHOTO LOG

SWMU #: 186

PHOTO DATE: 12-14-94

Appendix C
Excerpts from SWPPP

STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

FOR

MARINE CORPS AIR STATION EL TORO
EL TORO, CALIFORNIA

CONTRACT NO. N68711-96-D-2059
DELIVERY ORDER NO. 0002

VOLUME 1

DECEMBER, 1996
INTEGRATED ENVIRONMENTAL MANAGEMENT, INC.

TABLE 5-39
MCAS EL TORO
SPILL HISTORY

Date	Incident No.	Description
November 28, 1995	N/A	Approximately 2 quarts of hydraulic fluid were lost on the roadway and shoulder when a forklift's hydraulic line was inadvertently punctured. A drip pan was placed under the leaking line to contain the leak and contaminated soil was removed and drummed as hazardous waste.
September 18, 1995	N/A	A one gallon container of liquid scale dissolver spilled when it was dropped by warehouse personnel. The spill was diked and absorbed with ash. Spill contained to the warehouse floor.
September 12, 1995	N/A	Three quarts of hydraulic fluid spilled onto the concrete warehouse floor when a forklift's fork punctured the stored material during issuance. Spilled cleaned up with speedy dry absorbent. Spill contained to the warehouse floor.
July 21, 1995	N/A	Approximately 80 gallons of JP-5 fuel spilled when a fuel truck attempted to fuel an aircraft with an open fuel cell. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
July 20, 1995	N/A	Approximately 10 gallons of JP-5 fuel spilled when an aircraft vented it's tanks. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
June 29, 1995	N/A	Approximately 70 gallons of JP-5 fuel spilled from an aircraft fuel tank with a dysfunctional valve. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
November 1, 1994	N/A	Approximately 400 gallons of JP-5 fuel leaked from an F/A-18 aircraft. Three hundred gallons were recovered and 100 gallons were cleaned up with speedy dry absorbent. Spill contained to the flightline.
November 1, 1994	N/A	Approximately 250 gallons of JP-5 fuel leaked from an F/A-18 aircraft. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
September 1, 1994	N/A	Approximately 1 gallon of hydrochloric acid and another gallon of chlorine spilled when

TABLE 5-39
MCAS EL TORO
SPILL HISTORY

Date	Incident No.	Description
		their lines ruptured. Pumping through the line was stopped immediately and the spill was cleaned up with sodium bicarbonate. Spill contained to the flightline.
August 12, 1994	N/A	A small amount of paint stripper (methylene chloride) from a 5 gallon can spilled when the can overheated and blew its cap. The small amount evaporated before cleanup could occur.
July 14, 1994	249777	Approximately 25 gallons of transformer oil, possibly containing more than 55 ppm PCBs, spilled when the personnel handling the transformer overturned it. The initial responders laid down absorbent socks, mats pads and Lite-Dri absorbent around the spill and on the liquid. Workers then removed and drummed soil from the spill area as hazardous waste. Cleanup began immediately on 14 July 94 and was completed 15 July 94. Additional hazardous waste included the absorbent materials, personal protective gear rags and mops used to cleanup the spill.
April 26, 1994	N/A	Approximately 100 gallons of JP-5 fuel spilled when an aircraft vented its tanks. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
March 8, 1994	N/A	Approximately 20 gallons of JP-5 fuel spilled when an aircraft was refueling. Spill cleaned up with speedy dry absorbent. Spill contained to the flightline.
May 11, 1993	318	Caustic soap leaked from a container behind Bldg. 317.
March 1, 1993	146	Approximately one quart of methyl ethyl ketone spilled to the ground at Bldg. 306.
September 9, 1992	873	Unknown quantity of fumigant released into the soil at Strawberry Field.
August 16, 1992	788	Fire occurred at Bldg. 751 with a van containing Hg, Li, Cd, and Pb-acid batteries. This caused a chemical release into the atmosphere.

TABLE 5-39
MCAS EL TORO
SPILL HISTORY

Date	Incident No.	Description
June 1, 1992	560	Approximately 3,950 gallons of JP-5 spilled from a refueler. Fuel was contained and did not enter storm drains.
May 28, 1992	552	JP-5 smell coming from storm drain at Bldg. 368. Flow from drain diverted to oil/water separators.
March 5, 1992	228	Three quarts of Hg spilled at Bldg. 297. The spill was contained.
March 5, 1992	223	Tractor trailer spilled 15-20 gallons of diesel fuel into sanitary sewer. Sewer system was diked and covered.
February 5, 1992	121	One gallon of transformer oil containing PCBs spilled at Bldg. 439. The spill was contained.
January 17, 1992	053	Approximately 100 gallons of antifreeze spilled into ditch and then to Agua Chinon.
December 18, 1991	1092	Lithium battery exploded at Bldg. 17. The debris was contained with some off-gassing.
November 19, 1991	997	Approximately 10 Lithium Batteries leaking and off-gassing at Bldg. 673T3.
September 16, 1991	754	Contaminated oil spilled into sewer at Bldg 295.
July 12, 1991	580	Paint stripper spilled into ditch near Bldg. 800. The spill was diverted to oil/water separator.
May 23, 1991	453	Unknown white substance found at Officer's Club crystal room.

A reference to a major spill is contained in the May 1990 SPCCP written for the MCAS. The SPCC states that "one major unauthorized release has occurred in the last two years. In August

Recommended BMPs are to replace wet washing of interior floors with dry sweeping. The oil/water separator diversion valves should be repaired if wash rack use is to be put back in service. The oil/water separator should then be routinely inspected and maintained in accordance with the manufacturer's specifications to ensure proper operation.

Building 673 - Aircraft Ground Support Equipment Shop - MALS-16

Industrial activities at this facility include vehicle maintenance. A concrete bermed wash rack with a canopy is located at the site and is served by an oil/water separator (#673). No diversion valves were observed and the discharge point of the oil/water separator is to the sanitary sewer. Potential pollutants include oil and grease. The building contains an indoor storage area which has a concrete secondary containment berm. An outdoor storage area with a concrete secondary containment berm and a canopy is located near Building 673.

Existing BMPs include a SPCCP, spill kits, and dry sweeping. Personnel should be trained in spill response techniques. No additional BMPs are recommended at this time.

Building 762 - Vehicle Wash Rack Utility Bldg - MWSG-37

This wash rack is adjacent to Building 390. Refer to the discussion of Building 390 for information about this wash rack.

5.10.3 Summary of Potential Pollutants

The following pollutants pose a potential threat to storm water quality in Drainage Basin 10.

aerosol	antifreeze	corrosives	hydraulic fuel
grease	paint	paint thinner	petrochemical products
vehicle wash waste	waste oils	diesel	unleaded gasoline
jet fuel			

TABLE 5-12
BASIN 10
SUMMARY OF BMPs

BLDG #	BASIN	BUILDING DESCRIPTION	TENANT	Concern Level	BMP STATUS	BMP #	BMP Description
172	10	Inert Storehouse	Vacant	Limited			No Additional BMPs Recommended
389	10	Loading/Unloading Ramp	Station	Concern	Rec	01	Personnel Education
					Rec	04	Spill Prevention, Control, Countermeasures Plans
					Rec	36	Place Spill Kit in Area
390	10	Golf Cart Shop	MWR	Concern	Rec	006	Construct Berm or Provide Secondary Containment
					Rec	009	Repair/Replace Oil/Water Separator Diversion Valve
					Rec	010	Perform Routine Maintenance for Oil/Water Separator
					Rec	011	Avoid/Minimize Hosing Down Sites
					Rec	029	Provide Regular Sweeping of Floor/Lot
416	10	Storage Building	FAA	Limited			No Additional BMPs Recommended
579	10	General Storage Shed	Installation	Limited			No Additional BMPs Recommended
627	10	Transmitter Building	Station	Limited			No Additional BMPs Recommended
673	10	Ground Support Equipment Shop	MALS-16	Concern	Rec	01	Educate Personnel
					Existing	04	Spill Prevention, Control, Countermeasures Plan
					Existing	06	Construct Berm or Provide Secondary Containment
					Existing	16	Properly Label and Store Waste
					Existing	36	Place Spill Kit in Area

Appendix D
Excerpts from HM/HWMP

Final

Marine Corps Air Station El Toro Hazardous Material/Hazardous Waste Management Plan

August 1994

Prepared for:

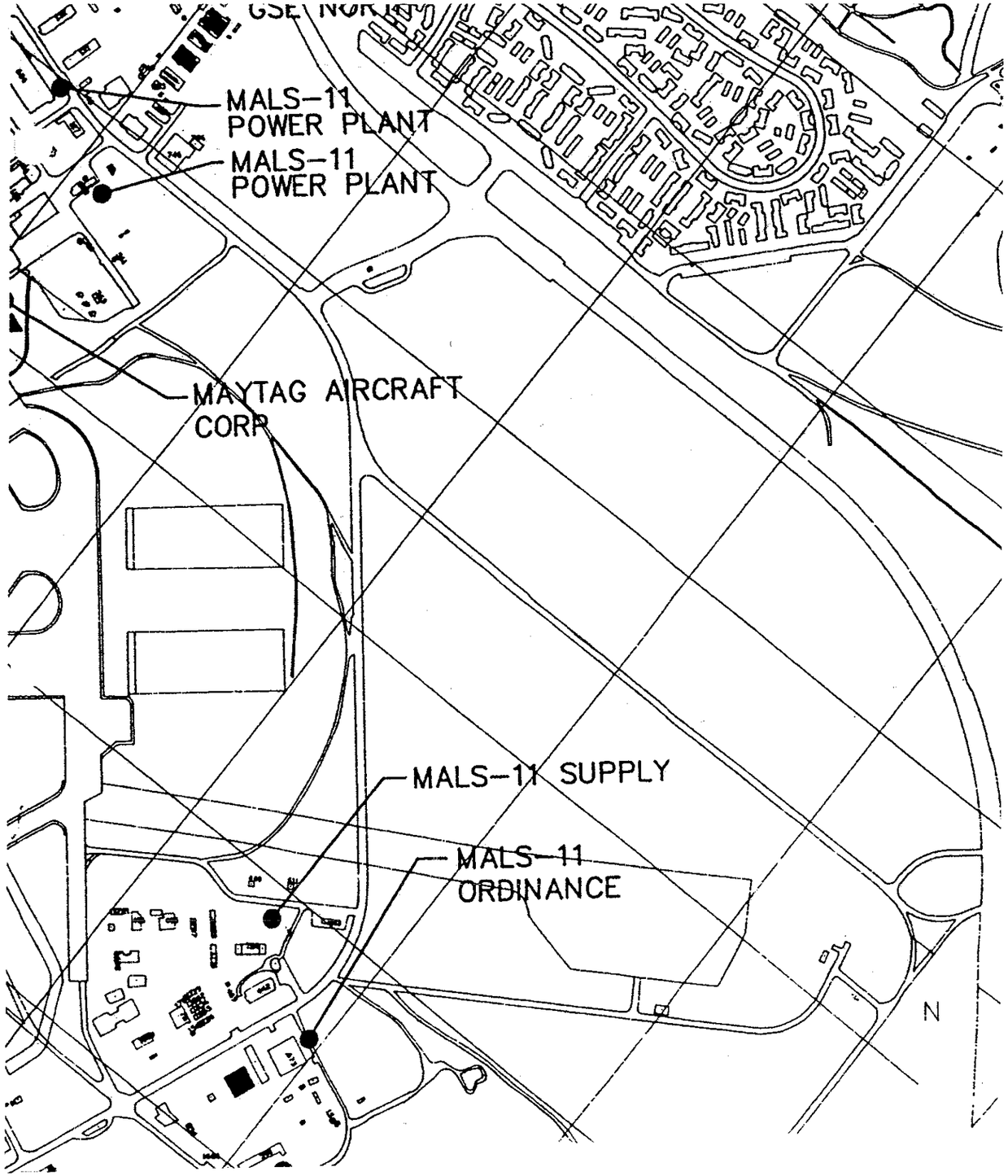
Southwest Division Naval Facilities Engineering Command
1220 Pacific Highway
San Diego, CA 92132-5190

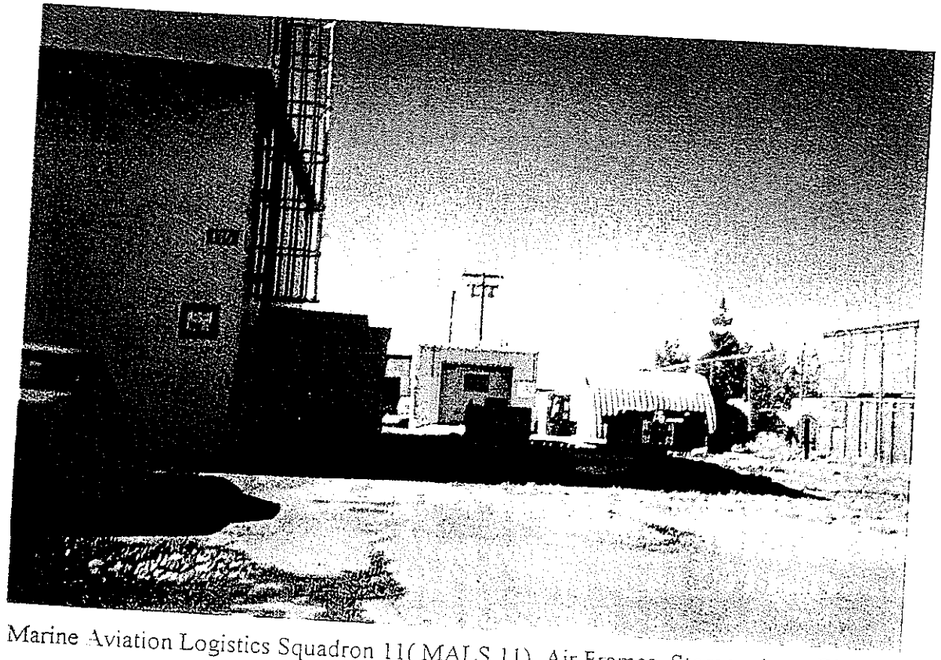
Prepared by:

Science Applications International Corporation
Engineering Sciences Division
10260 Campus Point Drive
San Diego, CA 92121

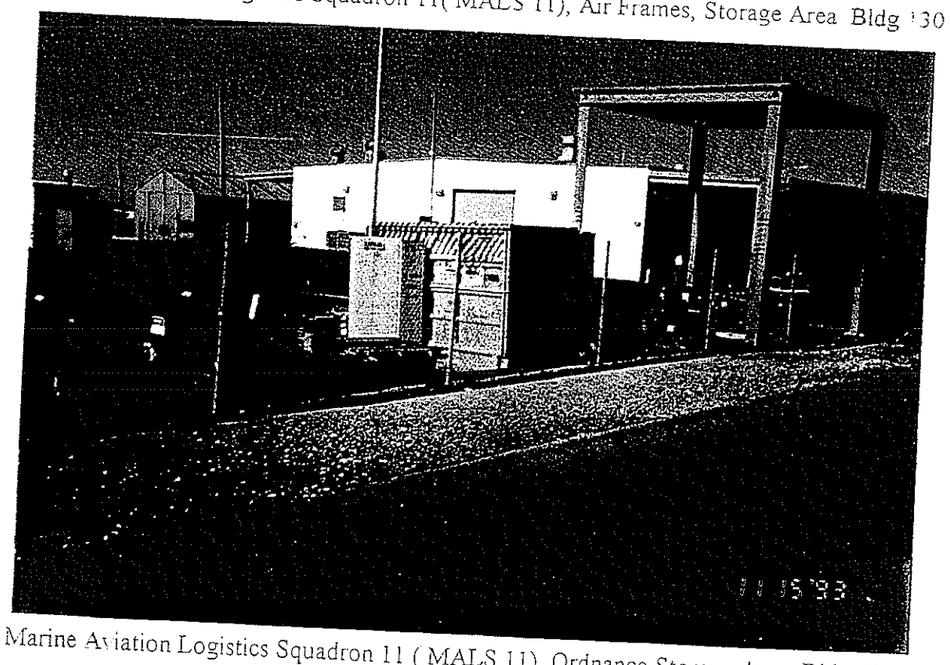
Contract No. N68711-92-D-4658
Delivery Order No. 0004

Hazardous Waste Accumulation Point Summary		
Unit	Bldg #	Coordinates
Aero Club	10	R5
Armory	744	O2
Auto Hobby Shop	626	M3
CSSD-14	388	U8
Environmental Above Ground Storage Tank	n/a	U6
FMD Shops, Bldg 1601	370	T6
Fuels Division	314	U9
H&HS 38	22	R4
MACG-38 MWCS 38	HGR 5	R4
MAG-46	51	O4
MAG-46 Fixed Wing	296	T9
MAG-46 Helo Mals-46	295	S8
MALS-11 Air Frames	130	M9
MALS-11 Avionics	856	Q12
MALS-11 Cryogenics (ALSS)	636	R12
MALS-11 GSE North	392	M9
MALS-11 Ordinance	673	P12
MALS-11 Power Plant	658	N10
MALS-11 Power Plant	634	N9
MALS-11 Supply	441	P12
Maytag Aircraft Corp	779	N10
MOD Team	115	N9
Motor Pool (G-4), Bldg 770	386	T7
MWHS-3	7	O5
MWR Auto #1	651	O2
MWR Golf Course	390	P13
MWSS-Utilities	31	S4
MWSS-373 HQ	800	U10
MWSS-373 Refuelers	671	U9
SOMS HQ	289	N5
SOMS Maintenance	HGR 2	O4
SOMS Recovery		
Supply	320	U7
VMFA (AW)-121	462	R11
VMFA (AW) 225	698	N9
VMFA (AW)-242	461	R11
VMFAT-101	371	Q10
VMFA-323	606	N8
VMGR-352	297	T8
VFMA-314	605	N7


MALS-11
POWER PLANT
MALS-11
POWER PLANT
MAYTAG AIRCRAFT
CORP
MALS-11 SUPPLY
MALS-11
ORDINANCE
N



Marine Aviation Logistics Squadron 11(MALS 11), Air Frames, Storage Area Bldg 130



Marine Aviation Logistics Squadron 11 (MALS 11), Ordnance Storage Area Bldg 673

Appendix E
Excerpts from EBS

MARINE CORPS AIR STATION EL TORO
EL TORO, CALIFORNIA
INSTALLATION RESTORATION PROGRAM
FINAL ENVIRONMENTAL
BASELINE SURVEY REPORT

01 April 1995

Revision 0

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

THROUGH:
CONTRACT #N68711-89-D-9296
CTO #284
DOCUMENT CONTROL NO.
CLE-C01-01F284-S2-9004

WITH:
Jacobs Engineering Group Inc.
401 West A Street, Suite 1905
San Diego, California 92101

In association with:
International Technology Corporation
CH2M HILL

M. W. Arends 3/31/95

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

Max Pan 3-31-95

Max Pan, P.E. — Date
CLEAN Technical Reviewer
IT Corporation

SCO100217CD.WPS\95\MA

Table 3-7
Less Than 90-Day Accumulation Area Inventory
MCAS El Toro EBS Report - April 1995

Database Tracking	Building Number	Status	SWMU/ AOC	Comments	AREA TYPE
SAA 441	441	Inactive	256	RFA recommended NFA	3
SAA 442	442	Inactive	126	Sampling Visit Not Recommended During PR/VSI	2
SAA 445	445	Inactive	127	Sampling Visit Not Recommended During PR/VSI	2
SAA 447	447	Inactive	130	RFA recommended NFA	3
SAA 456	456	Inactive	135	Sampling Visit Not Recommended During PR/VSI	2
SAA 461	461	Active	138	RFA recommended NFA (1)	2
SAA 462	462	Active	140	Sampling Visit Not Recommended During PR/VSI	2
SAA 529	529	Inactive	144	RFA recommended NFA	2
SAA 534	534	Inactive	146	Sampling Visit Not Recommended During PR/VSI	2
SAA 602	602	Inactive	147	RFA recommended NFA	3
SAA 605	605	Active	149	RFA recommended NFA	3
SAA 606	606	Active	255	RFA recommended NFA	2
SAA 626	626	Active	158	IRP Site 20 (1)	7
SAA 634	634	Active		Identified in 1994 SPCC Plan	7
SAA 636	636	Inactive	160	RFA recommended NFA	3
SAA 651	651	Active	165	Located within SWMU/AOC 164	3
SAA 658	658	Active	171	Shallow soil borings recommended	7
SAA 671	671	Active	172	RFA recommended NFA	2
SAA 672	672	Inactive	177	Sampling Visit Not Recommended During PR/VSI	2
SAA 673	673	Active	186	RFA recommended NFA	2
SAA 693	693	Active		Identified in Station's HW Open Drum Inspection Report	7
SAA 698	698	Active		Identified in 1994 SPCC Plan	7
SAA 744	744	Active		Identified in 1994 SPCC Plan	7
SAA 746	746	Active		Identified in Station's HW Open Drum Inspection Report	7
SAA 747	747	Actvie		Identified in Station's HW Open Drum Inspection Report	7
SAA 761	761	Inactive		Located at IRP Site 6 (2)	7
SAA 765	765	Inactive	266	Sampling Visit Not Recommended During PR/VSI	2
SAA 769	769	Inactive	222	RFA recommended NFA	2
SAA 770	770	Inactive	223	RFA recommended NFA	3
SAA 771	771	Inactive	224	RFA recommended NFA	2
SAA 772	772	Inactive	225	RFA recommended NFA	3
SAA 778	778	Inactive	226	RFA recommended NFA	3
SAA 779	779	Inactive	227	RFA recommended NFA	3
SAA 800	800	Active	229	RFA recommended NFA	2
SAA 831	831	Active		Identified in Station's HW Open Drum Inspection Report	7
SAA 856	856	Active	234	RFA recommended NFA	3
SAA 900	900	Active		Environmental Office accumulation area	7

Appendix F
MCAS, El Toro Plant Account Records

FACILITY NUMBER	PRIMARY USE	FACILITY NAME	ACQUISITION NAME	ACQUISITION DATE	AREA UNIT MEASURE	TOTAL AREA	LENGTH	WIDTH	HEIGHT	GOVERNMENT COST	CURRENT PLANT VALUE	YEAR BUILT	YEAR IMPROVED
1	61010	SQDN HQ-TELEPHONE CENTER	NOY5421	19430301	SF	15,768	208	107	22	$92,096	$1,151,426	1943	1988
2	21105	NOSE HANGAR	NOY5421	19430601	SF	10,370	85	122	27	$60,039	$580,354	1943	1989
3	14140	COMM MNT SHOP	NOY5421	19430101	SF	1,560	39	40	14	$7,808	$106,204	1943	1977
4	14140	ELEC/COMM MAINT SHOP	NOY5421	19430101	SF	1,560	40	39	14	$33,964	$137,722	1943	1990
5	21451	AUTO/ORGANIZATIONAL SHOP	NOY5421	19430101	SF	10,370	85	122	27	$53,015	$551,077	1943	1983
6	73020	PROVOST MARSHAL OFFICE	NOY5421	19430301	SF	9,226	156	91	44	$267,076	$2,416,721	1943	1990
7	44112	STRG/OUT OF STORES MARCOR	NOY5421	19430301	SF	10,370	85	122	27	$97,190	$1,167,438	1943	1985
8	44112	STORAGE	NOY5421	19430301	SF	1,560	40	39	14	$7,036	$95,704	1943	1980
9	44112	STORAGE	NOY5421	19421201	SF	1,560	39	40	14	$16,310	$118,701	1942	1982
10	74075	COMM/ELEC SHOP	NOY5421	19430301	SF	10,370	122	85	27	$50,672	$519,208	1943	1983
11	61072	SQUADRON HEADQUARTERS	NOY5421	19430301	SF	3,960	108	80	11	$21,999	$299,230	1943	1977
12	61072	GROUP HQ	NOY5421	19430301	SF	3,960	108	80	11	$23,229	$303,563	1943	1985
13	61072	GROUP HQ	NOY5421	19430301	SF	3,960	108	80	11	$23,669	$306,486	1943	1986
14	61072	SQDRN HD	NOY5421	19430301	SF	3,960	108	80	11	$22,887	$306,425	1943	1984
15	21710	STOREHOUSE/ELECTRONICS MAINT	NOY5421	19430301	SF	6,240	160	39	13	$23,428	$312,107	1943	1990
16	44112	STORAGE GROUP	NOY5421	19430301	SF	6,240	160	39	13	$17,692	$240,647	1943	1977
17	21710	ELEC MAINT SHOP	NOY5421	19430301	SF	6,240	160	39	13	$26,018	$305,882	1943	1981
19	61072	ADMIN OFF	NOY5421	19431101	SF	6,240	160	39	13	$20,464	$272,593	1943	1981
20	21871	STRG/OUT OF STORES MARCOR	NOY5421	19430301	SF	6,240	160	39	13	$16,105	$219,060	1943	1977
21	44135	STORAGE	NOY5421	19430301	SF	640	32	20	13	$4,372	$60,522	1943	
22	21710	ELECNX/COMMS MAINT SHOP	NOY5421	19430601	SF	6,240	160	39	13	$34,386	$281,323	1943	1984
23	44112	STORAGE	NOY5421	19431001	SF	6,240	160	39	13	$25,404	$236,267	1943	1989
25	21820	CARPENTRY SHOP	NOY5421	19430301	SF	6,240	160	39	13	$55,404	$258,359	1943	1984
26	21820	STORAGE OUT OF STORES	NOY5421	19430601	SF	6,240	160	39	13	$14,665	$199,473	1943	
27	61077	PMO ADMIN STORAGE	NOY5421	19430301	SF	6,240	160	39	13	$30,583	$246,383	1943	1986
28	21820	COMMUNICATION SHOP	NOY5421	19430101	SF	6,240	160	39	13	$20,206	$240,818	1943	1979
29	61010	STORAGE	NOY5421	19431201	SF	6,240	160	39	13	$66,492	$536,110	1943	1990
31	21820	AUTO MAINT FAC	NOY5421	19430301	SF	6,240	160	39	13	$33,092	$228,853	1943	1986
32	72411	BOQ W/O MESS	NOY5421	19430201	SF	7,740	144	30	22	$55,386	$558,495	1943	1986
33	72411	BOQ W/O MESS	NOY5421	19430201	SF	7,740	144	30	22	$60,725	$570,751	1943	1988
34	72411	OFFICERS BARRACKS	NOY5421	19430201	SF	7,740	144	30	22	$55,426	$558,549	1943	1986
35	72411	UOPH W/O MESS	NOY5421	19430201	SF	7,740	144	30	22	$44,185	$545,005	1943	1990
38	61010	ADMIN OFFICE	NOY5421	19430201	SF	9,390	132	108	14	$69,708	$948,168	1943	
46	61010	ADMIN OFFICE	NOY5421	19430301	SF	2,280	114	20	11	$20,537	$266,135	1943	1985
47	21820	ENGINE MAINTENANCE SHOP	NOY5421	19430301	SF	2,980	69	31	26	$55,374	$759,079	1943	1985
48	61072	FIIU HEADQUARTERS	NOY5421	19430201	SF	5,148	132	39	14	$42,074	$401,692	1943	1986
49	44112	TRAINING BLDG/RESERVES		19430601	SF	21,956	165	168	27	$95,913	$1,025,869	1943	1983
50	17110	RESERVE TRAINING BLDG	NOY5421	19430601	SF	6,240	160	39	13	$20,766	$260,215	1943	1979
51	21451	RESERVE TRAINING BLDG	NOY5421	19430601	SF	6,240	160	39	15	$25,095	$344,328	1943	1977
52	44112	STOREHOUSE	NOY5421	19430601	SF	4,224	100	66	21	$19,727	$268,327	1943	
53	17110	GROUND SAFETY	NOY5421	19430601	SF	4,036	109	39	37	$18,881	$250,559	1943	1990
54	61040	LAW CENTER	NOY5421	19430301	SF	11,374	170	120	11	$298,101	$2,773,006	1943	1990
56	61072	TRNG/ELEC COMM/GRD SAFETY	NOY5421	19430301	SF	11,528	168	99	14	$133,343	$1,160,364	1943	1990
57	74089	BATHHOUSE	NOY5421	19430301	SF	9,310	111	70	17	$121,087	$1,549,313	1943	1988
58	61010	JOINT RECEPTION CENTER	NOY5421	19430301	SF	30,610	202	144	21	$422,673	$2,189,283	1943	1990
59	61010	ADMINISTRATIVE OFFICES	NOY5421	19430601	SF	5,696	140	46	10	$82,106	$1,116,806	1943	
60	61072	RESERVE SUPPORT UNIT	NOY5421	19431001	SF	5,376	168	32	9	$162,641	$511,066	1943	1988
156	84140	WATER PRESSURE TANK	NOY5421	19430101	SY	0	54	0	0	$7,000	$96,047	1943	
174	84140	STORAGE TANK GRND POT	NOY5421	19430115	SY	0	0	0	16	$50,100	$693,534	1943	
175	84140	STORAGE TANK GRND POT	NOY5421	19430115	SY	0	0	0	16	$50,100	$693,534	1943	
FT176	12430	AVGAS STORAGE TANK	NOY5421	19430601	SY	0	0	24	8	$5,420	$75,029	1943	

BB312	74081	CABIN-BIG BEAR		19740701	SF	504	24	21	12	$7,500	$25,403	1971	
BB313	74081	CABIN-BIG BEAR		19740701	SF	504	24	21	12	$7,500	$25,403	1971	
BB314	74081	CABIN-BIG BEAR		19740701	SF	504	24	21	12	$7,500	$25,403	1971	
BB315	74081	CABIN-BIG BEAR		19740701	SF	504	24	21	12	$7,500	$25,403	1971	
BB316	74081	CABIN-BIG BEAR		19740701	SF	504	24	21	12	$7,500	$25,403	1971	
BB317	74081	CABIN-BIG BEAR		19740701	SF	504	24	21	12	$7,500	$25,403	1971	
BB318	74081	CABIN-BIG BEAR		19740701	SF	504	24	21	12	$7,500	$25,403	1971	
	81212	TACC SUPPORT FACILITIES	N6247474C1283	19740501		0	0	0	0	$12,189	$32,130	1974	
686	74079	RIDING STABLE-TACK-LOCKER		19740901	SF	2,500	100	25	8	$12,000	$31,632	1974	
687	73075	PUBLIC TOILET		19740901	SF	176	22	8	8	$3,773	$9,946	1974	
	75036	TV DISTRIBUTION SYSTEM	N6247472C0078	19750301	SY	0	0	0	0	$83,209	$230,073	1973	
688	13135	RECEIVER BUILDING	N6247472C0078	19750301	SF	144	12	12	8	$20,121	$55,635	1973	
689	75035	ACTIVITY TV RECVR ANTENNA	N6247472C0078	19750301	SY	0	0	0	60	$4,500	$12,443	1973	
684	17120	EJECTION SEAT TRNG BLDG	N6247473C3502	19750301	SF	804	42	22	24	$40,564	$106,927	1974	
	13620	PARKING & SERVICE AREA LITNG	N6247471C4282	19721101	SY	0	0	0	0	$69,793	$105,146	1972	1988
	81240	SECURITY LIGHTING		19731101		0	0	0	0	$319,481	$476,195	1973	1989
	86020	AMMO AREA ALARM SYSTEM	N6247473C5496	19731101		0	0	0	0	$5,725	$15,830	1973	
682	73025	SENTRY HOUSE	N6247473C5496	19731101	SF	200	20	10	7	$3,944	$9,922	1973	1990
676	71477	COMMUNITY STRG (MISC)	N6247473C3486	19730301	SF	1,750	50	35	10	$8,930	$24,691	1973	
660	72111	UEPH	N6247471C4047	19730201	SF	51,347	226	94	29	$1,375,414	$3,762,585	1973	1988
661	72111	UEPH	N6247471C4047	19730201	SF	51,347	226	94	29	$1,375,414	$3,762,585	1973	1988
662	82109	HEATING PLANT BUILDING	N6247471C4047	19730201	SF	546	26	21	12	$37,514	$95,446	1973	1983
	81212	TRANSFORMER STATION	N6247471C4047	19730201		0	0	0	0	$16,157	$44,674	1973	
	82226	HOT WATER LINES	N6247471C4047	19730201		0	0	0	0	$19,950	$55,162	1973	
692	61030	CLASS MTTER DESTRCTN BLDG	N6247475C5501	19750101	SF	120	12	10	8	$9,110	$22,101	1975	
666	72111	UEPH	N6247471C4800	19731001	SF	33,984	236	48	28	$987,526	$2,686,517	1973	1986
667	72111	UEPH	N6247471C4800	19731001	SF	33,984	236	48	28	$1,001,431	$2,703,467	1973	1988
668	72113	ENLISTED BARRACKS	N6247471C4800	19731001	SF	33,984	236	48	28	$992,691	$2,692,860	1973	1988
669	72111	UEPH	N6247471C4800	19731001	SF	33,984	236	48	28	$994,477	$2,694,991	1973	1988
670	82320	GAS STORAGE TANK	N6247471C4800	19731001	SY	0	0	0	0	$9,687	$26,785	1973	
	81212	SUBSTATION	N6247471C4800	19731001		0	0	0	0	$5,404	$14,942	1973	
658	21181	TURBOJET ENGINE TEST FAC	N6247470C0835	19720401	SF	2,894	99	37	39	$811,194	$2,306,239	1972	1990
659	84440	WATER STORAGE TANK NON POTBL	N6247470C0835	19720401	SY	0	0	0	0	$10,600	$33,475	1972	
FT699	12430	A/C READY FUEL STORAGE	N6247470C0835	19720401	SY	0	0	0	0	$37,970	$119,909	1972	
695	21115	LINE MAINTENANCE SHELTER		19750701	SF	900	50	20	9	$21,082	$40,999	1975	1990
696	21115	LINE MAINTENANCE SHELTER		19750601	SF	900	50	20	9	$11,627	$27,509	1975	1979
697	21115	LINE MAINTENANCE SHELTER		19750901	SF	900	50	20	9	$10,396	$24,826	1975	
698	21115	LINE MAINTENANCE SHELTER		19751001	SF	900	50	20	9	$11,833	$26,322	1975	1984
700	12315	FILLING STATION C-POOL		19751101	SF	36	6	6	8	$10,636	$23,914	1975	1985
701	69010	FLAGPOLE		19751101	SY	0	0	0	30	$339	$810	1975	
703	75010	TENNIS COURT		19760301	SY	0	194	121	0	$69,250	$119,782	1976	1982
704	75010	BASKETBALL/VOLLEYBALL COURTS		19751201	SY	0	170	73	0	$23,500	$48,043	1975	1982
	13645	WHEELS UP/WAVEOFF LIGHTG	N6247475C55	19760401	SY	0	0	0	0	$83,804	$189,397	1976	
673	21860	GROUND SUPPORT EQUIPMENT FAC	N6247472C0204	19740201	SF	13,800	115	120	16	$271,121	$697,617	1974	1990
6200	71170	SAN JOAQUIN HSG-EM 2 FAMILY	N6247471C4170	19731001	SF	2,800	68	59	11	$34,765	$96,125	1973	
6201	71170	SAN JOAQUIN HSG-EM	N6247471C4170	19731001	SF	2,004	71	40	12	$17,388	$48,078	1973	
6202	71170	SAN JOAQUIN HSG-EM 2 FAMILY	N6247471C4170	19731001	SF	2,800	68	59	11	$34,765	$96,125	1973	
6203	71170	SAN JOAQUIN HSG-EM	N6247471C4170	19731001	SF	2,004	71	40	12	$17,388	$48,078	1973	
6204	71170	SAN JOAQUIN HSG-EM	N6247471C4170	19731001	SF	2,004	71	40	12	$17,388	$48,078	1973	
6205	71170	SAN JOAQUIN HSG-EM 2 FAMILY	N6247471C4170	19731001	SF	2,800	68	59	11	$34,765	$96,125	1973	
6206	71170	SAN JOAQUIN HSG-EM	N6247471C4170	19731001	SF	2,004	71	40	12	$17,388	$48,078	1973	
6207	71170	SAN JOAQUIN HSG-EM 2 FAMILY	N6247471C4170	19731001	SF	2,800	68	59	11	$34,765	$96,125	1973	
6208	71170	SAN JOAQUIN HSG-EM	N6247471C4170	19731001	SF	2,004	71	40	12	$17,389	$48,081	1973	

Appendix G
Photolog

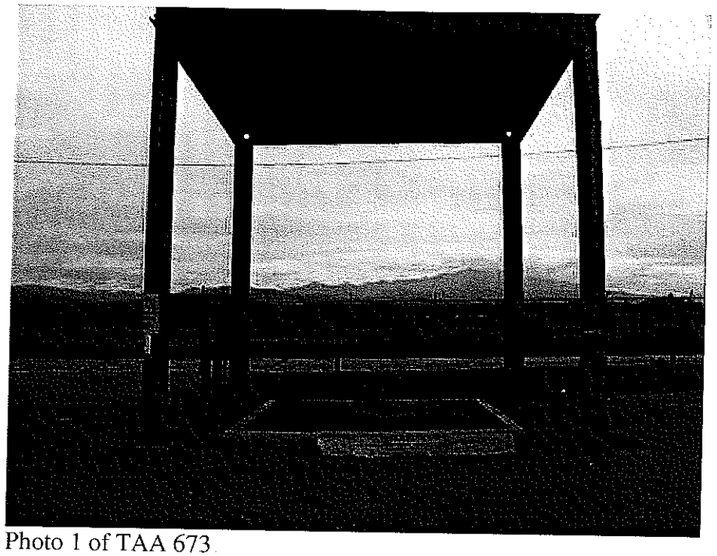


Photo 1 of TAA 673

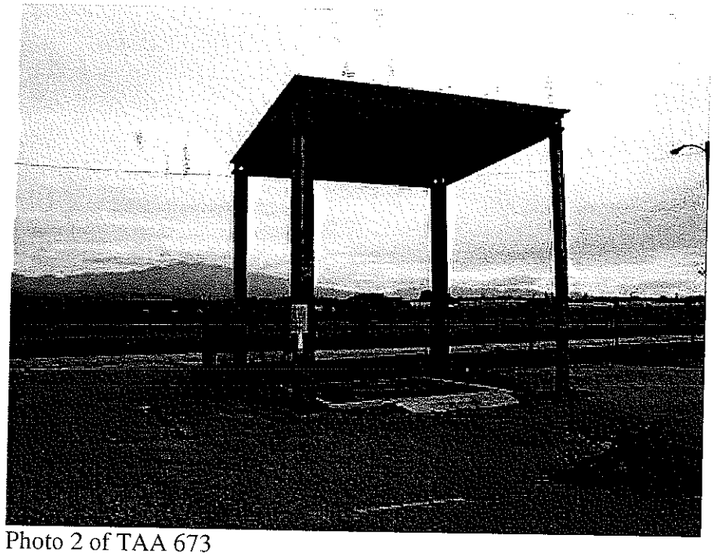
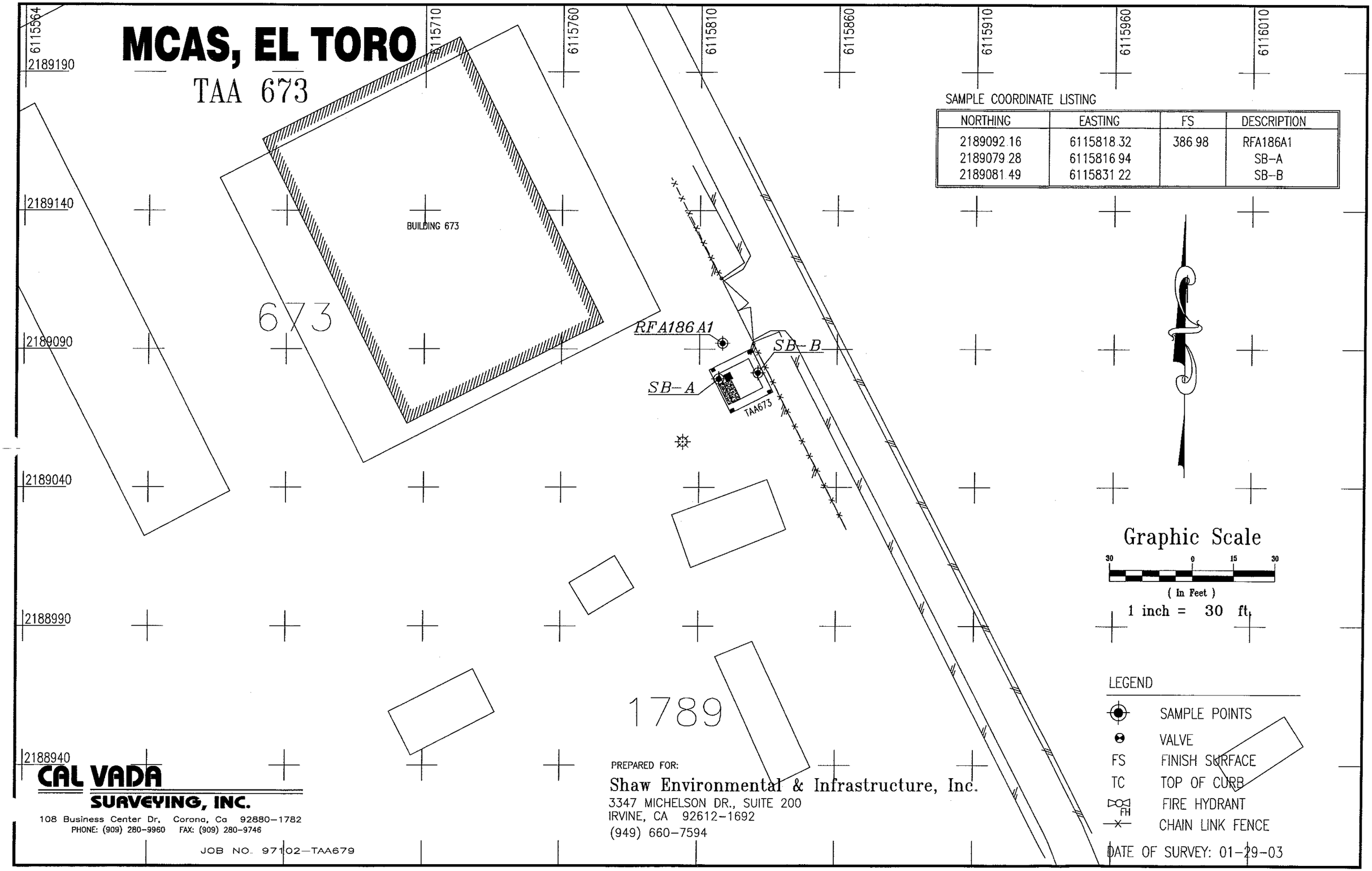


Photo 2 of TAA 673

Appendix H
Land Survey Data

MCAS, EL TORO

TAA 673



SAMPLE COORDINATE LISTING

NORTHING	EASTING	FS	DESCRIPTION
2189092.16	6115818.32	386.98	RFA186A1
2189079.28	6115816.94		SB-A
2189081.49	6115831.22		SB-B

CAL VADA SURVEYING, INC.
108 Business Center Dr. Corona, Ca 92880-1782
PHONE: (909) 280-9960 FAX: (909) 280-9746

JOB NO. 97102-TAA679

PREPARED FOR:
Shaw Environmental & Infrastructure, Inc.
3347 MICHELSON DR., SUITE 200
IRVINE, CA 92612-1692
(949) 660-7594

DATE OF SURVEY: 01-29-03

Appendix I
Analytical Report

the i group

IT Corporation
2790 Mosside Blvd.
Monroeville, PA 15146-2792
(412)372-7701

CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY

A 15873

FORM 0019 REV. 9-99

IT'S LAB COORDINATOR: Lynn Jefferson	LAB COORDINATOR'S PHONE: 949-660-7537	LAB COORDINATOR'S FAX: 949-475-5433	LABORATORY SERVICE ID: 03-C131	LABORATORY CONTACT: Yc Myint	MAIL REPORT (COMPANY NAME): Shaw E&I
PROJECT NAME: MCAS El Toro	PROJECT LOCATION: MCAS El Toro, CA	PROJECT NUMBER: 818655	LABORATORY PHONE: 310-618-8889	LABORATORY FAX: 310-618-0218	RECIPIENT NAME: Dwayne Ishida
PROJECT CONTACT: Dhananjay Rawal	PROJECT PHONE NUMBER: 949-660-7576	PROJECT FAX: 949-474-8309	LABORATORY ADDRESS: 1835 W. 205th St.		ADDRESS: 3347 Micheison Dr. Suite 200
PROJECT ADDRESS: MCAS El Toro	CITY, STATE AND ZIP CODE: Santa Ana, CA	CLIENT: EFA West	CITY, STATE AND ZIP CODE: Torrance, CA 90501		CITY, STATE AND ZIP CODE: Irvine, CA 92612
PROJECT MANAGER: Dhananjay Rawal	PROJECT MANAGER'S PHONE: 949-660-7576	PROJECT MANAGER'S FAX: 949-474-8309			

Item	Sample Identifier	Matrix	Date 2003	Time	Preserved	# of Cont.	QC Level	T.A.T.	VOC-8260	TPH-Gas	TPH-Diesel	SVOC-8270	SVOC-8310	Pesticide-8081	Metals-6010	Comments
1	818655-3215	W	03/25	1530	HCl 4°C	PR #2	C	5DAY	X							
2	818655-3216	S		0930		7			X	X	X	X	X	X	X	
3	818655-3217			1000					X	X	X	X	X	X	X	
4	818655-3218			1015					X	X	X	X	X	X	X	
5	818655-3219			1115			D		X	X	X	X	X	X	X	
6	818655-3220			1145			C		X	X	X	X	X	X	X	
7	818655-3221			1330					X	X	X	X	X	X	X	
8	818655-3222			1415					X	X	X	X	X	X	X	
9	818655-3223	W		1515	HNO3 HCl	8			X	X	X	X		X	X	
10	~~818655-~~									PR 03/26/03						

SAMPLES COLLECTED BY: P Reeves

COURIER AND AIR BILL NUMBER: EMAI CARRIER

COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature] 03/26/03	[signature]	3-26-03	1500	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Manilla - 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	X
2) TAA 673 SB-B @ 18"	X		X	
3) TAA 673 SB-B @ 36"	X		X	
4) TAA 673 SB-B @ 36" (DUP)	X		X	X
5) TAA 772 SB-E1 @ 18"	X		X	
6) TAA 772 SB-E1 @ 36"	X		X	
7) TAA 772 SB-E2 @ 18"	X		X	
8) TAA 772 SB-E2 @ 36"	X		X	
9) EQUIPMENT RINSATE FOR 03/25/03 SAMPLING	X		X	X
10)				

Comments

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

the group

IT Corporation
2790 Mosside Blvd.
Monroeville, PA 15146-2792
(412)372-7701

CHAIN-OF-CUSTODY RECORD

PROJECT DATA MANAGER'S COPY

A 16143

FORM 0019 REV. 9-99

T'S LAB COORDINATOR: LYNN JEFFERSON	LAB COORDINATOR'S PHONE: 949.660.7537	LAB COORDINATOR'S FAX: 949.475.5433	LABORATORY SERVICE ID: 03-D011	LABORATORY CONTACT: YE MYINT	MAIL REPORT (COMPANY NAME): STAN EA
ROJECT NAME: TAA SAMPLING	PROJECT LOCATION: MCAS EL TORO	PROJECT NUMBER: 818655	LABORATORY PHONE: 310.618.8889	LABORATORY FAX: 310.618.0818	RECIPIENT NAME: DUANNE ISHIDA
ROJECT CONTACT: LYNN JEFFERSON	PROJECT PHONE NUMBER: 949.660.7537	PROJECT FAX: 949.475.5433	LABORATORY ADDRESS: 1835 W 205TH ST.	ADDRESS: 3347 MICHELSON DR. SUITE 200	
ROJECT ADDRESS: MCAS EL TORO	CITY, STATE AND ZIP CODE: SANTA ANA, CA	CLIENT: EFA WEST	CITY, STATE AND ZIP CODE: TORRANCE, CA 90501	CITY, STATE AND ZIP CODE: IRVINE, CA 92612	
ROJECT MANAGER: JANANJAY RAHAL	PROJECT MANAGER'S PHONE: 949.660.7576	PROJECT MANAGER'S FAX: 949.474.8309			

Item	Sample Identifier	Matrix	Date	Time	Preserved	# of Cont.	QC Level	T.A.T.	VOC-8260	TPH-GAS	TPH-DIESEL	SVOC-8270	SIM-8270	PESTICIDE-8081	METALS-6010	Comments
1	88655-3254	W	04/02	1445	HCl	2	C	5 DAY	X							
2	-3255	S		1040	4°C	7			X	X	X	X	X	X	X	
3	-3256			1055					X	X	X	X	X	X	X	
4	-3257			1115					X	X	X	X	X	X	X	
5	-3258			1330					X	X	X	X	X	X	X	
6	-3259			1350					X	X	X	X	X	X	X	
7	-3260	W		1430	HCl pH<2	8			X	X	X	X		X	X	
8																
9																
10																

AR 04/02/03

SAMPLES COLLECTED BY: D. REEVES

COURIER AND AIR BILL NUMBER: FMAX CARIER

COOLER TEMPERATURE UPON RECEIPT:

RELINQUISHED BY	RECEIVED BY	DATE	TIME	SAMPLE'S CONDITION UPON RECEIPT
[signature] 04/02/03 1500	[signature]	4/02/03	1500	

Distribution: White - Laboratory (To be returned with Analytical Report); Goldenrod - Project File; Manilla - 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) TAA 673 SB-A @ 18"	X		X	
3) TAA 673 SB-A @ 18" (DUP)	X		X	X
4) TAA 673 SB-A @ 36"	X		X	
5) TAA 698 SB-D @ 18"	X		X	
6) TAA 698 SB-D @ 36"	X		X	
7) EQUIPMENT RINSATE	X		X	X

Comments

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

EMAX
LABORATORIES, INC.
1835 W 205th Street
Torrance, CA 90501
Telephone: (310) 618-8889
Fax: (310) 618-0818

Date: 04-15-2003
EMAX Batch No.: 03D011

Attn: Way-Lynn Jefferson

Shaw E&I
3347 Michelson Dr., Suite 200
Irvine CA 92612

Subject: Laboratory Report
Project: El Toro, CTO 0024

Enclosed is the Laboratory report for samples received on 04/02/03. The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
818655-3254	D011-01	04/02/03	WATER	VOLATILE ORGANICS BY GC/MS
818655-3255	D011-02	04/02/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3256	D011-03	04/02/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3257	D011-04	04/02/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM

Sample ID	Control #	Col Date	Matrix	Analysis
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3258	D011-05	04/02/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3259	D011-06	04/02/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3260	D011-07	04/02/03	WATER	VOLATILE ORGANICS BY GC/MS
				TPH GASOLINE
				TPH DIESEL
				SEMIVOLATILE ORGANICS BY GCMS
				PESTICIDES ORGANOCHLORINE
				METALS TAL BY ICP
				MERCURY

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

EMAX LABORATORIES, INC. 1835 W 205th Street, Torrance, CA 90501 Tel: (310) 618-8889 Fax: (310) 618-0818

EMAX
LABORATORIES, INC.
1835 W 205th Street
Torrance CA 90501
Telephone: (310) 618-8889
Fax: (310) 618-0818

Date: 04-02-2003
EMAX Batch No.: 03C131

Attn: Way-Lynn Jefferson

Shaw E&I
3347 Michelson Dr., Suite 200
Irvine CA 92612

Subject: Laboratory Report
Project: El Toro, CTO 0024

Enclosed is the Laboratory report for samples received on 03/26/03. The data reported include :

Sample ID	Control #	Col Date	Matrix	Analysis
818655-3215	C131-01	03/25/03	WATER	VOLATILE ORGANICS BY GC/MS
818655-3216	C131-02	03/25/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3217	C131-03	03/25/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3218	C131-04	03/25/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM

Sample ID	Control #	Col Date	Matrix	Analysis
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3219	C131-05	03/25/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3220	C131-06	03/25/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3221	C131-07	03/25/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3222	C131-08	03/25/03	SOIL	TPH DIESEL
				SEMIVOLATILE ORGANICS SIM
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS
818655-3223	C131-09	03/25/03	WATER	TPH DIESEL
				SEMIVOLATILE ORGANICS BY GCMS
				MERCURY

EMAX LABORATORIES, INC. 1835 W 205th Street, Torrance, CA 90501 Tel: (310) 618-8889 Fax: (310) 618-0818

Sample ID	Control #	Col Date	Matrix	Analysis
				METALS TAL BY ICP
				PESTICIDES ORGANOCHLORINE
				TPH GASOLINE
				VOLATILE ORGANICS BY GC/MS

The results are summarized on the following pages.

Please feel free to call if you have any questions concerning these results.

Sincerely yours,

Kam Y. Pang, Ph.D.
Laboratory Director

EMAX LABORATORIES, INC. 1835 W. 205th Street, Torrance CA 90501 Tel: (310) 618-8889 Fax: (310) 618-0818

CA LUFT/M8015

TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03D011

Matrix : SOIL
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	DSD003SB	ND	106	90	1	NA	10	4	04/03/0313:22	04/03/0312:25	TD03003A	TD03002A	DSD003S	NA	04/03/03
LCS1S	DSD003SL	479	117	93	1	NA	10	4	04/03/0314:03	04/03/0312:25	TD03004A	TD03002A	DSD003S	NA	04/03/03
LCD1S	DSD003SC	476	117	94	1	NA	10	4	04/03/0314:45	04/03/0312:25	TD03005A	TD03002A	DSD003S	NA	04/03/03
818655-3255	D011-02	ND	105	91	1	8.9	11	4.4	04/03/0315:26	04/03/0312:25	TD03006A	TD03002A	DSD003S	04/02/03	04/02/03
818655-3256	D011-03	ND	110	94	1	6.6	11	4.3	04/03/0316:07	04/03/0312:25	TD03007A	TD03002A	DSD003S	04/02/03	04/02/03
818655-3257	D011-04	ND	109	92	1	6.4	11	4.3	04/03/0316:48	04/03/0312:25	TD03008A	TD03002A	DSD003S	04/02/03	04/02/03
818655-3258	D011-05	46	107	99	1	8.2	11	4.4	04/03/0317:29	04/03/0312:25	TD03009A	TD03002A	DSD003S	04/02/03	04/02/03
818655-3259	D011-06	29	108	100	1	8.6	11	4.4	04/03/0318:11	04/03/0312:25	TD03010A	TD03002A	DSD003S	04/02/03	04/02/03

RL : Reporting Limit
SURR1 : Bromobenzene
SURR2 : Hexacosane

Parameter	H-C Range
Diesel	C10-C38

5004

FT/M8015

TOTAL PETROLEUM ROCARBONS BY EXTRACTION

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03C131

Matrix : SOIL
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	DSC009SB	ND	117	110	1	NA	10	4	03/27/0316:45	03/27/0312:50	TC27003A	TC27002A	DSC009S	NA	03/27/03
LCS1S	DSC009SL	513	130	114	1	NA	10	4	03/27/0317:26	03/27/0312:50	TC27004A	TC27002A	DSC009S	NA	03/27/03
818655-3216	C131-02	ND	105	100	1	8.6	11	4.4	03/27/0318:07	03/27/0312:50	TC27005A	TC27002A	DSC009S	03/25/03	03/26/03
818655-3217	C131-03	ND	106	100	1	6.9	11	4.3	03/27/0318:48	03/27/0312:50	TC27006A	TC27002A	DSC009S	03/25/03	03/26/03
818655-3218	C131-04	ND	114	107	1	6.6	11	4.3	03/27/0319:30	03/27/0312:50	TC27007A	TC27002A	DSC009S	03/25/03	03/26/03
818655-3219	C131-05	ND	111	108	1	16.2	12	4.8	03/27/0320:11	03/27/0312:50	TC27008A	TC27002A	DSC009S	03/25/03	03/26/03
818655-3220	C131-06	ND	108	103	1	6.7	11	4.3	03/27/0320:52	03/27/0312:50	TC27009A	TC27002A	DSC009S	03/25/03	03/26/03
818655-3221	C131-07	ND	110	105	1	9.5	11	4.4	03/27/0321:33	03/27/0312:50	TC27010A	TC27002A	DSC009S	03/25/03	03/26/03
818655-3222	C131-08	ND	107	103	1	5.7	11	4.2	03/27/0322:15	03/27/0312:50	TC27011A	TC27002A	DSC009S	03/25/03	03/26/03

RL : Reporting Limit
SURR1 : Bromobenzene
SURR2 : Hexacosane

Parameter	H-C Range
Diesel	C10-C38

METHOD 3520C/M8015
TOTAL PETROLEUM HYDROCARBONS BY EXTRACTION

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03C131

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSC011WB	ND	90	102	1	NA	.1	.1	04/01/0312:55	04/01/0311:30	TD01003A	TD01002A	DSC011W	NA	04/01/03
LCS1W	DSC011WL	4.88	110	106	1	NA	.1	.1	04/01/0313:37	04/01/0311:30	TD01004A	TD01002A	DSC011W	NA	04/01/03
LCD1W	DSC011WC	4.77	103	105	1	NA	.1	.1	04/01/0314:18	04/01/0311:30	TD01005A	TD01002A	DSC011W	NA	04/01/03
818655-3223	C131-09	ND	93	111	.94	NA	.094	.094	04/01/0315:40	04/01/0311:30	TD01007A	TD01002A	DSC011W	03/25/03	03/26/03

RL : Reporting Limit
SURR1 : Bromobenzene
SURR2 : Hexacosane

Parameter	H-C Range
Diesel	C10-C38

5004

MET 520C/M8015
TOTAL PETROLEUM ... ROCARBONS BY EXTRACTION

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03D011

Matrix : WATER
Instrument ID : GCT050

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SUR1 (%)	SUR2 (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	DSD002WB	ND	97	103	1	NA	.1	.1	04/03/0319:33	04/03/0310:30	TD03012A	TD03011A	DSD002W	NA	04/03/03
LCS1W	DSD002WL	4.84	107	104	1	NA	.1	.1	04/03/0320:14	04/03/0310:30	TD03013A	TD03011A	DSD002W	NA	04/03/03
LCD1W	DSD002WC	4.79	110	102	1	NA	.1	.1	04/03/0320:55	04/03/0310:30	TD03014A	TD03011A	DSD002W	NA	04/03/03
818655-3260	D011-07	ND	85	98	.94	NA	.094	.094	04/03/0321:36	04/03/0310:30	TD03015A	TD03011A	DSD002W	04/02/03	04/02/03

RL : Reporting Limit
SURR1 : Bromobenzene
SURR2 : Hexacosane

Parameter	H-C Range
Diesel	C10-C38

5005

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 3520C/M8015

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	DSC011WB	DSC011WL	DSC011WC		
LAB FILE ID:	TD01003A	TD01004A	TD01005A		
DATE EXTRACTED:	04/01/0311:30	04/01/0311:30	04/01/0311:30	DATE COLLECTED:	NA
DATE ANALYZED:	04/01/0312:55	04/01/0313:37	04/01/0314:18	DATE RECEIVED:	04/01/03
PREP. BATCH:	DSC011W	DSC011W	DSC011W		
CALIB. REF:	TD01002A	TD01002A	TD01002A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	4.88	98	5	4.77	95	2	65-135	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	1.1	110	1	1.03	103	50-150
Hexacosane	.25	.266	106	.25	.262	105	40-160

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
NO.: 03C131
METHOD: CA LUFT/M8015

==========

MATRIX: SOIL % MOISTURE: NA
DILUTION FACTOR: 1 1
SAMPLE ID: MBLK1S
LAB SAMP ID: DSC009SB DSC009SL
LAB FILE ID: TC27003A TC27004A
DATE EXTRACTED: 03/27/0312:50 03/27/0312:50 DATE COLLECTED: NA
DATE ANALYZED: 03/27/0316:45 03/27/0317:26 DATE RECEIVED: 03/27/03
PREP. BATCH: DSC009S DSC009S
CALIB. REF: TC27002A TC27002A

ACCESSION:

PARAMETER	BLNK RSLT (mg/kg)	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	QC LIMIT (%)
Diesel	ND	500	513	103	65-135

==========

SURROGATE PARAMETER	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	QC LIMIT (%)
Bromobenzene	100	130	130	50-150
Hexacosane	25	28.5	114	30-160

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 3520C/M8015

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	DSD002WB	DSD002WL	DSD002WC		
LAB FILE ID:	TD03012A	TD03013A	TD03014A		
DATE EXTRACTED:	04/03/0310:30	04/03/0310:30	04/03/0310:30	DATE COLLECTED:	NA
DATE ANALYZED:	04/03/0319:33	04/03/0320:14	04/03/0320:55	DATE RECEIVED:	04/03/03
PREP. BATCH:	DSD002W	DSD002W	DSD002W		
CALIB. REF:	TD03011A	TD03011A	TD03011A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	5	4.84	97	5	4.79	96	1	65-135	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromobenzene	1	1.07	107	1	1.1	110	50-150
Hexacosane	.25	.259	104	.25	.255	102	40-160

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BA[illegible]IO.: 03D011
ME[illegible]: CA LUFT/M8015

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	DSD003SB	DSD003SL	DSD003SC		
LAB FILE ID:	TD03003A	TD03004A	TD03005A		
DATE EXTRACTED:	04/03/0312:25	04/03/0312:25	04/03/0312:25	DATE COLLECTED:	NA
DATE ANALYZED:	04/03/0313:22	04/03/0314:03	04/03/0314:45	DATE RECEIVED:	04/03/03
PREP. BATCH:	DSD003S	DSD003S	DSD003S		
CALIB. REF:	TD03002A	TD03002A	TD03002A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/kg)	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Diesel	ND	500	479	96	500	476	95	1	65-135	50

SURROGATE PARAMETER	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)	BSD % REC	QC LIMIT (%)
Bromobenzene	100	117	117	100	117	117	50-150
Hexacosane	25	23.3	93	25	23.5	94	30-160

METHOD 5/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03D011

Matrix : SOIL
Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	SURR (%)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	VM39D02B	ND	92	1	NA	10	.524	04/02/0317:51	04/02/0317:51	ED02004A	ED02002A	VM39D02	NA	04/02/03
LCS1S	VM39D02L	26.4	104	1	NA	10	.524	04/02/0318:24	04/02/0318:24	ED02005A	ED02002A	VM39D02	NA	04/02/03
LCD1S	VM39D02C	27.2	100	1	NA	10	.524	04/02/0318:58	04/02/0318:58	ED02006A	ED02002A	VM39D02	NA	04/02/03
818655-3255	D011-02	ND	85	.93	8.9	10	.53	04/02/0320:39	04/02/0320:39	ED02009A	ED02002A	VM39D02	04/02/03	04/02/03
818655-3256	D011-03	ND	85	.91	6.6	9.7	.51	04/02/0321:13	04/02/0321:13	ED02010A	ED02002A	VM39D02	04/02/03	04/02/03
818655-3257	D011-04	ND	89	.94	6.4	10	.53	04/02/0321:47	04/02/0321:47	ED02011A	ED02002A	VM39D02	04/02/03	04/02/03
818655-3258	D011-05	ND	84	.88	8.2	9.6	.5	04/02/0322:21	04/02/0322:21	ED02012A	ED02002A	VM39D02	04/02/03	04/02/03
818655-3259	D011-06	ND	87	.93	8.6	10	.53	04/02/0322:55	04/02/0322:55	ED02013A	ED02002A	VM39D02	04/02/03	04/02/03

RL : Reporting Limit
Methanol Extraction: 04/02/03 17:15 (VM39D02)

METHOD 5035/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03C131

Matrix : SOIL
Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	SURR (%)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	VM39C20B	ND	85	1	NA	10	.524	03/26/0318:49	03/26/0318:49	EC26003A	EC26002A	VM39C20	NA	03/26/03
LCS1S	VM39C20L	29.1	101	1	NA	10	.524	03/26/0319:23	03/26/0319:23	EC26004A	EC26002A	VM39C20	NA	03/26/03
LCD1S	VM39C20C	27.9	84	1	NA	10	.524	03/26/0319:57	03/26/0319:57	EC26005A	EC26002A	VM39C20	NA	03/26/03
818655-3216	C131-02	ND	88	.81	8.6	8.9	.46	03/26/0320:31	03/26/0320:31	EC26006A	EC26002A	VM39C20	03/25/03	03/26/03
818655-3217	C131-03	ND	88	.88	6.9	9.5	.5	03/26/0321:05	03/26/0321:05	EC26007A	EC26002A	VM39C20	03/25/03	03/26/03
818655-3218	C131-04	ND	83	.88	6.6	9.4	.49	03/26/0321:39	03/26/0321:39	EC26008A	EC26002A	VM39C20	03/25/03	03/26/03
818655-3219	C131-05	ND	88	.85	16.2	10	.53	03/26/0322:13	03/26/0322:13	EC26009A	EC26002A	VM39C20	03/25/03	03/26/03
818655-3220	C131-06	ND	86	.94	6.7	10	.53	03/26/0322:47	03/26/0322:47	EC26010A	EC26002A	VM39C20	03/25/03	03/26/03
818655-3221	C131-07	ND	86	.96	9.5	11	.56	03/26/0323:21	03/26/0323:21	EC26011A	EC26002A	VM39C20	03/25/03	03/26/03
818655-3222	C131-08	ND	88	.89	5.7	9.4	.49	03/26/0323:55	03/26/0323:55	EC26012A	EC26002A	VM39C20	03/25/03	03/26/03

RL : Reporting Limit
Methanol Extraction : 03/26/03 18:30(VM39C20)

METHOD `B/M8015
TOTAL PETROLEUM HYDRC ..BONS BY PURGE AND TRAP

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03C131

Matrix : WATER
Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VA39C22B	ND	89	1	NA	.1	.005	03/27/0312:21	03/27/0312:21	EC26029A	EC26024A	VA39C22	NA	03/27/03
LCS1W	VA39C22L	.514	99	1	NA	.1	.005	03/27/0312:55	03/27/0312:55	EC26030A	EC26024A	VA39C22	NA	03/27/03
LCD1W	VA39C22C	.553	107	1	NA	.1	.005	03/27/0313:29	03/27/0313:29	EC26031A	EC26024A	VA39C22	NA	03/27/03
818655-3223	C131-09	ND	81	1	NA	.1	.005	03/27/0314:03	03/27/0314:03	EC26032A	EC26024A	VA39C22	03/25/03	03/26/03

RL : Reporting Limit

METHOD 5030B/M8015
TOTAL PETROLEUM HYDROCARBONS BY PURGE AND TRAP

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03D011

Matrix : WATER
Instrument ID : GCT039

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/L)	SURR (%)	DLF	MOIST	RL (mg/L)	MDL (mg/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	VA39D04B	ND	85	1	NA	.1	.005	04/03/0301:44	04/03/0301:44	ED02018A	ED02014A	VA39D04	NA	04/03/03
LCS1W	VA39D04L	.503	102	1	NA	.1	.005	04/03/0302:18	04/03/0302:18	ED02019A	ED02014A	VA39D04	NA	04/03/03
LCD1W	VA39D04C	.527	105	1	NA	.1	.005	04/03/0302:52	04/03/0302:52	ED02020A	ED02014A	VA39D04	NA	04/03/03
818655-3260	D011-07R	ND	86	1	NA	.1	.005	04/03/0311:44	04/03/0311:44	ED02027A	ED02025A	VA39D04	04/02/03	04/02/03

RL : Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
B NO.: 03C131
M. D: METHOD 5030B/M8015

==========

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	VA39C22B	VA39C22L	VA39C22C		
LAB FILE ID:	EC26029A	EC26030A	EC26031A		
DATE EXTRACTED:	03/27/0312:21	03/27/0312:55	03/27/0313:29	DATE COLLECTED:	NA
DATE ANALYZED:	03/27/0312:21	03/27/0312:55	03/27/0313:29	DATE RECEIVED:	03/27/03
PREP. BATCH:	VA39C22	VA39C22	VA39C22		
CALIB. REF:	EC26024A	EC26024A	EC26024A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	.55	.514	94	.55	.553	101	7	67-136	30

==========

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	.04	.0396	99	.04	.0428	107	63-154

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 5035/M8015

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	VM39C20B	VM39C20L	VM39C20C		
LAB FILE ID:	EC26003A	EC26004A	EC26005A		
DATE EXTRACTED:	03/26/0318:49	03/26/0319:23	03/26/0319:57	DATE COLLECTED:	NA
DATE ANALYZED:	03/26/0318:49	03/26/0319:23	03/26/0319:57	DATE RECEIVED:	03/26/03
PREP. BATCH:	VM39C20	VM39C20	VM39C20		
CALIB. REF:	EC26002A	EC26002A	EC26002A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/kg)	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	27.5	29.1	106	27.5	27.9	101	5	57-146	50

SURROGATE PARAMETER	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	2	2.02	101	2	1.67	84	63-154

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BA D.: 03D011
ME : METHOD 5030B/M8015

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	VA39D04B	VA39D04L	VA39D04C		
LAB FILE ID:	ED02018A	ED02019A	ED02020A		
DATE EXTRACTED:	04/03/0301:44	04/03/0302:18	04/03/0302:52	DATE COLLECTED:	NA
DATE ANALYZED:	04/03/0301:44	04/03/0302:18	04/03/0302:52	DATE RECEIVED:	04/03/03
PREP. BATCH:	VA39D04	VA39D04	VA39D04		
CALIB. REF:	ED02014A	ED02014A	ED02014A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/L)	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	.55	.503	91	.55	.527	96	5	67-136	30

SURROGATE PARAMETER	SPIKE AMT (mg/L)	BS RSLT (mg/L)	BS % REC	SPIKE AMT (mg/L)	BSD RSLT (mg/L)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	.04	.0406	102	.04	.0418	105	63-154

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 5035/M8015

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	VM39D02B	VM39D02L	VM39D02C		
LAB FILE ID:	ED02004A	ED02005A	ED02006A		
DATE EXTRACTED:	04/02/0317:51	04/02/0318:24	04/02/0318:58	DATE COLLECTED:	NA
DATE ANALYZED:	04/02/0317:51	04/02/0318:24	04/02/0318:58	DATE RECEIVED:	04/02/03
PREP. BATCH:	VM39D02	VM39D02	VM39D02		
CALIB. REF:	ED02002A	ED02002A	ED02002A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/kg)	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
Gasoline	ND	27.5	26.4	96	27.5	27.2	99	3	57-146	50

SURROGATE PARAMETER	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)	BSD % REC	QC LIMIT (%)
Bromofluorobenzene	2	2.08	104	2	2.01	100	63-154

SW3550B/8081A
PESTICIDES

Cl : SHAW E&I	Date Collected: 04/02/03
Pr : EL TORO, CTO 0024	Date Received: 04/02/03
Batch No. : 03D011	Date Extracted: 04/03/03 13:30
Sample ID: 818655-3255	Date Analyzed: 04/07/03 17:39
Lab Samp ID: D011-02	Dilution Factor: 1
Lab File ID: SD07013A	Matrix : SOIL
Ext Btch ID: CPD004S	% Moisture : 8.9
Calib. Ref.: SD07003A	Instrument ID : GCT008

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	(ND) | .00047J	.0022	.00022 | .00022
GAMMA-BHC (LINDANE)	(ND) | ND	.0022	.00022 | .00022
BETA-BHC	(ND) | ND	.0022	.00022 | .00022
HEPTACHLOR	(ND) | ND	.0022	.0011 | .0011
DELTA-BHC	(ND) | ND	.0022	.00022 | .00022
ALDRIN	(ND) | ND	.0022	.00055 | .00055
HEPTACHLOR EPOXIDE	(ND) | ND	.0022	.00022 | .00022
GAMMA-CHLORDANE	(ND) | ND	.0022	.00022 | .00022
ALPHA-CHLORDANE	(ND) | ND	.0022	.00022 | .00022
ENDOSULFAN I	(ND) | ND	.0044	.0011 | .0011
4,4'-DDE	(ND) | ND	.0044	.0011 | .0011
DIELDRIN	(ND) | ND	.0044	.00055 | .00055
ENDRIN	(ND) | ND	.0033	.0011 | .0011
4,4'-DDD	(ND) | ND	.0044	.0011 | .0011
ENDOSULFAN II	(ND) | ND	.0044	.00055 | .00055
4,4'-DDT	(ND) | ND	.0044	.0011 | .0011
ENDRIN ALDEHYDE	(ND) | ND	.0044	.00055 | .00055
EN FAN SULFATE	(ND) | ND	.0044	.00055 | .00055
ENL KETONE	(ND) | ND	.0033	.0011 | .0011
METHOXYCHLOR	(ND) | ND	.022	.0044 | .0044
TOXAPHENE	(ND) | ND	.11	.0088 | .0088

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(70) | 72	35-135
DECACHLOROBIPHENYL	(72) | 70	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3550B/8081A
PESTICIDES

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 13:30
Sample ID:	818655-3256	Date Analyzed:	04/07/03 18:04
Lab Samp ID:	D011-03	Dilution Factor:	1
Lab File ID:	SD07014A	Matrix :	SOIL
Ext Btch ID:	CPD004S	% Moisture :	6.6
Calib. Ref.:	SD07003A	Instrument ID :	GCT008

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	(ND) | .00056J	.0021	.00021 | .00021
GAMMA-BHC (LINDANE)	(ND) | ND	.0021	.00021 | .00021
BETA-BHC	(ND) | ND	.0021	.00021 | .00021
HEPTACHLOR	(ND) | ND	.0021	.0011 | .0011
DELTA-BHC	(ND) | ND	.0021	.00021 | .00021
ALDRIN	(ND) | ND	.0021	.00054 | .00054
HEPTACHLOR EPOXIDE	(ND) | ND	.0021	.00021 | .00021
GAMMA-CHLORDANE	(ND) | ND	.0021	.00021 | .00021
ALPHA-CHLORDANE	(ND) | ND	.0021	.00021 | .00021
ENDOSULFAN I	(ND) | ND	.0043	.0011 | .0011
4,4'-DDE	(ND) | ND	.0043	.0011 | .0011
DIELDRIN	(ND) | ND	.0043	.00054 | .00054
ENDRIN	(ND) | ND	.0032	.0011 | .0011
4,4'-DDD	(ND) | ND	.0043	.0011 | .0011
ENDOSULFAN II	(ND) | ND	.0043	.00054 | .00054
4,4'-DDT	(ND) | ND	.0043	.0011 | .0011
ENDRIN ALDEHYDE	(ND) | ND	.0043	.00054 | .00054
ENDOSULFAN SULFATE	(ND) | ND	.0043	.00054 | .00054
ENDRIN KETONE	(ND) | ND	.0032	.0011 | .0011
METHOXYCHLOR	(ND) | ND	.021	.0043 | .0043
TOXAPHENE	(ND) | ND	.11	.0086 | .0086

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(77) | 72	35-135
DECACHLOROBIPHENYL	(69) | 69	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3550B/8081A
PESTICIDES

Cli	: SHAW E&I	Date Collected:	04/02/03
Prc	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 13:30
Sample ID:	818655-3257	Date Analyzed:	04/07/03 18:29
Lab Samp ID:	D011-04	Dilution Factor:	1
Lab File ID:	SD07015A	Matrix :	SOIL
Ext Btch ID:	CPD004S	% Moisture :	6.4
Calib. Ref.:	SD07003A	Instrument ID :	GCT008

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	(ND) | .00053J	.0021	.00021 | .00021
GAMMA-BHC (LINDANE)	(ND) | ND	.0021	.00021 | .00021
BETA-BHC	(ND) | ND	.0021	.00021 | .00021
HEPTACHLOR	(ND) | ND	.0021	.0011 | .0011
DELTA-BHC	(ND) | ND	.0021	.00021 | .00021
ALDRIN	(ND) | ND	.0021	.00053 | .00053
HEPTACHLOR EPOXIDE	(ND) | ND	.0021	.00021 | .00021
GAMMA-CHLORDANE	(ND) | ND	.0021	.00021 | .00021
ALPHA-CHLORDANE	(ND) | ND	.0021	.00021 | .00021
ENDOSULFAN I	(ND) | ND	.0043	.0011 | .0011
4,4'-DDE	(ND) | ND	.0043	.0011 | .0011
DIELDRIN	(ND) | ND	.0043	.00053 | .00053
ENDRIN	(ND) | ND	.0032	.0011 | .0011
4,4'-DDD	(ND) | ND	.0043	.0011 | .0011
ENDOSULFAN II	(ND) | ND	.0043	.00053 | .00053
4,4'-DDT	(ND) | ND	.0043	.0011 | .0011
ENDRIN ALDEHYDE	(ND) | ND	.0043	.00053 | .00053
ENDOSULFAN SULFATE	(ND) | ND	.0043	.00053 | .00053
ENDRIN KETONE	(ND) | ND	.0032	.0011 | .0011
METHOXYCHLOR	(ND) | ND	.021	.0043 | .0043
TOXAPHENE	(ND) | ND	.11	.0085 | .0085

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(82) | 70	35-135
DECACHLOROBIPHENYL	(69) | 69	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3550B/8081A
PESTICIDES

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 15:00
Sample ID:	818655-3216	Date Analyzed:	03/28/03 16:54
Lab Samp ID:	C131-02	Dilution Factor:	1
Lab File ID:	WC27046A	Matrix :	SOIL
Ext Btch ID:	CPC013S	% Moisture :	8.6
Calib. Ref.:	WC27035A	Instrument ID :	GCT016

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	ND | (ND)	.0022	.00022 | .00022
GAMMA-BHC (LINDANE)	ND | (ND)	.0022	.00022 | .00022
BETA-BHC	ND | (ND)	.0022	.00022 | .00022
HEPTACHLOR	ND | (ND)	.0022	.0011 | .0011
DELTA-BHC	ND | (ND)	.0022	.00022 | .00022
ALDRIN	ND | (ND)	.0022	.00055 | .00055
HEPTACHLOR EPOXIDE	ND | (ND)	.0022	.00022 | .00022
GAMMA-CHLORDANE	ND | (ND)	.0022	.00022 | .00022
ALPHA-CHLORDANE	ND | (ND)	.0022	.00022 | .00022
ENDOSULFAN I	ND | (ND)	.0044	.0011 | .0011
4,4'-DDE	ND | (ND)	.0044	.0011 | .0011
DIELDRIN	ND | (ND)	.0044	.00055 | .00055
ENDRIN	ND | (ND)	.0033	.0011 | .0011
4,4'-DDD	ND | (ND)	.0044	.0011 | .0011
ENDOSULFAN II	ND | (ND)	.0044	.00055 | .00055
4,4'-DDT	ND | (ND)	.0044	.0011 | .0011
ENDRIN ALDEHYDE	ND | (ND)	.0044	.00055 | .00055
ENDOSULFAN SULFATE	ND | (ND)	.0044	.00055 | .00055
ENDRIN KETONE	ND | (ND)	.0033	.0011 | .0011
METHOXYCHLOR	ND | (ND)	.022	.0044 | .0044
TOXAPHENE	ND | (ND)	.11	.0088 | .0088

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	67 | (67)	35-135
DECACHLOROBIPHENYL	84 | (76)	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3550B/8081A
PESTICIDES

C[illegible]	: SHAW E&I	Date Collected:	03/25/03
P[illegible]t	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 15:00
Sample ID:	818655-3217	Date Analyzed:	03/28/03 17:20
Lab Samp ID:	C131-03	Dilution Factor:	1
Lab File ID:	WC27047A	Matrix :	SOIL
Ext Btch ID:	CPC013S	% Moisture :	6.9
Calib. Ref.:	WC27035A	Instrument ID :	GCT016

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	ND | (ND)	.0021	.00021 | .00021
GAMMA-BHC (LINDANE)	ND | (ND)	.0021	.00021 | .00021
BETA-BHC	ND | (ND)	.0021	.00021 | .00021
HEPTACHLOR	ND | (ND)	.0021	.0011 | .0011
DELTA-BHC	ND | (ND)	.0021	.00021 | .00021
ALDRIN	ND | (ND)	.0021	.00054 | .00054
HEPTACHLOR EPOXIDE	ND | (ND)	.0021	.00021 | .00021
GAMMA-CHLORDANE	ND | (ND)	.0021	.00021 | .00021
ALPHA-CHLORDANE	ND | (ND)	.0021	.00021 | .00021
ENDOSULFAN I	ND | (ND)	.0043	.0011 | .0011
4,4'-DDE	ND | (ND)	.0043	.0011 | .0011
DIELDRIN	ND | (ND)	.0043	.00054 | .00054
ENDRIN	ND | (ND)	.0032	.0011 | .0011
4,4'-DDD	ND | (ND)	.0043	.0011 | .0011
ENDOSULFAN II	ND | (ND)	.0043	.00054 | .00054
4,4'-DDT	ND | (ND)	.0043	.0011 | .0011
ENDRIN ALDEHYDE	ND | (ND)	.0043	.00054 | .00054
E[illegible]LFAN SULFATE	ND | (ND)	.0043	.00054 | .00054
E[illegible] KETONE	ND | (ND)	.0032	.0011 | .0011
METHOXYCHLOR	ND | (ND)	.021	.0043 | .0043
TOXAPHENE	ND | (ND)	.11	.0086 | .0086

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	64 | (62)	35-135
DECACHLOROBIPHENYL	78 | (71)	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3550B/8081A
PESTICIDES

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 15:00
Sample ID:	818655-3218	Date Analyzed:	03/28/03 17:45
Lab Samp ID:	C131-04	Dilution Factor:	1
Lab File ID:	WC27048A	Matrix :	SOIL
Ext Btch ID:	CPC013S	% Moisture :	6.6
Calib. Ref.:	WC27035A	Instrument ID :	GCT016

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	ND | (ND)	.0021	.00021 | .00021
GAMMA-BHC (LINDANE)	ND | (ND)	.0021	.00021 | .00021
BETA-BHC	ND | (ND)	.0021	.00021 | .00021
HEPTACHLOR	ND | (ND)	.0021	.0011 | .0011
DELTA-BHC	ND | (ND)	.0021	.00021 | .00021
ALDRIN	ND | (ND)	.0021	.00054 | .00054
HEPTACHLOR EPOXIDE	ND | (ND)	.0021	.00021 | .00021
GAMMA-CHLORDANE	ND | (ND)	.0021	.00021 | .00021
ALPHA-CHLORDANE	.00073J | (ND)	.0021	.00021 | .00021
ENDOSULFAN I	ND | (ND)	.0043	.0011 | .0011
4,4'-DDE	ND | (ND)	.0043	.0011 | .0011
DIELDRIN	ND | (ND)	.0043	.00054 | .00054
ENDRIN	ND | (ND)	.0032	.0011 | .0011
4,4'-DDD	ND | (ND)	.0043	.0011 | .0011
ENDOSULFAN II	ND | (ND)	.0043	.00054 | .00054
4,4'-DDT	ND | (ND)	.0043	.0011 | .0011
ENDRIN ALDEHYDE	ND | (ND)	.0043	.00054 | .00054
ENDOSULFAN SULFATE	ND | (ND)	.0043	.00054 | .00054
ENDRIN KETONE	ND | (ND)	.0032	.0011 | .0011
METHOXYCHLOR	ND | (ND)	.021	.0043 | .0043
TOXAPHENE	ND | (ND)	.11	.0086 | .0086

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	69 | (74)	35-135
DECACHLOROBIPHENYL	81 | (72)	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3520C/8081A
PESTICIDES

C[illegible]	: SHAW E&I	Date Collected:	03/25/03
P[illegible]ct	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/28/03 12:30
Sample ID:	818655-3223	Date Analyzed:	03/29/03 14:29
Lab Samp ID:	C131-09	Dilution Factor:	.96
Lab File ID:	WC27097A	Matrix :	WATER
Ext Btch ID:	CPC014W	% Moisture :	NA
Calib. Ref.:	WC27087A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ALPHA-BHC	ND | (ND)	.096	.0096 | .0096
GAMMA-BHC (LINDANE)	ND | (ND)	.096	.0096 | .0096
BETA-BHC	ND | (ND)	.096	.0096 | .0096
HEPTACHLOR	ND | (ND)	.096	.0096 | .0096
DELTA-BHC	ND | (ND)	.096	.0096 | .0096
ALDRIN	ND | (ND)	.096	.0096 | .0096
HEPTACHLOR EPOXIDE	ND | (ND)	.096	.0096 | .0096
GAMMA-CHLORDANE	ND | (ND)	.096	.0096 | .0096
ALPHA-CHLORDANE	ND | (ND)	.096	.0096 | .0096
ENDOSULFAN I	ND | (ND)	.096	.029 | .029
4,4'-DDE	ND | (ND)	.19	.029 | .029
DIELDRIN	ND | (ND)	.19	.096 | .096
ENDRIN	ND | (ND)	.096	.0096 | .0096
4,4'-DDD	ND | (ND)	.19	.029 | .029
ENDOSULFAN II	ND | (ND)	.19	.0096 | .0096
4,4'-DDT	ND | (ND)	.19	.019 | .019
ENDRIN ALDEHYDE	ND | (ND)	.19	.0096 | .0096
E[illegible]LFAN SULFATE	ND | (ND)	.19	.0096 | .0096
E[illegible] KETONE	ND | (ND)	.096	.0096 | .0096
METHOXYCHLOR	ND | (ND)	.96	.096 | .096
TOXAPHENE	ND | (ND)	2.9	1.2 | 1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	85 | (83)	45-125
DECACHLOROBIPHENYL	96 | (91)	34-133

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3520C/8081A
PESTICIDES

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 10:30
Sample ID:	818655-3260	Date Analyzed:	04/07/03 15:57
Lab Samp ID:	D011-07	Dilution Factor:	.94
Lab File ID:	SD07009A	Matrix :	WATER
Ext Btch ID:	CPD003W	% Moisture :	NA
Calib. Ref.:	SD07003A	Instrument ID :	GCT008

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ALPHA-BHC	(ND)|ND	.094	.0094|.0094
GAMMA-BHC (LINDANE)	(ND)|ND	.094	.0094|.0094
BETA-BHC	(ND)|ND	.094	.0094|.0094
HEPTACHLOR	(ND)|ND	.094	.0094|.0094
DELTA-BHC	(ND)|ND	.094	.0094|.0094
ALDRIN	(ND)|ND	.094	.0094|.0094
HEPTACHLOR EPOXIDE	(ND)|ND	.094	.0094|.0094
GAMMA-CHLORDANE	(ND)|ND	.094	.0094|.0094
ALPHA-CHLORDANE	(ND)|ND	.094	.0094|.0094
ENDOSULFAN I	(ND)|ND	.094	.028|.028
4,4'-DDE	(ND)|ND	.19	.028|.028
DIELDRIN	(ND)|ND	.19	.094|.094
ENDRIN	(ND)|ND	.094	.0094|.0094
4,4'-DDD	(ND)|ND	.19	.028|.028
ENDOSULFAN II	(ND)|ND	.19	.0094|.0094
4,4'-DDT	(ND)|ND	.19	.019|.019
ENDRIN ALDEHYDE	(ND)|ND	.19	.0094|.0094
ENDOSULFAN SULFATE	(ND)|ND	.19	.0094|.0094
ENDRIN KETONE	(ND)|ND	.094	.0094|.0094
METHOXYCHLOR	(ND)|ND	.94	.094|.094
TOXAPHENE	(ND)|ND	2.8	1.2|1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(83)|87	45-125
DECACHLOROBIPHENYL	(77)|81	34-133

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

SW3520C/8081A
PESTICIDES

Cl[illegible]	: SHAW E&I	Date Collected:	NA
Pr[illegible]	: EL TORO, CTO 0024	Date Received:	03/28/03
Batch No.	: 03C131	Date Extracted:	03/28/03 12:30
Sample ID:	MBLK1W	Date Analyzed:	03/29/03 01:48
Lab Samp ID:	CPC014WB	Dilution Factor:	1
Lab File ID:	WC27067A	Matrix :	WATER
Ext Btch ID:	CPC014W	% Moisture :	NA
Calib. Ref.:	WC27061A	Instrument ID :	GCT016

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ALPHA-BHC	ND|(ND)	.1	.01|.01
GAMMA-BHC (LINDANE)	ND|(ND)	.1	.01|.01
BETA-BHC	ND|(ND)	.1	.01|.01
HEPTACHLOR	ND|(ND)	.1	.01|.01
DELTA-BHC	ND|(ND)	.1	.01|.01
ALDRIN	ND|(ND)	.1	.01|.01
HEPTACHLOR EPOXIDE	ND|(ND)	.1	.01|.01
GAMMA-CHLORDANE	ND|(ND)	.1	.01|.01
ALPHA-CHLORDANE	ND|(ND)	.1	.01|.01
ENDOSULFAN I	ND|(ND)	.1	.03|.03
4,4'-DDE	ND|(ND)	.2	.03|.03
DIELDRIN	ND|(ND)	.2	.1|.1
ENDRIN	ND|(ND)	.1	.01|.01
4,4'-DDD	ND|(ND)	.2	.03|.03
ENDOSULFAN II	ND|(ND)	.2	.01|.01
4,4'-DDT	ND|(ND)	.2	.02|.02
ENDRIN ALDEHYDE	ND|(ND)	.2	.01|.01
EN[illegible]FAN SULFATE	ND|(ND)	.2	.01|.01
EN[illegible] KETONE	ND|(ND)	.1	.01|.01
METHOXYCHLOR	ND|(ND)	1	.1|.1
TOXAPHENE	ND|(ND)	3	1.2|1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	74|(72)	45-125
DECACHLOROBIPHENYL	93|(87)	34-133

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: SW3520C/8081A

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID:	MBLK1W		
LAB SAMP ID:	CPC014WB	CPC014WL	CPC014WC
LAB FILE ID:	WC27067A	WC27068A	WC27069A
DATE EXTRACTED:	03/28/0312:30	03/28/0312:30	03/28/0312:30
DATE ANALYZED:	03/29/0301:48	03/29/0302:13	03/29/0302:39
PREP. BATCH:	CPC014W	CPC014W	CPC014W
CALIB. REF:	WC27061A	WC27061A	WC27061A

DATE COLLECTED: NA
DATE RECEIVED: 03/28/03

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)		SPIKE AMT (ug/L)	BS RSLT (ug/L)		BS % REC		SPIKE AMT (ug/L)	BSD RSLT (ug/L)		BSD % REC		RPD (%)		QC LIMIT (%)	MAX RPD (%)
alpha-BHC	ND	(ND)	.2	.191	(.162)	96	(81)	.2	(.175)	.142	(88)	71*	9	(13)	75-125	30
gamma-BHC (Lindane)	ND	(ND)	.2	.192	(.178)	96	(89)	.2	.181	(.155)	90	(78)	6	(14)	73-125	30
beta-BHC	ND	(ND)	.2	.214	(.195)	107	(97)	.2	.213	(.184)	106	(92)	0	(6)	51-125	30
Heptachlor	ND	(ND)	.2	.211	(.186)	105	(93)	.2	.201	(.165)	100	(82)	5	(12)	45-128	30
delta-BHC	ND	(ND)	.2	.217	(.169)	108	(84)	.2	.215	(.159)	108	(79)	1	(6)	75-126	30
Aldrin	ND	(ND)	.2	.194	(.158)	97	(79)	.2	.185	(.152)	92	(76)	5	(4)	47-125	30
Heptachlor Epoxide	ND	(ND)	.2	.204	(.18)	102	(90)	.2	.198	(.163)	99	(82)	3	(10)	53-134	30
gamma-Chlordane	ND	(ND)	.2	.214	(.188)	107	(94)	.2	.214	(.175)	107	(88)	0	(7)	41-125	30
alpha-Chlordane	ND	(ND)	.2	.211	(.185)	105	(92)	.2	.209	(.17)	104	(85)	1	(8)	41-125	30
Endosulfan I	ND	(ND)	.2	.272	(.207)	136	(104)	.2	.287	(.186)	144*	(93)	5	(11)	49-143	30
4,4'-DDE	ND	(ND)	.4	.367	(.414)	92	(104)	.4	.372	(.383)	93	(96)	1	(8)	45-139	30
Dieldrin	ND	(ND)	.4	.401	(.373)	100	(93)	.4	.396	(.341)	99	(85)	1	(9)	42-132	30
Endrin	ND	(ND)	.4	.433	(.383)	108	(96)	.4	.43	(.35)	108	(88)	1	(9)	43-134	30
4,4'-DDD	ND	(ND)	.4	.489	(.429)	122	(107)	.4	.492	(.395)	123	(99)	1	(8)	48-136	30
Endosulfan II	ND	(ND)	.4	.463	(.412)	116	(103)	.4	.467	(.383)	117	(96)	1	(7)	75-159	30
4,4'-DDT	ND	(ND)	.4	.438	(.414)	110	(104)	.4	.438	(.379)	110	(95)	0	(9)	34-143	30
Endrin Aldehyde	ND	(ND)	.4	.527	(.456)	132	(114)	.4	.535	(.434)	134	(108)	2	(5)	75-150	30
Endosulfan Sulfate	ND	(ND)	.4	.537	(.43)	134	(108)	.4	.542	(.402)	136	(100)	1	(7)	46-141	30
Endrin Ketone	ND	(ND)	.4	.501	(.463)	125	(116)	.4	.506	(.432)	126	(108)	1	(7)	75-150	30
Methoxychlor	ND	(ND)	2	2.58	(2.26)	129	(113)	2	2.6	(2.11)	130	(105)	1	(7)	73-142	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)		BS % REC		SPIKE AMT (ug/L)	BSD RSLT (ug/L)		BSD % REC		QC LIMIT (%)
Tetrachloro-m-xylene	.4	.349	(.31)	87	(77)	.4	.326	(.277)	81	(69)	45-125
Decachlorobiphenyl	.8	.943	(.79)	118	(99)	.8	.956	(.73)	119	(91)	34-133

5072

SW3550B/8081A
PESTICIDES

Cl[illegible]	: SHAW E&I	Date Collected:	NA
Pr[illegible]	: EL TORO, CTO 0024	Date Received:	03/27/03
Batch No.	: 03C131	Date Extracted:	03/27/03 15:00
Sample ID:	MBLK1S	Date Analyzed:	03/28/03 16:03
Lab Samp ID:	CPC013SB	Dilution Factor:	1
Lab File ID:	WC27044A	Matrix :	SOIL
Ext Btch ID:	CPC013S	% Moisture :	NA
Calib. Ref.:	WC27035A	Instrument ID :	GCT016

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	ND | (ND)	.002	.0002 | .0002
GAMMA-BHC (LINDANE)	ND | (ND)	.002	.0002 | .0002
BETA-BHC	ND | (ND)	.002	.0002 | .0002
HEPTACHLOR	ND | (ND)	.002	.001 | .001
DELTA-BHC	ND | (ND)	.002	.0002 | .0002
ALDRIN	ND | (ND)	.002	.0005 | .0005
HEPTACHLOR EPOXIDE	ND | (ND)	.002	.0002 | .0002
GAMMA-CHLORDANE	ND | (ND)	.002	.0002 | .0002
ALPHA-CHLORDANE	ND | (ND)	.002	.0002 | .0002
ENDOSULFAN I	ND | (ND)	.004	.001 | .001
4,4'-DDE	ND | (ND)	.004	.001 | .001
DIELDRIN	ND | (ND)	.004	.0005 | .0005
ENDRIN	ND | (ND)	.003	.001 | .001
4,4'-DDD	ND | (ND)	.004	.001 | .001
ENDOSULFAN II	ND | (ND)	.004	.0005 | .0005
4,4'-DDT	ND | (ND)	.004	.001 | .001
ENDRIN ALDEHYDE	ND | (ND)	.004	.0005 | .0005
EN[illegible] FAN SULFATE	ND | (ND)	.004	.0005 | .0005
EN[illegible] KETONE	ND | (ND)	.003	.001 | .001
METHOXYCHLOR	ND | (ND)	.02	.004 | .004
TOXAPHENE	ND | (ND)	.1	.008 | .008

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	88 | (85)	35-135
DECACHLOROBIPHENYL	87 | (78)	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: SW3550B/8081A

MATRIX:	SOIL		% MOISTURE:	NA
DILUTION FACTOR:	1	1		
SAMPLE ID:	MBLK1S			
LAB SAMP ID:	CPC013SB	CPC013SL		
LAB FILE ID:	WC27044A	WC27045A		
DATE EXTRACTED:	03/27/0315:00	03/27/0315:00	DATE COLLECTED:	NA
DATE ANALYZED:	03/28/0316:03	03/28/0316:29	DATE RECEIVED:	03/27/03
PREP. BATCH:	CPC013S	CPC013S		
CALIB. REF:	WC27035A	WC27035A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/kg)	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	QC LIMIT (%)
alpha-BHC	ND | (ND)	.00667	.00684 | (.00618)	103 | (93)	65-135
gamma-BHC (Lindane)	ND | (ND)	.00667	.00694 | (.00648)	104 | (97)	63-130
beta-BHC	ND | (ND)	.00667	.00777 | (.00665)	116 | (100)	41-133
Heptachlor	ND | (ND)	.00667	.00774 | (.00666)	116 | (100)	35-138
delta-BHC	ND | (ND)	.00667	.00743 | (.00663)	111 | (99)	65-136
Aldrin	ND | (ND)	.00667	.00687 | (.00623)	103 | (93)	37-126
Heptachlor Epoxide	ND | (ND)	.00667	.00701 | (.00641)	105 | (96)	43-144
gamma-Chlordane	ND | (ND)	.00667	.00729 | (.00653)	109 | (98)	31-133
alpha-Chlordane	ND | (ND)	.00667	.00714 | (.00659)	107 | (99)	31-135
Endosulfan I	ND | (ND)	.00667	.00881 | (.00703)	132 | (105)	39-153
4,4'-DDE	ND | (ND)	.0133	.0127 | (.0141)	95 | (106)	35-149
Dieldrin	ND | (ND)	.0133	.0135 | (.0129)	101 | (97)	32-142
Endrin	ND | (ND)	.0133	.0143 | (.0128)	107 | (96)	33-144
4,4'-DDD	ND | (ND)	.0133	.0159 | (.0143)	119 | (107)	38-146
Endosulfan II	ND | (ND)	.0133	.0153 | (.0139)	115 | (104)	65-169
4,4'-DDT	ND | (ND)	.0133	.0142 | (.0139)	107 | (104)	25-153
Endrin Aldehyde	ND | (ND)	.0133	.0169 | (.0148)	127 | (111)	65-160
Endosulfan Sulfate	ND | (ND)	.0133	.0174 | (.0147)	131 | (110)	36-151
Endrin Ketone	ND | (ND)	.0133	.0164 | (.0154)	123 | (116)	65-160
Methoxychlor	ND | (ND)	.0667	.0807 | (.0717)	121 | (108)	63-152

SURROGATE PARAMETER	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	QC LIMIT (%)
Tetrachloro-m-xylene	.0133	.0119 | (.0115)	90 | (86)	35-135
Decachlorobiphenyl	.0266	.0299 | (.0243)	112 | (91)	25-143

SW3520C/8081A
PESTICIDES

C' · :	SHAW E&I	Date Collected:	NA
P. t :	EL TORO, CTO 0024	Date Received:	04/03/03
Batch No. :	03D011	Date Extracted:	04/03/03 10:30
Sample ID:	MBLK1W	Date Analyzed:	04/07/03 14:42
Lab Samp ID:	CPD003WB	Dilution Factor:	1
Lab File ID:	SD07006A	Matrix :	WATER
Ext Btch ID:	CPD003W	% Moisture :	NA
Calib. Ref.:	SD07003A	Instrument ID :	GCT008

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
ALPHA-BHC	(ND)|ND	.1	.01|.01
GAMMA-BHC (LINDANE)	(ND)|ND	.1	.01|.01
BETA-BHC	(ND)|ND	.1	.01|.01
HEPTACHLOR	(ND)|ND	.1	.01|.01
DELTA-BHC	(ND)|ND	.1	.01|.01
ALDRIN	(ND)|ND	.1	.01|.01
HEPTACHLOR EPOXIDE	(ND)|ND	.1	.01|.01
GAMMA-CHLORDANE	(ND)|ND	.1	.01|.01
ALPHA-CHLORDANE	(ND)|ND	.1	.01|.01
ENDOSULFAN I	(ND)|ND	.1	.03|.03
4,4'-DDE	(ND)|ND	.2	.03|.03
DIELDRIN	(ND)|ND	.2	.1|.1
ENDRIN	(ND)|ND	.1	.01|.01
4,4'-DDD	(ND)|ND	.2	.03|.03
ENDOSULFAN II	(ND)|ND	.2	.01|.01
4,4'-DDT	(ND)|ND	.2	.02|.02
ENDRIN ALDEHYDE	(ND)|ND	.2	.01|.01
E LFAN SULFATE	(ND)|ND	.2	.01|.01
EN. , KETONE	(ND)|.018J	.1	.01|.01
METHOXYCHLOR	(ND)|ND	1	.1|.1
TOXAPHENE	(ND)|ND	3	1.2|1.2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(59)|86	45-125
DECACHLOROBIPHENYL	(77)|81	34-133

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: SW3520C/8081A

MATRIX: WATER | % MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	CPD003WB	CPD003WL	CPD003WC		
LAB FILE ID:	SD07006A	SD07007A	SD07008A		
DATE EXTRACTED:	04/03/0310:30	04/03/0310:30	04/03/0310:30	DATE COLLECTED:	NA
DATE ANALYZED:	04/07/0314:42	04/07/0315:07	04/07/0315:32	DATE RECEIVED:	04/03/03
PREP. BATCH:	CPD003W	CPD003W	CPD003W		
CALIB. REF:	SD07003A	SD07003A	SD07003A		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)		SPIKE AMT (ug/L)	BS RSLT (ug/L)		BS % REC		SPIKE AMT (ug/L)	BSD RSLT (ug/L)		BSD % REC		RPD (%)		QC LIMIT (%)	MAX RPD (%)
alpha-BHC	(ND)	ND	.2	(.178)	.192	(89)	96	.2	(.182)	.187	(91)	94	(2)	3	75-125	30
gamma-BHC (Lindane)	(ND)	ND	.2	(.186)	.196	(93)	98	.2	(.188)	.194	(94)	97	(1)	1	73-125	30
beta-BHC	(ND)	ND	.2	(.191)	.204	(96)	102	.2	(.188)	.203	(94)	101	(2)	0	51-125	30
Heptachlor	(ND)	ND	.2	(.2)	.215	(100)	108	.2	(.193)	.201	(96)	100	(4)	7	45-128	30
delta-BHC	(ND)	ND	.2	(.21)	.21	(105)	105	.2	(.208)	.213	(104)	106	(1)	1	75-126	30
Aldrin	(ND)	ND	.2	(.198)	.201	(99)	100	.2	(.191)	.19	(96)	95	(4)	6	47-125	30
Heptachlor Epoxide	(ND)	ND	.2	(.194)	.201	(97)	100	.2	(.195)	.197	(97)	98	(1)	2	53-134	30
gamma-Chlordane	(ND)	ND	.2	(.193)	.206	(96)	103	.2	(.19)	.201	(95)	100	(2)	2	41-125	30
alpha-Chlordane	(ND)	ND	.2	(.195)	.198	(97)	99	.2	(.194)	.193	(97)	96	(1)	3	41-125	30
Endosulfan I	(ND)	ND	.2	(.265)	.214	(132)	107	.2	(.257)	.213	(128)	106	(3)	0	49-143	30
4,4'-DDE	(ND)	ND	.4	(.369)	.419	(92)	105	.4	(.368)	.416	(92)	104	(0)	1	45-139	30
Dieldrin	(ND)	ND	.4	(.366)	.375	(92)	94	.4	(.37)	.382	(92)	96	(1)	2	42-132	30
Endrin	(ND)	ND	.4	(.419)	.415	(105)	104	.4	(.418)	.413	(104)	103	(0)	0	43-134	30
4,4'-DDD	(ND)	ND	.4	(.439)	.42	(110)	105	.4	(.435)	.419	(109)	105	(1)	0	48-136	30
Endosulfan II	(ND)	ND	.4	(.432)	.443	(108)	111	.4	(.439)	.449	(110)	112	(2)	1	75-159	30
4,4'-DDT	(ND)	ND	.4	(.441)	.437	(110)	109	.4	(.44)	.432	(110)	108	(0)	1	34-143	30
Endrin Aldehyde	(ND)	ND	.4	(.465)	.461	(116)	115	.4	(.476)	.466	(119)	116	(2)	1	75-150	30
Endosulfan Sulfate	(ND)	ND	.4	(.457)	.46	(114)	115	.4	(.461)	.463	(115)	116	(1)	1	46-141	30
Endrin Ketone	(ND)	.018J	.4	(.464)	.482	(116)	116	.4	(.469)	.532	(117)	128	(1)	10	75-150	30
Methoxychlor	(ND)	ND	2	(2.26)	2.18	(113)	109	2	(2.24)	2.16	(112)	108	(1)	1	73-142	30

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)		BS % REC		SPIKE AMT (ug/L)	BSD RSLT (ug/L)		BSD % REC		QC LIMIT (%)
Tetrachloro-m-xylene	.4	(.336)	.341	(84)	85	.4	(.325)	.327	(81)	82	45-125
Decachlorobiphenyl	.8	(.691)	.632	(86)	79	.8	(.697)	.64	(87)	80	34-133

5035

SW3550B/8081A
PESTICIDES

Cl[illegible] :	SHAW E&I	Date Collected:	NA
P[illegible]t :	EL TORO, CTO 0024	Date Received:	04/03/03
Batch No. :	03D011	Date Extracted:	04/03/03 13:30
Sample ID:	MBLK1S	Date Analyzed:	04/07/03 16:23
Lab Samp ID:	CPD004SB	Dilution Factor:	1
Lab File ID:	SD07010A	Matrix :	SOIL
Ext Btch ID:	CPD004S	% Moisture :	NA
Calib. Ref.:	SD07003A	Instrument ID :	GCT008

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
ALPHA-BHC	(ND) | ND	.002	.0002 | .0002
GAMMA-BHC (LINDANE)	(ND) | ND	.002	.0002 | .0002
BETA-BHC	(ND) | ND	.002	.0002 | .0002
HEPTACHLOR	(ND) | ND	.002	.001 | .001
DELTA-BHC	(ND) | ND	.002	.0002 | .0002
ALDRIN	(ND) | ND	.002	.0005 | .0005
HEPTACHLOR EPOXIDE	(ND) | ND	.002	.0002 | .0002
GAMMA-CHLORDANE	(ND) | ND	.002	.0002 | .0002
ALPHA-CHLORDANE	(ND) | ND	.002	.0002 | .0002
ENDOSULFAN I	(ND) | ND	.004	.001 | .001
4,4'-DDE	(ND) | ND	.004	.001 | .001
DIELDRIN	(ND) | ND	.004	.0005 | .0005
ENDRIN	(ND) | ND	.003	.001 | .001
4,4'-DDD	(ND) | ND	.004	.001 | .001
ENDOSULFAN II	(ND) | ND	.004	.0005 | .0005
4,4'-DDT	(ND) | ND	.004	.001 | .001
ENDRIN ALDEHYDE	(ND) | ND	.004	.0005 | .0005
E[illegible]'LFAN SULFATE	(ND) | ND	.004	.0005 | .0005
E[illegible] KETONE	(ND) | ND	.003	.001 | .001
METHOXYCHLOR	(ND) | ND	.02	.004 | .004
TOXAPHENE	(ND) | ND	.1	.008 | .008

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TETRACHLORO-M-XYLENE	(77) | 78	35-135
DECACHLOROBIPHENYL	(70) | 69	25-143

RL : Reporting limit
Left of | is related to first column ; Right of | related to second column
( ) included the reported column

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: SW3550B/8081A

MATRIX: SOIL % MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	CPD004SB	CPD004SL	CPD004SC		
LAB FILE ID:	SD07010A	SD07011A	SD07012A		
DATE EXTRACTED:	04/03/0313:30	04/03/0313:30	04/03/0313:30	DATE COLLECTED:	NA
DATE ANALYZED:	04/07/0316:23	04/07/0316:48	04/07/0317:13	DATE RECEIVED:	04/03/03
PREP. BATCH:	CPD004S	CPD004S	CPD004S		
CALIB. REF:	SD07003A	SD07003A	SD07003A		

ACCESSION:

PARAMETER	BLNK RSLT (mg/kg)		SPIKE AMT (mg/kg)	BS RSLT (mg/kg)		BS % REC		SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)		BSD % REC		RPD (%)		QC LIMIT (%)	MAX RPD (%)
alpha-BHC	(ND)	ND	.00667	(.00581)	.00618	(87)	93	.00667	(.00598)	.00636	(90)	95	(3)	3	65-135	50
gamma-BHC (Lindane)	(ND)	ND	.00667	(.00615)	.00632	(92)	95	.00667	(.00649)	.00651	(97)	98	(5)	3	63-130	50
beta-BHC	(ND)	ND	.00667	(.00636)	.00648	(95)	97	.00667	(.00665)	.00667	(100)	100	(4)	3	41-133	50
Heptachlor	(ND)	ND	.00667	(.00637)	.00663	(96)	99	.00667	(.00662)	.00689	(99)	103	(4)	4	35-138	50
delta-BHC	(ND)	ND	.00667	(.00653)	.00661	(98)	99	.00667	(.00684)	.00689	(103)	103	(5)	4	65-136	50
Aldrin	(ND)	ND	.00667	(.00607)	.00612	(91)	92	.00667	(.00621)	.00631	(93)	95	(2)	3	37-126	50
Heptachlor Epoxide	(ND)	ND	.00667	(.00639)	.00643	(96)	96	.00667	(.0066)	.00665	(99)	100	(3)	3	43-144	50
gamma-Chlordane	(ND)	ND	.00667	(.00619)	.00647	(93)	97	.00667	(.00643)	.00673	(96)	101	(4)	4	31-133	50
alpha-Chlordane	(ND)	ND	.00667	(.00636)	.00636	(95)	95	.00667	(.00662)	.00652	(99)	98	(4)	2	31-135	50
Endosulfan I	(ND)	ND	.00667	(.00793)	.00687	(119)	103	.00667	(.00843)	.00712	(126)	107	(6)	4	39-153	50
4,4'-DDE	(ND)	ND	.0133	(.0123)	.0134	(92)	101	.0133	(.0126)	.014	(95)	105	(2)	4	35-149	50
Dieldrin	(ND)	ND	.0133	(.0122)	.0126	(92)	95	.0133	(.0125)	.0128	(94)	96	(2)	2	32-142	50
Endrin	(ND)	ND	.0133	(.0136)	.0134	(102)	101	.0133	(.014)	.0137	(105)	103	(3)	2	33-144	50
4,4'-DDD	(ND)	ND	.0133	(.014)	.0128	(105)	96	.0133	(.0146)	.0139	(110)	104	(4)	8	38-146	50
Endosulfan II	(ND)	ND	.0133	(.0145)	.0151	(109)	113	.0133	(.0148)	.0149	(111)	112	(2)	1	65-169	50
4,4'-DDT	(ND)	ND	.0133	(.0144)	.0139	(108)	104	.0133	(.0149)	.0143	(112)	107	(3)	3	25-153	50
Endrin Aldehyde	(ND)	ND	.0133	(.0152)	.0152	(114)	114	.0133	(.0156)	.0155	(117)	116	(3)	2	65-160	50
Endosulfan Sulfate	(ND)	ND	.0133	(.0152)	.0151	(114)	113	.0133	(.0154)	.0154	(116)	116	(1)	2	36-151	50
Endrin Ketone	(ND)	ND	.0133	(.0154)	.0158	(116)	119	.0133	(.0157)	.016	(118)	120	(2)	1	65-160	50
Methoxychlor	(ND)	ND	.0667	(.0737)	.0707	(111)	106	.0667	(.0747)	.0715	(112)	107	(1)	1	63-152	50

SURROGATE PARAMETER	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)		BS % REC		SPIKE AMT (mg/kg)	BSD RSLT (mg/kg)		BSD % REC		QC LIMIT (%)
Tetrachloro-m-xylene	.0133	(.0115)	.0114	(87)	85	.0133	(.0115)	.0113	(86)	85	35-135
Decachlorobiphenyl	.0266	(.023)	.0213	(86)	80	.0266	(.0235)	.0216	(88)	81	25-143

5037

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/08/03 23:26
Sample ID:	818655-3255	Date Analyzed:	04/08/03 23:26
Lab Samp ID:	D011-02	Dilution Factor:	.93
Lab File ID:	RDB154	Matrix :	SOIL
Ext Btch ID:	V003D15	% Moisture :	8.9
Calib. Ref.:	RDB025	Instrument ID :	T-003

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	5.1	2
1,1,2,2-TETRACHLOROETHANE	ND	5.1	2
1,1,2-TRICHLOROETHANE	ND	5.1	2
1,1-DICHLOROETHANE	ND	5.1	2
1,1-DICHLOROETHENE	ND	5.1	2
1,2-DICHLOROETHANE	ND	5.1	2
1,2-DICHLOROPROPANE	ND	5.1	2
2-BUTANONE (MEK)	ND	51	5.1
2-HEXANONE	ND	51	5.1
2-CHLOROETHYLVINYLETHER	ND	51	2
4-METHYL-2-PENTANONE (MIBK)	ND	51	5.1
ACETONE	19J	51	5.1
BENZENE	ND	5.1	2
BROMODICHLOROMETHANE	ND	5.1	2
BROMOFORM	ND	5.1	2
BROMOMETHANE	ND	5.1	3.1
CARBON DISULFIDE	ND	5.1	2
CARBON TETRACHLORIDE	ND	5.1	2
CHLOROBENZENE	ND	5.1	2
CHLOROETHANE	ND	5.1	3.1
CHLOROFORM	ND	5.1	2
CHLOROMETHANE	ND	5.1	5.1
CIS-1,2-DICHLOROETHENE	ND	5.1	2
CIS-1,3-DICHLOROPROPENE	ND	5.1	2
DIBROMOCHLOROMETHANE	ND	5.1	2
ETHYLBENZENE	ND	5.1	2
XYLENE,TOTAL	ND	5.1	3.1
METHYLENE CHLORIDE	ND	5.1	2
MTBE	ND	10	2
STYRENE	ND	5.1	2
TOLUENE	ND	5.1	2
TRANS-1,2-DICHLOROETHENE	ND	5.1	2
TRANS-1,3-DICHLOROPROPENE	ND	5.1	2
TRICHLOROETHENE	ND	5.1	2
TETRACHLOROETHENE	ND	5.1	2
VINYL ACETATE	ND	51	2
VINYL CHLORIDE	ND	5.1	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	113	70-130
BROMOFLUOROBENZENE	94	70-130
TOLUENE-D8	102	70-130

Preservation Date: 04/02/03 17:30

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/09/03 00:07
Sample ID:	818655-3256	Date Analyzed:	04/09/03 00:07
Lab Samp ID:	D011-03	Dilution Factor:	.89
Lab File ID:	RDB155	Matrix :	SOIL
Ext Btch ID:	V003D15	% Moisture :	6.6
Calib. Ref.:	RDB025	Instrument ID :	T-003

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	4.8	1.9
1,1,2,2-TETRACHLOROETHANE	ND	4.8	1.9
1,1,2-TRICHLOROETHANE	ND	4.8	1.9
1,1-DICHLOROETHANE	ND	4.8	1.9
1,1-DICHLOROETHENE	ND	4.8	1.9
1,2-DICHLOROETHANE	ND	4.8	1.9
1,2-DICHLOROPROPANE	ND	4.8	1.9
2-BUTANONE (MEK)	ND	48	4.8
2-HEXANONE	ND	48	4.8
2-CHLOROETHYLVINYLETHER	ND	48	1.9
4-METHYL-2-PENTANONE (MIBK)	ND	48	4.8
ACETONE	15J	48	4.8
BENZENE	ND	4.8	1.9
BROMODICHLOROMETHANE	ND	4.8	1.9
BROMOFORM	ND	4.8	1.9
BROMOMETHANE	ND	4.8	2.9
CARBON DISULFIDE	ND	4.8	1.9
CARBON TETRACHLORIDE	ND	4.8	1.9
CHLOROBENZENE	ND	4.8	1.9
CHLOROETHANE	ND	4.8	2.9
CHLOROFORM	ND	4.8	1.9
CHLOROMETHANE	ND	4.8	4.8
CIS-1,2-DICHLOROETHENE	ND	4.8	1.9
CIS-1,3-DICHLOROPROPENE	ND	4.8	1.9
DIBROMOCHLOROMETHANE	ND	4.8	1.9
ETHYLBENZENE	ND	4.8	1.9
XYLENE,TOTAL	ND	4.8	2.9
METHYLENE CHLORIDE	ND	4.8	1.9
MTBE	ND	9.5	1.9
STYRENE	ND	4.8	1.9
TOLUENE	ND	4.8	1.9
TRANS-1,2-DICHLOROETHENE	ND	4.8	1.9
TRANS-1,3-DICHLOROPROPENE	ND	4.8	1.9
TRICHLOROETHENE	ND	4.8	1.9
TETRACHLOROETHENE	ND	4.8	1.9
VINYL ACETATE	ND	48	1.9
VINYL CHLORIDE	ND	4.8	1.9

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	112	70-130
BROMOFLUOROBENZENE	94	70-130
TOLUENE-D8	101	70-130

Preservation Date: 04/02/03 17:30

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/09/03 00:48
Sample ID:	818655-3257	Date Analyzed:	04/09/03 00:48
Lab Samp ID:	D011-04	Dilution Factor:	.93
Lab File ID:	RDB156	Matrix :	SOIL
Ext Btch ID:	V003D15	% Moisture :	6.4
Calib. Ref.:	RDB025	Instrument ID :	T-003

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	16J	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CHLOROETHANE	ND	5	3
CHLOROFORM	ND	5	2
CHLOROMETHANE	ND	5	5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	9.9	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	111	70-130
BROMOFLUOROBENZENE	92	70-130
TOLUENE-D8	99	70-130

Preservation Date: 04/02/03 17:30

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/31/03 21:12
Sample ID:	818655-3216	Date Analyzed:	03/31/03 21:12
Lab Samp ID:	C131-02	Dilution Factor:	.82
Lab File ID:	RCW435	Matrix :	SOIL
Ext Btch ID:	V006C54	% Moisture :	8.6
Calib. Ref.:	RCW400	Instrument ID :	T-006

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	4.5	1.8
1,1,2,2-TETRACHLOROETHANE	ND	4.5	1.8
1,1,2-TRICHLOROETHANE	ND	4.5	1.8
1,1-DICHLOROETHANE	ND	4.5	1.8
1,1-DICHLOROETHENE	ND	4.5	1.8
1,2-DICHLOROETHANE	ND	4.5	1.8
1,2-DICHLOROPROPANE	ND	4.5	1.8
2-BUTANONE (MEK)	ND	45	4.5
2-HEXANONE	ND	45	4.5
2-CHLOROETHYLVINYLETHER	ND	45	1.8
4-METHYL-2-PENTANONE (MIBK)	ND	45	4.5
ACETONE	19J	45	4.5
BENZENE	ND	4.5	1.8
BROMODICHLOROMETHANE	ND	4.5	1.8
BROMOFORM	ND	4.5	1.8
BROMOMETHANE	ND	4.5	2.7
CARBON DISULFIDE	ND	4.5	1.8
CARBON TETRACHLORIDE	ND	4.5	1.8
CHLOROBENZENE	ND	4.5	1.8
CHLOROETHANE	ND	4.5	2.7
CHLOROFORM	ND	4.5	1.8
CHLOROMETHANE	ND	4.5	4.5
CIS-1,2-DICHLOROETHENE	ND	4.5	1.8
CIS-1,3-DICHLOROPROPENE	ND	4.5	1.8
DIBROMOCHLOROMETHANE	ND	4.5	1.8
ETHYLBENZENE	ND	4.5	1.8
XYLENE,TOTAL	ND	4.5	2.7
METHYLENE CHLORIDE	ND	4.5	1.8
MTBE	ND	9	1.8
STYRENE	ND	4.5	1.8
TOLUENE	ND	4.5	1.8
TRANS-1,2-DICHLOROETHENE	ND	4.5	1.8
TRANS-1,3-DICHLOROPROPENE	ND	4.5	1.8
TRICHLOROETHENE	ND	4.5	1.8
TETRACHLOROETHENE	ND	4.5	1.8
VINYL ACETATE	ND	45	1.8
VINYL CHLORIDE	ND	4.5	1.8

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	117	70-130
BROMOFLUOROBENZENE	91	70-130
TOLUENE-D8	102	70-130

Preservation Date: 03/26/03 19:00

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/31/03 21:49
Sample ID:	818655-3217	Date Analyzed:	03/31/03 21:49
Lab Samp ID:	C131-03	Dilution Factor:	.89
Lab File ID:	RCW436	Matrix :	SOIL
Ext Btch ID:	V006C54	% Moisture :	6.9
Calib. Ref.:	RCW400	Instrument ID :	T-006

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	4.8	1.9
1,1,2,2-TETRACHLOROETHANE	ND	4.8	1.9
1,1,2-TRICHLOROETHANE	ND	4.8	1.9
1,1-DICHLOROETHANE	ND	4.8	1.9
1,1-DICHLOROETHENE	ND	4.8	1.9
1,2-DICHLOROETHANE	ND	4.8	1.9
1,2-DICHLOROPROPANE	ND	4.8	1.9
2-BUTANONE (MEK)	ND	48	4.8
2-HEXANONE	ND	48	4.8
2-CHLOROETHYLVINYLETHER	ND	48	1.9
4-METHYL-2-PENTANONE (MIBK)	ND	48	4.8
ACETONE	18J	48	4.8
BENZENE	ND	4.8	1.9
BROMODICHLOROMETHANE	ND	4.8	1.9
BROMOFORM	ND	4.8	1.9
BROMOMETHANE	ND	4.8	2.9
CARBON DISULFIDE	ND	4.8	1.9
CARBON TETRACHLORIDE	ND	4.8	1.9
CHLOROBENZENE	ND	4.8	1.9
CHLOROETHANE	ND	4.8	2.9
CHLOROFORM	ND	4.8	1.9
CHLOROMETHANE	ND	4.8	4.8
CIS-1,2-DICHLOROETHENE	ND	4.8	1.9
CIS-1,3-DICHLOROPROPENE	ND	4.8	1.9
DIBROMOCHLOROMETHANE	ND	4.8	1.9
ETHYLBENZENE	ND	4.8	1.9
XYLENE,TOTAL	ND	4.8	2.9
METHYLENE CHLORIDE	ND	4.8	1.9
MTBE	ND	9.6	1.9
STYRENE	ND	4.8	1.9
TOLUENE	ND	4.8	1.9
TRANS-1,2-DICHLOROETHENE	ND	4.8	1.9
TRANS-1,3-DICHLOROPROPENE	ND	4.8	1.9
TRICHLOROETHENE	ND	4.8	1.9
TETRACHLOROETHENE	ND	4.8	1.9
VINYL ACETATE	ND	48	1.9
VINYL CHLORIDE	ND	4.8	1.9

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	108	70-130
BROMOFLUOROBENZENE	94	70-130
TOLUENE-D8	102	70-130

Preservation Date: 03/26/03 19:00

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	04/01/03 19:27
Sample ID:	818655-3218	Date Analyzed:	04/01/03 19:27
Lab Samp ID:	C131-04	Dilution Factor:	.79
Lab File ID:	RDW031	Matrix :	SOIL
Ext Btch ID:	V006D04	% Moisture :	6.6
Calib. Ref.:	RCW400	Instrument ID :	T-006

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	4.2	1.7
1,1,2,2-TETRACHLOROETHANE	ND	4.2	1.7
1,1,2-TRICHLOROETHANE	ND	4.2	1.7
1,1-DICHLOROETHANE	ND	4.2	1.7
1,1-DICHLOROETHENE	ND	4.2	1.7
1,2-DICHLOROETHANE	ND	4.2	1.7
1,2-DICHLOROPROPANE	ND	4.2	1.7
2-BUTANONE (MEK)	ND	42	4.2
2-HEXANONE	ND	42	4.2
2-CHLOROETHYLVINYLETHER	ND	42	1.7
4-METHYL-2-PENTANONE (MIBK)	ND	42	4.2
ACETONE	15J	42	4.2
BENZENE	ND	4.2	1.7
BROMODICHLOROMETHANE	ND	4.2	1.7
BROMOFORM	ND	4.2	1.7
BROMOMETHANE	ND	4.2	2.5
CARBON DISULFIDE	ND	4.2	1.7
CARBON TETRACHLORIDE	ND	4.2	1.7
CHLOROBENZENE	ND	4.2	1.7
CHLOROETHANE	ND	4.2	2.5
CHLOROFORM	ND	4.2	1.7
CHLOROMETHANE	ND	4.2	4.2
CIS-1,2-DICHLOROETHENE	ND	4.2	1.7
CIS-1,3-DICHLOROPROPENE	ND	4.2	1.7
DIBROMOCHLOROMETHANE	ND	4.2	1.7
ETHYLBENZENE	ND	4.2	1.7
XYLENE,TOTAL	ND	4.2	2.5
METHYLENE CHLORIDE	ND	4.2	1.7
MTBE	ND	8.5	1.7
STYRENE	ND	4.2	1.7
TOLUENE	ND	4.2	1.7
TRANS-1,2-DICHLOROETHENE	ND	4.2	1.7
TRANS-1,3-DICHLOROPROPENE	ND	4.2	1.7
TRICHLOROETHENE	ND	4.2	1.7
TETRACHLOROETHENE	ND	4.2	1.7
VINYL ACETATE	ND	42	1.7
VINYL CHLORIDE	ND	4.2	1.7

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	70-130
BROMOFLUOROBENZENE	93	70-130
TOLUENE-D8	105	70-130

Preservation Date: 03/26/03 19:00

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Pr :	: EL TORO, CTO 0024	Date Received:	03/26/03
Ba No.	: 03C131	Date Extracted:	04/01/03 05:11
Sample ID:	818655-3215	Date Analyzed:	04/01/03 05:11
Lab Samp ID:	C131-01	Dilution Factor:	1
Lab File ID:	RDW009	Matrix :	WATER
Ext Btch ID:	V006D02	% Moisture :	NA
Calib. Ref.:	RCW400	Instrument ID :	T-006

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CH ETHANE	ND	5	2
CH ORM	ND	5	2
CHLOROMETHANE	ND	5	2.5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	91	86-118
BROMOFLUOROBENZENE	92	86-115
TOLUENE-D8	104	88-110

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	04/01/03 11:55
Sample ID:	818655-3223	Date Analyzed:	04/01/03 11:55
Lab Samp ID:	C131-09R	Dilution Factor:	1
Lab File ID:	RDW020	Matrix :	WATER
Ext Btch ID:	V006D02	% Moisture :	NA
Calib. Ref.:	RCW400	Instrument ID :	T-006

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CHLOROETHANE	ND	5	2
CHLOROFORM	ND	5	2
CHLOROMETHANE	ND	5	2.5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	97	86-118
BROMOFLUOROBENZENE	97	86-115
TOLUENE-D8	106	88-110

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/04/03 13:03
Sample ID	: 818655-3254	Date Analyzed:	04/04/03 13:03
Lab Samp ID	: D011-01	Dilution Factor:	1
Lab File ID	: RDB089	Matrix	: WATER
Ext Btch ID	: V003D09	% Moisture	: NA
Calib. Ref.	: RDB025	Instrument ID	: T-003

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CHLOROETHANE	ND	5	2
CHLOROFORM	ND	5	2
CHLOROMETHANE	ND	5	2.5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	104	86-118
BROMOFLUOROBENZENE	96	86-115
TOLUENE-D8	98	88-110

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/04/03 13:44
Sample ID:	818655-3260	Date Analyzed:	04/04/03 13:44
Lab Samp ID:	D011-07	Dilution Factor:	1
Lab File ID:	RDB090	Matrix :	WATER
Ext Btch ID:	V003D09	% Moisture :	NA
Calib. Ref.:	RDB025	Instrument ID :	T-003

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CHLOROETHANE	ND	5	2
CHLOROFORM	ND	5	2
CHLOROMETHANE	ND	5	2.5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	86-118
BROMOFLUOROBENZENE	95	86-115
TOLUENE-D8	99	88-110

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	04/01/03
Batch No.	: 03C131	Date Extracted:	04/01/03 04:35
Sample ID:	MBLK1W	Date Analyzed:	04/01/03 04:35
Lab Samp ID:	V006D02Q	Dilution Factor:	1
Lab File ID:	RDW008	Matrix :	WATER
Ext Btch ID:	V006D02	% Moisture :	NA
Calib. Ref.:	RCW400	Instrument ID :	T-006

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
C[illegible]ETHANE	ND	5	2
C[illegible]OFORM	ND	5	2
CHLOROMETHANE	ND	5	2.5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	93	86-118
BROMOFLUOROBENZENE	93	86-115
TOLUENE-D8	106	88-110

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: SW 5030B/8260B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V006D02Q	V006D02L	V006D02C		
LAB FILE ID:	RDW008	RDW005	RDW006		
DATE EXTRACTED:	04/01/0304:35	04/01/0302:44	04/01/0303:21	DATE COLLECTED:	NA
DATE ANALYZED:	04/01/0304:35	04/01/0302:44	04/01/0303:21	DATE RECEIVED:	04/01/03
PREP. BATCH:	V006D02	V006D02	V006D02		
CALIB. REF:	RCW400	RCW400	RCW400		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	21.7	108	20	20	100	8	75-125	20
Benzene	ND	20	19.6	98	20	19.5	97	1	75-125	20
Chlorobenzene	ND	20	19.3	96	20	19.2	96	0	75-125	20
Toluene	ND	20	19.8	99	20	19.5	97	2	74-125	20
Trichloroethene	ND	20	22.3	111	20	21.9	110	1	71-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	45.6	91	50	45.9	92	86-118
Bromofluorobenzene	50	47.3	95	50	47.1	94	86-115
Toluene-d8	50	52.7	105	50	53.3	107	88-110

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Cl[illegible] : SHAW E&I	Date Collected: NA
P[illegible] : EL TORO, CTO 0024	Date Received: 03/31/03
Ba[illegible] No. : 03C131	Date Extracted: 03/31/03 15:06
Sample ID: MBLK1S	Date Analyzed: 03/31/03 15:06
Lab Samp ID: V006C54B	Dilution Factor: 1
Lab File ID: RCW425	Matrix : SOIL
Ext Btch ID: V006C54	% Moisture : NA
Calib. Ref.: RCW400	Instrument ID : T-006

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
C[illegible]ETHANE	ND	5	3
Ch[illegible]FORM	ND	5	2
CHLOROMETHANE	ND	5	5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	93	70-130
BROMOFLUOROBENZENE	95	70-130
TOLUENE-D8	103	70-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: SW 5035/8260B

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	V006C54B	V006C54L	V006C54C		
LAB FILE ID:	RCW425	RCW423	RCW424		
DATE EXTRACTED:	03/31/0315:06	03/31/0313:53	03/31/0314:30	DATE COLLECTED:	NA
DATE ANALYZED:	03/31/0315:06	03/31/0313:53	03/31/0314:30	DATE RECEIVED:	03/31/03
PREP. BATCH:	V006C54	V006C54	V006C54		
CALIB. REF:	RCW400	RCW400	RCW400		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	19.8	99	20	20	100	1	65-135	30
Benzene	ND	20	18.6	93	20	19.2	96	3	65-135	30
Chlorobenzene	ND	20	18.9	94	20	19	95	1	65-135	30
Toluene	ND	20	18.6	93	20	19.4	97	4	64-135	30
Trichloroethene	ND	20	19.5	98	20	20.9	104	7	61-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	50.7	101	50	48.9	98	70-130
Bromofluorobenzene	50	46.3	93	50	46.3	93	70-130
Toluene-d8	50	49.6	99	50	50.7	101	70-130

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Cl[illegible]	: SHAW E&I	Date Collected:	NA
Pr[illegible]	: EL TORO, CTO 0024	Date Received:	04/01/03
Batch No.	: 03C131	Date Extracted:	04/01/03 18:13
Sample ID:	MBLK2S	Date Analyzed:	04/01/03 18:13
Lab Samp ID:	V006D04Q	Dilution Factor:	1
Lab File ID:	RDW029	Matrix :	SOIL
Ext Btch ID:	V006D04	% Moisture :	NA
Calib. Ref.:	RCW400	Instrument ID :	T-006

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
C[illegible]ETHANE	ND	5	3
Ch[illegible]FORM	ND	5	2
CHLOROMETHANE	ND	5	5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	70-130
BROMOFLUOROBENZENE	94	70-130
TOLUENE-D8	108	70-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: SW 5035/8260B

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK2S				
LAB SAMP ID:	V006D04Q	V006D04L	V006D04C		
LAB FILE ID:	RDW029	RDW026	RDW027		
DATE EXTRACTED:	04/01/0318:13	04/01/0316:23	04/01/0317:00	DATE COLLECTED:	NA
DATE ANALYZED:	04/01/0318:13	04/01/0316:23	04/01/0317:00	DATE RECEIVED:	04/01/03
PREP. BATCH:	V006D04	V006D04	V006D04		
CALIB. REF:	RCW400	RCW400	RCW400		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	20.9	105	20	20.1	100	4	65-135	30
Benzene	ND	20	19.2	96	20	19.3	97	1	65-135	30
Chlorobenzene	ND	20	19.8	99	20	19.2	96	3	65-135	30
Toluene	ND	20	20.5	102	20	20.1	100	2	64-135	30
Trichloroethene	ND	20	22.2	111	20	21.6	108	3	61-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
1,2-Dichloroethane-d4	50	48.4	97	50	46.7	93	70-130
Bromofluorobenzene	50	51	102	50	46.6	93	70-130
Toluene-d8	50	53.4	107	50	52.7	105	70-130

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

C[illegible]nt : SHAW E&I	Date Collected: NA
[illegible]ct : EL TORO, CTO 0024	Date Received: 04/01/03
Ba[illegible]n No. : 03C131	Date Extracted: 04/01/03 18:50
Sample ID: MBLK3S	Date Analyzed: 04/01/03 18:50
Lab Samp ID: VPC004SB	Dilution Factor: 1.0
Lab File ID: RDW030	Matrix : SOIL
Ext Btch ID: VO06D04	% Moisture : NA
Calib. Ref.: RCW400	Instrument ID : T-006

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
[illegible]OETHANE	ND	5	3
[illegible]OFORM	ND	5	2
CHLOROMETHANE	ND	5	5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	99	70-130
BROMOFLUOROBENZENE	95	70-130
TOLUENE-D8	102	70-130

Preservation Date: 03/26/03 19:00

SW 5030B/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	04/04/03
Batch No.	: 03D011	Date Extracted:	04/04/03 07:58
Sample ID:	MBLK1W	Date Analyzed:	04/04/03 07:58
Lab Samp ID:	V003D09Q	Dilution Factor:	1
Lab File ID:	RDB082	Matrix :	WATER
Ext Btch ID:	V003D09	% Moisture :	NA
Calib. Ref.:	RDB025	Instrument ID :	T-003

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CHLOROETHANE	ND	5	2
CHLOROFORM	ND	5	2
CHLOROMETHANE	ND	5	2.5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	117	86-118
BROMOFLUOROBENZENE	93	86-115
TOLUENE-D8	96	88-110

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
B NO.: 03D011
ME. JD: SW 5030B/8260B

MATRIX: WATER
% MOISTURE: NA

DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	V003D09Q	V003D09L	V003D09C		
LAB FILE ID:	RDB082	RDB079	RDB080		
DATE EXTRACTED:	04/04/0307:58	04/04/0305:54	04/04/0306:35	DATE COLLECTED:	NA
DATE ANALYZED:	04/04/0307:58	04/04/0305:54	04/04/0306:35	DATE RECEIVED:	04/04/03
PREP. BATCH:	V003D09	V003D09	V003D09		
CALIB. REF:	RDB025	RDB025	RDB025		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	22.5	113	20	21.7	109	4	75-125	20
Benzene	ND	20	22.4	112	20	21.3	107	5	75-125	20
Chlorobenzene	ND	20	23.2	116	20	22.1	110	5	75-125	20
Toluene	ND	20	22.4	112	20	21.5	107	4	74-125	20
Trichloroethene	ND	20	21.7	109	20	20.1	101	8	71-125	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
1 chloroethane-d4	50	58.6	117	50	57.2	114	86-118
B luorobenzene	50	47.3	95	50	46.4	93	86-115
Toluene-d8	50	47.8	96	50	47.9	96	88-110

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	04/08/03
Batch No.	: 03D011	Date Extracted:	04/08/03 17:15
Sample ID:	MBLK1S	Date Analyzed:	04/08/03 17:15
Lab Samp ID:	V003D15B	Dilution Factor:	1
Lab File ID:	RDB145	Matrix :	SOIL
Ext Btch ID:	V003D15	% Moisture :	NA
Calib. Ref.:	RDB025	Instrument ID :	T-003

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CHLOROETHANE	ND	5	3
CHLOROFORM	ND	5	2
CHLOROMETHANE	ND	5	5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	101	70-130
BROMOFLUOROBENZENE	91	70-130
TOLUENE-D8	99	70-130

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PRO IFCT: EL TORO, CTO 0024
B/ IO..: 03D011
ME : SW 5035/8260B

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	V003D15B	V003D15L	V003D15C		
LAB FILE ID:	RDB145	RDB143	RDB144		
DATE EXTRACTED:	04/08/0317:15	04/08/0315:51	04/08/0316:33	DATE COLLECTED:	NA
DATE ANALYZED:	04/08/0317:15	04/08/0315:51	04/08/0316:33	DATE RECEIVED:	04/08/03
PREP. BATCH:	V003D15	V003D15	V003D15		
CALIB. REF:	RDB025	RDB025	RDB025		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,1-Dichloroethene	ND	20	20.1	100	20	20.2	101	0	65-135	30
Benzene	ND	20	19.6	98	20	20.4	102	4	65-135	30
Chlorobenzene	ND	20	20.8	104	20	20.9	104	0	65-135	30
Toluene	ND	20	20	100	20	20.3	102	2	64-135	30
Trichloroethene	ND	20	19.4	97	20	20.2	101	4	61-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
1, chloroethane-d4	50	53.6	107	50	53.6	107	70-130
Br uorobenzene	50	45.4	91	50	45.1	90	70-130
Toluene-d8	50	47.3	95	50	47.8	96	70-130

SW 5035/8260B
VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	04/08/03
Batch No.	: 03D011	Date Extracted:	04/08/03 17:56
Sample ID:	MBLK2S	Date Analyzed:	04/08/03 17:56
Lab Samp ID:	VPD001SB	Dilution Factor:	1
Lab File ID:	RDB146	Matrix :	SOIL
Ext Btch ID:	V003D15	% Moisture :	NA
Calib. Ref.:	RDB025	Instrument ID :	T-003

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,1,1-TRICHLOROETHANE	ND	5	2
1,1,2,2-TETRACHLOROETHANE	ND	5	2
1,1,2-TRICHLOROETHANE	ND	5	2
1,1-DICHLOROETHANE	ND	5	2
1,1-DICHLOROETHENE	ND	5	2
1,2-DICHLOROETHANE	ND	5	2
1,2-DICHLOROPROPANE	ND	5	2
2-BUTANONE (MEK)	ND	50	5
2-HEXANONE	ND	50	5
2-CHLOROETHYLVINYLETHER	ND	50	2
4-METHYL-2-PENTANONE (MIBK)	ND	50	5
ACETONE	ND	50	5
BENZENE	ND	5	2
BROMODICHLOROMETHANE	ND	5	2
BROMOFORM	ND	5	2
BROMOMETHANE	ND	5	3
CARBON DISULFIDE	ND	5	2
CARBON TETRACHLORIDE	ND	5	2
CHLOROBENZENE	ND	5	2
CHLOROETHANE	ND	5	3
CHLOROFORM	ND	5	2
CHLOROMETHANE	ND	5	5
CIS-1,2-DICHLOROETHENE	ND	5	2
CIS-1,3-DICHLOROPROPENE	ND	5	2
DIBROMOCHLOROMETHANE	ND	5	2
ETHYLBENZENE	ND	5	2
XYLENE,TOTAL	ND	5	3
METHYLENE CHLORIDE	ND	5	2
MTBE	ND	10	2
STYRENE	ND	5	2
TOLUENE	ND	5	2
TRANS-1,2-DICHLOROETHENE	ND	5	2
TRANS-1,3-DICHLOROPROPENE	ND	5	2
TRICHLOROETHENE	ND	5	2
TETRACHLOROETHENE	ND	5	2
VINYL ACETATE	ND	50	2
VINYL CHLORIDE	ND	5	2

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
1,2-DICHLOROETHANE-D4	121	70-130
BROMOFLUOROBENZENE	87	70-130
TOLUENE-D8	99	70-130

Preservation Date: 04/02/03 17:30

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 12:30
Sample ID:	818655-3255	Date Analyzed:	04/07/03 17:40
Lab Sample ID:	D011-02	Dilution Factor:	1
Lab File ID:	RDX116	Matrix :	SOIL
Ext Btch ID:	SVD005S	% Moisture :	8.9
Calib. Ref.:	RCX007	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	360	180
1,2-DICHLOROBENZENE	ND	360	180
1,3-DICHLOROBENZENE	ND	360	180
1,4-DICHLOROBENZENE	ND	360	180
2,4,5-TRICHLOROPHENOL	ND	910	180
2,4,6-TRICHLOROPHENOL	ND	360	180
2,4-DICHLOROPHENOL	ND	360	180
2,4-DIMETHYLPHENOL	ND	360	180
2,4-DINITROPHENOL	ND	910	180
2,4-DINITROTOLUENE	ND	360	180
2,6-DINITROTOLUENE	ND	360	180
2-CHLORONAPHTHALENE	ND	360	180
2-CHLOROPHENOL	ND	360	180
2-METHYLNAPHTHALENE	ND	360	180
2-METHYLPHENOL	ND	360	180
2-NITROANILINE	ND	910	180
2-NITROPHENOL	ND	360	180
3,3'-DICHLOROBENZIDINE	ND	360	180
3-NITROANILINE	ND	910	180
4,6-DINITRO-2-METHYLPHENOL	ND	910	180
4-BROMOPHENYL-PHENYL ETHER	ND	360	180
4-CHLORO-3-METHYLPHENOL	ND	360	180
4-CHLOROANILINE	ND	360	180
4-CHLOROPHENYL-PHENYL ETHER	ND	360	180
4-METHYLPHENOL (1)	ND	360	180
4-NITROANILINE	ND	910	180
4-NITROPHENOL	ND	910	180
ACENAPHTHENE	ND	360	180
ACENAPHTHYLENE	ND	360	180
ANTHRACENE	ND	360	180
BENZO(A)ANTHRACENE	ND	360	180
BENZO(B)FLUORANTHENE	ND	360	180
BENZO(K)FLUORANTHENE	ND	360	180
BENZO(G,H,I)PERYLENE	ND	360	180
BIS(2-CHLOROETHOXY)METHANE	ND	360	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	360	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	360	180
BUTYLBENZYLPHTHALATE	ND	360	180
CHRYSENE	ND	360	180
DI-N-BUTYLPHTHALATE	ND	360	180
DI-N-OCTYLPHTHALATE	ND	360	180
DIBENZOFURAN	ND	360	180
DIETHYLPHTHALATE	ND	360	180
DIMETHYLPHTHALATE	ND	360	180
FLUORANTHENE	ND	360	180
FLUORENE	ND	360	180
HEXACHLOROBUTADIENE	ND	360	180
HEXACHLOROCYCLOPENTADIENE	ND	360	180
HEXACHLOROETHANE	ND	360	180
N-NITROSODIPHENYLAMINE (2)	ND	360	180
NAPHTHALENE	ND	360	180
NITROBENZENE	ND	360	180
PENTACHLOROPHENOL	ND	220	180
PHENANTHRENE	ND	360	180
PHENOL	ND	360	180
PYRENE	ND	360	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	52	25-144
2-FLUOROBIPHENYL	56	34-135
2-FLUOROPHENOL	50	25-135
NITROBENZENE-D5	60	25-135
PHENOL-D5	52	25-135
TERPHENYL-D14	57	32-136

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

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 12:30
Sample ID:	818655-3256	Date Analyzed:	04/07/03 18:14
Lab Samp ID:	D011-03	Dilution Factor:	1
Lab File ID:	RDX117	Matrix	: SOIL
Ext Btch ID:	SVD005S	% Moisture	: 6.6
Calib. Ref.:	RCX007	Instrument ID	: T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	180
1,2-DICHLOROBENZENE	ND	350	180
1,3-DICHLOROBENZENE	ND	350	180
1,4-DICHLOROBENZENE	ND	350	180
2,4,5-TRICHLOROPHENOL	ND	890	180
2,4,6-TRICHLOROPHENOL	ND	350	180
2,4-DICHLOROPHENOL	ND	350	180
2,4-DIMETHYLPHENOL	ND	350	180
2,4-DINITROPHENOL	ND	890	180
2,4-DINITROTOLUENE	ND	350	180
2,6-DINITROTOLUENE	ND	350	180
2-CHLORONAPHTHALENE	ND	350	180
2-CHLOROPHENOL	ND	350	180
2-METHYLNAPHTHALENE	ND	350	180
2-METHYLPHENOL	ND	350	180
2-NITROANILINE	ND	890	180
2-NITROPHENOL	ND	350	180
3,3'-DICHLOROBENZIDINE	ND	350	180
3-NITROANILINE	ND	890	180
4,6-DINITRO-2-METHYLPHENOL	ND	890	180
4-BROMOPHENYL-PHENYL ETHER	ND	350	180
4-CHLORO-3-METHYLPHENOL	ND	350	180
4-CHLOROANILINE	ND	350	180
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	180
4-NITROANILINE	ND	890	180
4-NITROPHENOL	ND	890	180
ACENAPHTHENE	ND	350	180
ACENAPHTHYLENE	ND	350	180
ANTHRACENE	ND	350	180
BENZO(A)ANTHRACENE	ND	350	180
BENZO(B)FLUORANTHENE	ND	350	180
BENZO(K)FLUORANTHENE	ND	350	180
BENZO(G,H,I)PERYLENE	ND	350	180
BIS(2-CHLOROETHOXY)METHANE	ND	350	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	350	180
BUTYLBENZYLPHTHALATE	ND	350	180
CHRYSENE	ND	350	180
DI-N-BUTYLPHTHALATE	ND	350	180
DI-N-OCTYLPHTHALATE	ND	350	180
DIBENZOFURAN	ND	350	180
DIETHYLPHTHALATE	ND	350	180
DIMETHYLPHTHALATE	ND	350	180
FLUORANTHENE	ND	350	180
FLUORENE	ND	350	180
HEXACHLOROBUTADIENE	ND	350	180
HEXACHLOROCYCLOPENTADIENE	ND	350	180
HEXACHLOROETHANE	ND	350	180
N-NITROSODIPHENYLAMINE (2)	ND	350	180
NAPHTHALENE	ND	350	180
NITROBENZENE	ND	350	180
PENTACHLOROPHENOL	ND	210	180
PHENANTHRENE	ND	350	180
PHENOL	ND	350	180
PYRENE	ND	350	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	59	25-144
2-FLUOROBIPHENYL	62	34-135
2-FLUOROPHENOL	56	25-135
NITROBENZENE-D5	68	25-135
PHENOL-D5	59	25-135
TERPHENYL-D14	75	32-136

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

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Bat[illegible] No.	: 03D011	Date Extracted:	04/03/03 12:30
Sa[illegible] ID:	818655-3257	Date Analyzed:	04/07/03 18:48
La[illegible]p ID:	D011-04	Dilution Factor:	1
Lab [illegible]le ID:	RDX118	Matrix :	SOIL
Ext Btch ID:	SVD005S	% Moisture :	6.4
Calib. Ref.:	RCX007	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	180
1,2-DICHLOROBENZENE	ND	350	180
1,3-DICHLOROBENZENE	ND	350	180
1,4-DICHLOROBENZENE	ND	350	180
2,4,5-TRICHLOROPHENOL	ND	890	180
2,4,6-TRICHLOROPHENOL	ND	350	180
2,4-DICHLOROPHENOL	ND	350	180
2,4-DIMETHYLPHENOL	ND	350	180
2,4-DINITROPHENOL	ND	890	180
2,4-DINITROTOLUENE	ND	350	180
2,6-DINITROTOLUENE	ND	350	180
2-CHLORONAPHTHALENE	ND	350	180
2-CHLOROPHENOL	ND	350	180
2-METHYLNAPHTHALENE	ND	350	180
2-METHYLPHENOL	ND	350	180
2-NITROANILINE	ND	890	180
2-NITROPHENOL	ND	350	180
3,3'-DICHLOROBENZIDINE	ND	350	180
3-NITROANILINE	ND	890	180
4,6-DINITRO-2-METHYLPHENOL	ND	890	180
4-BROMOPHENYL-PHENYL ETHER	ND	350	180
4-CHLORO-3-METHYLPHENOL	ND	350	180
4-CHLOROANILINE	ND	350	180
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	180
4-NITROANILINE	ND	890	180
4-NITROPHENOL	ND	890	180
ACENAPHTHENE	ND	350	180
ACENAPHTHYLENE	ND	350	180
ANTHRACENE	ND	350	180
BENZO(A)ANTHRACENE	ND	350	180
BENZO(B)FLUORANTHENE	ND	350	180
BENZO(K)FLUORANTHENE	ND	350	180
BENZO(G,H,I)PERYLENE	ND	350	180
BIS(2-CHLOROETHOXY)METHANE	ND	350	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	180
BI[illegible]THYLHEXYL)PHTHALATE	ND	350	180
BU[illegible]NZYLPHTHALATE	ND	350	180
CH[illegible]E	ND	350	180
DI-N-BUTYLPHTHALATE	ND	350	180
DI-N-OCTYLPHTHALATE	ND	350	180
DIBENZOFURAN	ND	350	180
DIETHYLPHTHALATE	ND	350	180
DIMETHYLPHTHALATE	ND	350	180
FLUORANTHENE	ND	350	180
FLUORENE	ND	350	180
HEXACHLOROBUTADIENE	ND	350	180
HEXACHLOROCYCLOPENTADIENE	ND	350	180
HEXACHLOROETHANE	ND	350	180
N-NITROSODIPHENYLAMINE (2)	ND	350	180
NAPHTHALENE	ND	350	180
NITROBENZENE	ND	350	180
PENTACHLOROPHENOL	ND	210	180
PHENANTHRENE	ND	350	180
PHENOL	ND	350	180
PYRENE	ND	350	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	55	25-144
2-FLUOROBIPHENYL	60	34-135
2-FLUOROPHENOL	56	25-135
NITROBENZENE-D5	65	25-135
PHENOL-D5	58	25-135
TERPHENYL-D14	73	32-136

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

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 13:30
Sample ID:	818655-3216	Date Analyzed:	03/27/03 18:20
Lab Samp ID:	C131-02	Dilution Factor:	1
Lab File ID:	RCX264	Matrix :	SOIL
Ext Btch ID:	SVC035S	% Moisture :	8.6
Calib. Ref.:	RCX007	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	360	180
1,2-DICHLOROBENZENE	ND	360	180
1,3-DICHLOROBENZENE	ND	360	180
1,4-DICHLOROBENZENE	ND	360	180
2,4,5-TRICHLOROPHENOL	ND	910	180
2,4,6-TRICHLOROPHENOL	ND	360	180
2,4-DICHLOROPHENOL	ND	360	180
2,4-DIMETHYLPHENOL	ND	360	180
2,4-DINITROPHENOL	ND	910	180
2,4-DINITROTOLUENE	ND	360	180
2,6-DINITROTOLUENE	ND	360	180
2-CHLORONAPHTHALENE	ND	360	180
2-CHLOROPHENOL	ND	360	180
2-METHYLNAPHTHALENE	ND	360	180
2-METHYLPHENOL	ND	360	180
2-NITROANILINE	ND	910	180
2-NITROPHENOL	ND	360	180
3,3'-DICHLOROBENZIDINE	ND	360	180
3-NITROANILINE	ND	910	180
4,6-DINITRO-2-METHYLPHENOL	ND	910	180
4-BROMOPHENYL-PHENYL ETHER	ND	360	180
4-CHLORO-3-METHYLPHENOL	ND	360	180
4-CHLOROANILINE	ND	360	180
4-CHLOROPHENYL-PHENYL ETHER	ND	360	180
4-METHYLPHENOL (1)	ND	360	180
4-NITROANILINE	ND	910	180
4-NITROPHENOL	ND	910	180
ACENAPHTHENE	ND	360	180
ACENAPHTHYLENE	ND	360	180
ANTHRACENE	ND	360	180
BENZO(A)ANTHRACENE	ND	360	180
BENZO(B)FLUORANTHENE	ND	360	180
BENZO(K)FLUORANTHENE	ND	360	180
BENZO(G,H,I)PERYLENE	ND	360	180
BIS(2-CHLOROETHOXY)METHANE	ND	360	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	360	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	360	180
BUTYLBENZYLPHTHALATE	ND	360	180
CHRYSENE	ND	360	180
DI-N-BUTYLPHTHALATE	ND	360	180
DI-N-OCTYLPHTHALATE	ND	360	180
DIBENZOFURAN	ND	360	180
DIETHYLPHTHALATE	ND	360	180
DIMETHYLPHTHALATE	ND	360	180
FLUORANTHENE	ND	360	180
FLUORENE	ND	360	180
HEXACHLOROBUTADIENE	ND	360	180
HEXACHLOROCYCLOPENTADIENE	ND	360	180
HEXACHLOROETHANE	ND	360	180
N-NITROSODIPHENYLAMINE (2)	ND	360	180
NAPHTHALENE	ND	360	180
NITROBENZENE	ND	360	180
PENTACHLOROPHENOL	ND	220	180
PHENANTHRENE	ND	360	180
PHENOL	ND	360	180
PYRENE	ND	360	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	53	25-144
2-FLUOROBIPHENYL	60	34-135
2-FLUOROPHENOL	53	25-135
NITROBENZENE-D5	61	25-135
PHENOL-D5	56	25-135
TERPHENYL-D14	74	32-136

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

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 13:30
S[illegible] ID:	818655-3217	Date Analyzed:	03/27/03 18:55
L[illegible]mp ID:	C131-03	Dilution Factor:	1
La[illegible]ile ID:	RCX265	Matrix	: SOIL
Ext Btch ID:	SVC035S	% Moisture	: 6.9
Calib. Ref.:	RCX007	Instrument ID	: T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	180
1,2-DICHLOROBENZENE	ND	350	180
1,3-DICHLOROBENZENE	ND	350	180
1,4-DICHLOROBENZENE	ND	350	180
2,4,5-TRICHLOROPHENOL	ND	890	180
2,4,6-TRICHLOROPHENOL	ND	350	180
2,4-DICHLOROPHENOL	ND	350	180
2,4-DIMETHYLPHENOL	ND	350	180
2,4-DINITROPHENOL	ND	890	180
2,4-DINITROTOLUENE	ND	350	180
2,6-DINITROTOLUENE	ND	350	180
2-CHLORONAPHTHALENE	ND	350	180
2-CHLOROPHENOL	ND	350	180
2-METHYLNAPHTHALENE	ND	350	180
2-METHYLPHENOL	ND	350	180
2-NITROANILINE	ND	890	180
2-NITROPHENOL	ND	350	180
3,3'-DICHLOROBENZIDINE	ND	350	180
3-NITROANILINE	ND	890	180
4,6-DINITRO-2-METHYLPHENOL	ND	890	180
4-BROMOPHENYL-PHENYL ETHER	ND	350	180
4-CHLORO-3-METHYLPHENOL	ND	350	180
4-CHLOROANILINE	ND	350	180
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	180
4-NITROANILINE	ND	890	180
4-NITROPHENOL	ND	890	180
ACENAPHTHENE	ND	350	180
ACENAPHTHYLENE	ND	350	180
ANTHRACENE	ND	350	180
BENZO(A)ANTHRACENE	ND	350	180
BENZO(B)FLUORANTHENE	ND	350	180
BENZO(K)FLUORANTHENE	ND	350	180
BENZO(G,H,I)PERYLENE	ND	350	180
BIS(2-CHLOROETHOXY)METHANE	ND	350	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	180
B[illegible]-ETHYLHEXYL)PHTHALATE	ND	350	180
B[illegible]ENZYLPHTHALATE	ND	350	180
C[illegible]NE	ND	350	180
DI-N-BUTYLPHTHALATE	ND	350	180
DI-N-OCTYLPHTHALATE	ND	350	180
DIBENZOFURAN	ND	350	180
DIETHYLPHTHALATE	ND	350	180
DIMETHYLPHTHALATE	ND	350	180
FLUORANTHENE	ND	350	180
FLUORENE	ND	350	180
HEXACHLOROBUTADIENE	ND	350	180
HEXACHLOROCYCLOPENTADIENE	ND	350	180
HEXACHLOROETHANE	ND	350	180
N-NITROSODIPHENYLAMINE (2)	ND	350	180
NAPHTHALENE	ND	350	180
NITROBENZENE	ND	350	180
PENTACHLOROPHENOL	ND	210	180
PHENANTHRENE	ND	350	180
PHENOL	ND	350	180
PYRENE	ND	350	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	50	25-144
2-FLUOROBIPHENYL	58	34-135
2-FLUOROPHENOL	49	25-135
NITROBENZENE-D5	57	25-135
PHENOL-D5	55	25-135
TERPHENYL-D14	82	32-136

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

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 13:30
Sample ID:	818655-3218	Date Analyzed:	03/27/03 19:29
Lab Samp ID:	C131-04	Dilution Factor:	1
Lab File ID:	RCX266	Matrix :	SOIL
Ext Btch ID:	SVC035S	% Moisture :	6.6
Calib. Ref.:	RCX007	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	350	180
1,2-DICHLOROBENZENE	ND	350	180
1,3-DICHLOROBENZENE	ND	350	180
1,4-DICHLOROBENZENE	ND	350	180
2,4,5-TRICHLOROPHENOL	ND	890	180
2,4,6-TRICHLOROPHENOL	ND	350	180
2,4-DICHLOROPHENOL	ND	350	180
2,4-DIMETHYLPHENOL	ND	350	180
2,4-DINITROPHENOL	ND	890	180
2,4-DINITROTOLUENE	ND	350	180
2,6-DINITROTOLUENE	ND	350	180
2-CHLORONAPHTHALENE	ND	350	180
2-CHLOROPHENOL	ND	350	180
2-METHYLNAPHTHALENE	ND	350	180
2-METHYLPHENOL	ND	350	180
2-NITROANILINE	ND	890	180
2-NITROPHENOL	ND	350	180
3,3'-DICHLOROBENZIDINE	ND	350	180
3-NITROANILINE	ND	890	180
4,6-DINITRO-2-METHYLPHENOL	ND	890	180
4-BROMOPHENYL-PHENYL ETHER	ND	350	180
4-CHLORO-3-METHYLPHENOL	ND	350	180
4-CHLOROANILINE	ND	350	180
4-CHLOROPHENYL-PHENYL ETHER	ND	350	180
4-METHYLPHENOL (1)	ND	350	180
4-NITROANILINE	ND	890	180
4-NITROPHENOL	ND	890	180
ACENAPHTHENE	ND	350	180
ACENAPHTHYLENE	ND	350	180
ANTHRACENE	ND	350	180
BENZO(A)ANTHRACENE	ND	350	180
BENZO(B)FLUORANTHENE	ND	350	180
BENZO(K)FLUORANTHENE	ND	350	180
BENZO(G,H,I)PERYLENE	ND	350	180
BIS(2-CHLOROETHOXY)METHANE	ND	350	180
BIS(2-CHLOROISOPROPYL)ETHER	ND	350	180
BIS(2-ETHYLHEXYL)PHTHALATE	ND	350	180
BUTYLBENZYLPHTHALATE	ND	350	180
CHRYSENE	ND	350	180
DI-N-BUTYLPHTHALATE	ND	350	180
DI-N-OCTYLPHTHALATE	ND	350	180
DIBENZOFURAN	ND	350	180
DIETHYLPHTHALATE	ND	350	180
DIMETHYLPHTHALATE	ND	350	180
FLUORANTHENE	ND	350	180
FLUORENE	ND	350	180
HEXACHLOROBUTADIENE	ND	350	180
HEXACHLOROCYCLOPENTADIENE	ND	350	180
HEXACHLOROETHANE	ND	350	180
N-NITROSODIPHENYLAMINE (2)	ND	350	180
NAPHTHALENE	ND	350	180
NITROBENZENE	ND	350	180
PENTACHLOROPHENOL	ND	210	180
PHENANTHRENE	ND	350	180
PHENOL	ND	350	180
PYRENE	ND	350	180

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	65	25-144
2-FLUOROBIPHENYL	73	34-135
2-FLUOROPHENOL	65	25-135
NITROBENZENE-D5	77	25-135
PHENOL-D5	67	25-135
TERPHENYL-D14	79	32-136

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

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/28/03 13:00
S[illegible] ID:	818655-3223	Date Analyzed:	03/28/03 23:56
L[illegible]mp ID:	C131-09	Dilution Factor:	0.96
L[illegible]ile ID:	RCX297	Matrix	: WATER
Ext Btch ID:	SVC034W	% Moisture	: NA
Calib. Ref.:	RCX007	Instrument ID	: T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	9.6	4.8
1,2-DICHLOROBENZENE	ND	9.6	4.8
1,3-DICHLOROBENZENE	ND	9.6	4.8
1,4-DICHLOROBENZENE	ND	9.6	4.8
2,4,5-TRICHLOROPHENOL	ND	24	4.8
2,4,6-TRICHLOROPHENOL	ND	9.6	4.8
2,4-DICHLOROPHENOL	ND	9.6	4.8
2,4-DIMETHYLPHENOL	ND	9.6	4.8
2,4-DINITROPHENOL	ND	24	9.6
2,4-DINITROTOLUENE	ND	9.6	4.8
2,6-DINITROTOLUENE	ND	9.6	4.8
2-CHLORONAPHTHALENE	ND	9.6	4.8
2-CHLOROPHENOL	ND	9.6	4.8
2-METHYLNAPHTHALENE	ND	9.6	4.8
2-METHYLPHENOL	ND	9.6	4.8
2-NITROANILINE	ND	24	9.6
2-NITROPHENOL	ND	9.6	4.8
3,3'-DICHLOROBENZIDINE	ND	9.6	4.8
3-NITROANILINE	ND	24	4.8
4,6-DINITRO-2-METHYLPHENOL	ND	24	9.6
4-BROMOPHENYL-PHENYL ETHER	ND	9.6	4.8
4-CHLORO-3-METHYLPHENOL	ND	9.6	4.8
4-CHLOROANILINE	ND	9.6	4.8
4-CHLOROPHENYL-PHENYL ETHER	ND	9.6	4.8
4-METHYLPHENOL (1)	ND	9.6	4.8
4-NITROANILINE	ND	24	4.8
4-NITROPHENOL	ND	24	4.8
ACENAPHTHENE	ND	9.6	4.8
ACENAPHTHYLENE	ND	9.6	4.8
ANTHRACENE	ND	9.6	4.8
BENZO(A)ANTHRACENE	ND	9.6	4.8
BENZO(A)PYRENE	ND	9.6	4.8
BENZO(B)FLUORANTHENE	ND	9.6	4.8
BENZO(K)FLUORANTHENE	ND	9.6	4.8
BENZO(G,H,I)PERYLENE	ND	9.6	4.8
BIS(2-CHLOROETHOXY)METHANE	ND	9.6	4.8
BI[illegible]-CHLOROETHYL)ETHER	ND	9.6	4.8
B[illegible] CHLOROISOPROPYL)ETHER	ND	9.6	4.8
B[illegible] ETHYLHEXYL)PHTHALATE	ND	19	9.6
BU[illegible]BENZYLPHTHALATE	ND	9.6	4.8
CHRYSENE	ND	9.6	4.8
DI-N-BUTYLPHTHALATE	ND	9.6	4.8
DI-N-OCTYLPHTHALATE	ND	9.6	4.8
DIBENZO(A,H)ANTHRACENE	ND	9.6	4.8
DIBENZOFURAN	ND	9.6	4.8
DIETHYLPHTHALATE	ND	9.6	4.8
DIMETHYLPHTHALATE	ND	9.6	4.8
FLUORANTHENE	ND	9.6	4.8
FLUORENE	ND	9.6	4.8
HEXACHLOROBENZENE	ND	9.6	4.8
HEXACHLOROBUTADIENE	ND	9.6	4.8
HEXACHLOROCYCLOPENTADIENE	ND	9.6	4.8
HEXACHLOROETHANE	ND	9.6	4.8
INDENO(1,2,3-CD)PYRENE	ND	9.6	4.8
N-NITROSO-DI-N-PROPYLAMINE	ND	9.6	4.8
N-NITROSODIPHENYLAMINE (2)	ND	9.6	4.8
NAPHTHALENE	ND	9.6	4.8
NITROBENZENE	ND	9.6	4.8
PENTACHLOROPHENOL	ND	9.6	9.6
PHENANTHRENE	ND	9.6	4.8
PHENOL	ND	9.6	4.8
PYRENE	ND	9.6	4.8

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	51	25-134
2-FLUOROBIPHENYL	42*	43-125
2-FLUOROPHENOL	40	25-125
NITROBENZENE-D5	45	32-125
PHENOL-D5	39	25-125
TERPHENYL-D14	91	42-126

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

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/04/03 10:00
Sample ID:	818655-3260	Date Analyzed:	04/04/03 17:33
Lab Samp ID:	D011-07	Dilution Factor:	1
Lab File ID:	RDX092	Matrix	: WATER
Ext Btch ID:	SVD004WB	% Moisture	: NA
Calib. Ref.:	RCX007	Instrument ID	: T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5
1,2-DICHLOROBENZENE	ND	10	5
1,3-DICHLOROBENZENE	ND	10	5
1,4-DICHLOROBENZENE	ND	10	5
2,4,5-TRICHLOROPHENOL	ND	25	5
2,4,6-TRICHLOROPHENOL	ND	10	5
2,4-DICHLOROPHENOL	ND	10	5
2,4-DIMETHYLPHENOL	ND	10	5
2,4-DINITROPHENOL	ND	25	10
2,4-DINITROTOLUENE	ND	10	5
2,6-DINITROTOLUENE	ND	10	5
2-CHLORONAPHTHALENE	ND	10	5
2-CHLOROPHENOL	ND	10	5
2-METHYLNAPHTHALENE	ND	10	5
2-METHYLPHENOL	ND	10	5
2-NITROANILINE	ND	25	10
2-NITROPHENOL	ND	10	5
3,3'-DICHLOROBENZIDINE	ND	10	5
3-NITROANILINE	ND	25	5
4,6-DINITRO-2-METHYLPHENOL	ND	25	10
4-BROMOPHENYL-PHENYL ETHER	ND	10	5
4-CHLORO-3-METHYLPHENOL	ND	10	5
4-CHLOROANILINE	ND	10	5
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5
4-METHYLPHENOL (1)	ND	10	5
4-NITROANILINE	ND	25	5
4-NITROPHENOL	ND	25	5
ACENAPHTHENE	ND	10	5
ACENAPHTHYLENE	ND	10	5
ANTHRACENE	ND	10	5
BENZO(A)ANTHRACENE	ND	10	5
BENZO(A)PYRENE	ND	10	5
BENZO(B)FLUORANTHENE	ND	10	5
BENZO(K)FLUORANTHENE	ND	10	5
BENZO(G,H,I)PERYLENE	ND	10	5
BIS(2-CHLOROETHOXY)METHANE	ND	10	5
BIS(2-CHLOROETHYL)ETHER	ND	10	5
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5
BIS(2-ETHYLHEXYL)PHTHALATE	ND	20	10
BUTYLBENZYLPHTHALATE	ND	10	5
CHRYSENE	ND	10	5
DI-N-BUTYLPHTHALATE	ND	10	5
DI-N-OCTYLPHTHALATE	ND	10	5
DIBENZO(A,H)ANTHRACENE	ND	10	5
DIBENZOFURAN	ND	10	5
DIETHYLPHTHALATE	ND	10	5
DIMETHYLPHTHALATE	ND	10	5
FLUORANTHENE	ND	10	5
FLUORENE	ND	10	5
HEXACHLOROBENZENE	ND	10	5
HEXACHLOROBUTADIENE	ND	10	5
HEXACHLOROCYCLOPENTADIENE	ND	10	5
HEXACHLOROETHANE	ND	10	5
INDENO(1,2,3-CD)PYRENE	ND	10	5
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5
N-NITROSODIPHENYLAMINE (2)	ND	10	5
NAPHTHALENE	ND	10	5
NITROBENZENE	ND	10	5
PENTACHLOROPHENOL	ND	10	10
PHENANTHRENE	ND	10	5
PHENOL	ND	10	5
PYRENE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	88	25-134
2-FLUOROBIPHENYL	76	43-125
2-FLUOROPHENOL	69	25-125
NITROBENZENE-D5	89	32-125
PHENOL-D5	73	25-125
TERPHENYL-D14	99	42-126

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

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	NA
Batch No.	: 03C131	Date Extracted:	03/28/03 13:00
Sample ID:	MBLK1W	Date Analyzed:	03/28/03 22:14
Lab Group ID:	SVC034WB	Dilution Factor:	1
Lab File ID:	RCX294	Matrix	: WATER
Ext Btch ID:	SVC034W	% Moisture	: NA
Calib. Ref.:	RCX007	Instrument ID	: T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5
1,2-DICHLOROBENZENE	ND	10	5
1,3-DICHLOROBENZENE	ND	10	5
1,4-DICHLOROBENZENE	ND	10	5
2,4,5-TRICHLOROPHENOL	ND	25	5
2,4,6-TRICHLOROPHENOL	ND	10	5
2,4-DICHLOROPHENOL	ND	10	5
2,4-DIMETHYLPHENOL	ND	10	5
2,4-DINITROPHENOL	ND	25	10
2,4-DINITROTOLUENE	ND	10	5
2,6-DINITROTOLUENE	ND	10	5
2-CHLORONAPHTHALENE	ND	10	5
2-CHLOROPHENOL	ND	10	5
2-METHYLNAPHTHALENE	ND	10	5
2-METHYLPHENOL	ND	10	5
2-NITROANILINE	ND	25	10
2-NITROPHENOL	ND	10	5
3,3'-DICHLOROBENZIDINE	ND	10	5
3-NITROANILINE	ND	25	5
4,6-DINITRO-2-METHYLPHENOL	ND	25	10
4-BROMOPHENYL-PHENYL ETHER	ND	10	5
4-CHLORO-3-METHYLPHENOL	ND	10	5
4-CHLOROANILINE	ND	10	5
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5
4-METHYLPHENOL (1)	ND	10	5
4-NITROANILINE	ND	25	5
4-NITROPHENOL	ND	25	5
ACENAPHTHENE	ND	10	5
ACENAPHTHYLENE	ND	10	5
ANTHRACENE	ND	10	5
BENZO(A)ANTHRACENE	ND	10	5
BENZO(A)PYRENE	ND	10	5
BENZO(B)FLUORANTHENE	ND	10	5
BENZO(K)FLUORANTHENE	ND	10	5
BENZO(G,H,I)PERYLENE	ND	10	5
BIS(2-CHLOROETHOXY)METHANE	ND	10	5
BIS(2-CHLOROETHYL)ETHER	ND	10	5
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5
BIS(2-ETHYLHEXYL)PHTHALATE	ND	20	10
BUTYLBENZYLPHTHALATE	ND	10	5
CHRYSENE	ND	10	5
DI-N-BUTYLPHTHALATE	ND	10	5
DI-N-OCTYLPHTHALATE	ND	10	5
DIBENZO(A,H)ANTHRACENE	ND	10	5
DIBENZOFURAN	ND	10	5
DIETHYLPHTHALATE	ND	10	5
DIMETHYLPHTHALATE	ND	10	5
FLUORANTHENE	ND	10	5
FLUORENE	ND	10	5
HEXACHLOROBENZENE	ND	10	5
HEXACHLOROBUTADIENE	ND	10	5
HEXACHLOROCYCLOPENTADIENE	ND	10	5
HEXACHLOROETHANE	ND	10	5
INDENO(1,2,3-CD)PYRENE	ND	10	5
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5
N-NITROSODIPHENYLAMINE (2)	ND	10	5
NAPHTHALENE	ND	10	5
NITROBENZENE	ND	10	5
PENTACHLOROPHENOL	ND	10	10
PHENANTHRENE	ND	10	5
PHENOL	ND	10	5
PYRENE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	67	25-134
2-FLUOROBIPHENYL	60	43-125
2-FLUOROPHENOL	55	25-125
NITROBENZENE-D5	64	32-125
PHENOL-D5	59	25-125
TERPHENYL-D14	89	42-126

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

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 3520C/8270C

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVC034WB	SVC034WL	SVC034WC		
LAB FILE ID:	RCX294	RCX295	RCX296		
DATE EXTRACTED:	03/28/0313:00	03/28/0313:00	03/28/0313:00	DATE COLLECTED:	NA
DATE ANALYZED:	03/28/0322:14	03/28/0322:48	03/28/0323:22	DATE RECEIVED:	NA
PREP. BATCH:	SVC034W	SVC034W	SVC034W		
CALIB. REF:	RCX007	RCX007	RCX007		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	100	56.1	56	100	61.6	62	9	44-142	20
1,4-Dichlorobenzene	ND	100	53.7	54	100	55.8	56	4	30-125	20
2,4-Dinitrotoluene	ND	100	70.9	71	100	76.2	76	7	39-139	20
2-Chlorophenol	ND	150	84.6	56	150	86.3	58	2	41-125	20
4-Chloro-3-Methylphenol	ND	150	92.3	62	150	101	68	9	44-125	20
4-Nitrophenol	ND	150	119	80	150	128	85	7	25-131	20
Acenaphthene	ND	100	62.5	62	100	66.9	67	7	49-125	20
N-Nitroso-di-n-propylamine	ND	100	67.4	67	100	71.3	71	6	37-125	20
Pentachlorophenol	ND	150	110	73	150	106	71	3	28-136	20
Phenol	ND	150	85.2	57	150	85.7	57	1	25-125	20
Pyrene	ND	100	73.9	74	100	80.7	81	9	47-136	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	150	101	67	150	103	69	25-134
2-Fluorobiphenyl	100	61.6	62	100	65.6	66	43-125
2-Fluorophenol	150	81.9	55	150	81.9	55	25-125
Nitrobenzene-d5	100	67.3	67	100	66.3	66	32-125
Phenol-d5	150	92.8	62	150	89.1	59	25-125
Terphenyl-d14	100	82.4	82	100	83.3	83	42-126

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	NA
Batch No.	: 03C131	Date Extracted:	03/27/03 13:30
Sample ID:	MBLK1S	Date Analyzed:	03/27/03 15:31
Lab Sample ID:	SVC035SB	Dilution Factor:	1
Lab File ID:	RCX259	Matrix :	SOIL
Ext Btch ID:	SVC035S	% Moisture :	NA
Calib. Ref.:	RCX007	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	830	170
2,4,6-TRICHLOROPHENOL	ND	330	170
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	830	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	830	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	830	170
4,6-DINITRO-2-METHYLPHENOL	ND	830	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	830	170
4-NITROPHENOL	ND	830	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
BIS(2-ETHYLHEXYL)PHTHALATE	ND	330	170
BUTYLBENZYLPHTHALATE	ND	330	170
CHRYSENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	170
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	200	170
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	66	25-144
2-FLUOROBIPHENYL	71	34-135
2-FLUOROPHENOL	63	25-135
NITROBENZENE-D5	77	25-135
PHENOL-D5	70	25-135
TERPHENYL-D14	93	32-136

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

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 3550B/8270C

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	SVC035SB	SVC035SL	SVC035SC		
LAB FILE ID:	RCX259	RCX260	RCX261		
DATE EXTRACTED:	03/27/0313:30	03/27/0313:30	03/27/0313:30	DATE COLLECTED:	NA
DATE ANALYZED:	03/27/0315:31	03/27/0316:05	03/27/0316:38	DATE RECEIVED:	NA
PREP. BATCH:	SVC035S	SVC035S	SVC035S		
CALIB. REF:	RCX007	RCX007	RCX007		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	2670	1460	55	2670	1780	67	20	34-152	30
1,4-Dichlorobenzene	ND	2670	1360	51	2670	1660	62	20	25-135	30
2,4-Dinitrotoluene	ND	2670	2040	76	2670	2150	81	5	29-149	30
2-Chlorophenol	ND	2670	1280	48	2670	1590	60	22	31-135	30
4-Chloro-3-Methylphenol	ND	2670	1470	55	2670	1750	66	18	34-135	30
4-Nitrophenol	ND	2670	1910	72	2670	1850	69	3	25-141	30
Acenaphthene	ND	2670	1580	59	2670	1810	68	14	39-135	30
Pentachlorophenol	ND	2670	1780	67	2670	1730	65	3	38-146	30
Phenol	ND	2670	1330	50	2670	1600	60	18	25-135	30
Pyrene	ND	2670	2020	76	2670	2040	77	1	37-146	30

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5000	3790	76	5000	4070	81	25-144
2-Fluorobiphenyl	3330	2010	60	3330	2600	78	34-135
2-Fluorophenol	5000	2540	51	5000	3370	67	25-135
Nitrobenzene-d5	3330	2170	65	3330	2790	84	25-135
Phenol-d5	5000	2910	58	5000	3670	73	25-135
Terphenyl-d14	3330	2880	87	3330	3000	90	32-136

SW 3520C/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	NA
Batch No.	: 03D011	Date Extracted:	04/04/03 10:00
Sample ID:	MBLK1W	Date Analyzed:	04/04/03 14:10
Lab Sample ID:	SVD004WB	Dilution Factor:	1
Lab File ID:	RDX086	Matrix :	WATER
Ext Btch ID:	SVD004WB	% Moisture :	NA
Calib. Ref.:	RCX007	Instrument ID :	T-042

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
1,2,4-TRICHLOROBENZENE	ND	10	5
1,2-DICHLOROBENZENE	ND	10	5
1,3-DICHLOROBENZENE	ND	10	5
1,4-DICHLOROBENZENE	ND	10	5
2,4,5-TRICHLOROPHENOL	ND	25	5
2,4,6-TRICHLOROPHENOL	ND	10	5
2,4-DICHLOROPHENOL	ND	10	5
2,4-DIMETHYLPHENOL	ND	10	5
2,4-DINITROPHENOL	ND	25	10
2,4-DINITROTOLUENE	ND	10	5
2,6-DINITROTOLUENE	ND	10	5
2-CHLORONAPHTHALENE	ND	10	5
2-CHLOROPHENOL	ND	10	5
2-METHYLNAPHTHALENE	ND	10	5
2-METHYLPHENOL	ND	10	5
2-NITROANILINE	ND	25	10
2-NITROPHENOL	ND	10	5
3,3'-DICHLOROBENZIDINE	ND	10	5
3-NITROANILINE	ND	25	5
4,6-DINITRO-2-METHYLPHENOL	ND	25	10
4-BROMOPHENYL-PHENYL ETHER	ND	10	5
4-CHLORO-3-METHYLPHENOL	ND	10	5
4-CHLOROANILINE	ND	10	5
4-CHLOROPHENYL-PHENYL ETHER	ND	10	5
4-METHYLPHENOL (1)	ND	10	5
4-NITROANILINE	ND	25	5
4-NITROPHENOL	ND	25	5
ACENAPHTHENE	ND	10	5
ACENAPHTHYLENE	ND	10	5
ANTHRACENE	ND	10	5
BENZO(A)ANTHRACENE	ND	10	5
BENZO(A)PYRENE	ND	10	5
BENZO(B)FLUORANTHENE	ND	10	5
BENZO(K)FLUORANTHENE	ND	10	5
BENZO(G,H,I)PERYLENE	ND	10	5
BIS(2-CHLOROETHOXY)METHANE	ND	10	5
BIS(2-CHLOROETHYL)ETHER	ND	10	5
BIS(2-CHLOROISOPROPYL)ETHER	ND	10	5
BIS(2-ETHYLHEXYL)PHTHALATE	ND	20	10
BUTYLBENZYLPHTHALATE	ND	10	5
CHRYSENE	ND	10	5
DI-N-BUTYLPHTHALATE	ND	10	5
DI-N-OCTYLPHTHALATE	ND	10	5
DIBENZO(A,H)ANTHRACENE	ND	10	5
DIBENZOFURAN	ND	10	5
DIETHYLPHTHALATE	ND	10	5
DIMETHYLPHTHALATE	ND	10	5
FLUORANTHENE	ND	10	5
FLUORENE	ND	10	5
HEXACHLOROBENZENE	ND	10	5
HEXACHLOROBUTADIENE	ND	10	5
HEXACHLOROCYCLOPENTADIENE	ND	10	5
HEXACHLOROETHANE	ND	10	5
INDENO(1,2,3-CD)PYRENE	ND	10	5
N-NITROSO-DI-N-PROPYLAMINE	ND	10	5
N-NITROSODIPHENYLAMINE (2)	ND	10	5
NAPHTHALENE	ND	10	5
NITROBENZENE	ND	10	5
PENTACHLOROPHENOL	ND	10	10
PHENANTHRENE	ND	10	5
PHENOL	ND	10	5
PYRENE	ND	10	5

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	81	25-134
2-FLUOROBIPHENYL	67	43-125
2-FLUOROPHENOL	60	25-125
NITROBENZENE-D5	72	32-125
PHENOL-D5	65	25-125
TERPHENYL-D14	87	42-126

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

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 3520B/8270B

MATRIX:	WATER			% MOISTURE:	NA
DILUTION FACTOR:	1	1	1		
SAMPLE ID:	MBLK1W				
LAB SAMP ID:	SVD004WB	SVD004WL	SVD004WC		
LAB FILE ID:	RDX086	RDX087	RDX088		
DATE EXTRACTED:	04/04/0310:00	04/04/0310:00	04/04/0310:00	DATE COLLECTED:	NA
DATE ANALYZED:	04/04/0314:10	04/04/0314:44	04/04/0315:18	DATE RECEIVED:	NA
PREP. BATCH:	SVD004WB	SVD004WB	SVD004WB		
CALIB. REF:	RCX007	RCX007	RCX007		

ACCESSION:

PARAMETER	BLNK RSLT (ug/L)	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	80	50.2	63	80	50.3	63	0	44-142	20
1,4-Dichlorobenzene	ND	80	44.3	55	80	46.3	58	4	30-125	20
2,4-Dinitrotoluene	ND	80	80.5	101	80	74.3	93	8	39-139	20
2-Chlorophenol	ND	80	54.7	68	80	59.3	74	8	41-125	20
4-Chloro-3-Methylphenol	ND	80	65.8	82	80	62.7	78	5	44-125	20
4-Nitrophenol	ND	80	94.6	118	80	82.5	103	14	25-131	20
Acenaphthene	ND	80	63.5	79	80	63.4	79	0	49-125	20
N-Nitroso-di-n-propylamine	ND	80	66.3	83	80	69.7	87	5	37-125	20
Pentachlorophenol	ND	80	75.8	95	80	67.4	84	12	28-136	20
Phenol	ND	80	56.6	71	80	59.3	74	5	25-125	20
Pyrene	ND	80	74.5	93	80	63.7	80	16	47-136	20

SURROGATE PARAMETER	SPIKE AMT (ug/L)	BS RSLT (ug/L)	BS % REC	SPIKE AMT (ug/L)	BSD RSLT (ug/L)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	150	143	95	150	135	90	25-134
2-Fluorobiphenyl	100	74	74	100	80.6	81	43-125
2-Fluorophenol	150	100	67	150	115	77	25-125
Nitrobenzene-d5	100	85.3	85	100	92.1	92	32-125
Phenol-d5	150	108	72	150	121	81	25-125
Terphenyl-d14	100	96.3	96	100	87	87	42-126

SW 3550B/8270C
SEMI VOLATILE ORGANICS BY GC/MS

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	NA
Batch No.	: 03D011	Date Extracted:	04/03/03 12:30
Sample ID:	MBLK1S	Date Analyzed:	04/07/03 15:59
Lab Sample ID:	SVD005SB	Dilution Factor:	1
Lab File ID:	RDX113	Matrix	: SOIL
Ext Btch ID:	SVD005S	% Moisture	: NA
Calib. Ref.:	RCX007	Instrument ID	: T-042

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
1,2,4-TRICHLOROBENZENE	ND	330	170
1,2-DICHLOROBENZENE	ND	330	170
1,3-DICHLOROBENZENE	ND	330	170
1,4-DICHLOROBENZENE	ND	330	170
2,4,5-TRICHLOROPHENOL	ND	830	170
2,4,6-TRICHLOROPHENOL	ND	330	170
2,4-DICHLOROPHENOL	ND	330	170
2,4-DIMETHYLPHENOL	ND	330	170
2,4-DINITROPHENOL	ND	830	170
2,4-DINITROTOLUENE	ND	330	170
2,6-DINITROTOLUENE	ND	330	170
2-CHLORONAPHTHALENE	ND	330	170
2-CHLOROPHENOL	ND	330	170
2-METHYLNAPHTHALENE	ND	330	170
2-METHYLPHENOL	ND	330	170
2-NITROANILINE	ND	830	170
2-NITROPHENOL	ND	330	170
3,3'-DICHLOROBENZIDINE	ND	330	170
3-NITROANILINE	ND	830	170
4,6-DINITRO-2-METHYLPHENOL	ND	830	170
4-BROMOPHENYL-PHENYL ETHER	ND	330	170
4-CHLORO-3-METHYLPHENOL	ND	330	170
4-CHLOROANILINE	ND	330	170
4-CHLOROPHENYL-PHENYL ETHER	ND	330	170
4-METHYLPHENOL (1)	ND	330	170
4-NITROANILINE	ND	830	170
4-NITROPHENOL	ND	830	170
ACENAPHTHENE	ND	330	170
ACENAPHTHYLENE	ND	330	170
ANTHRACENE	ND	330	170
BENZO(A)ANTHRACENE	ND	330	170
BENZO(B)FLUORANTHENE	ND	330	170
BENZO(K)FLUORANTHENE	ND	330	170
BENZO(G,H,I)PERYLENE	ND	330	170
BIS(2-CHLOROETHOXY)METHANE	ND	330	170
BIS(2-CHLOROISOPROPYL)ETHER	ND	330	170
B[illegible]ETHYLHEXYL)PHTHALATE	ND	330	170
B[illegible]ENZYLPHTHALATE	ND	330	170
C[illegible]ENE	ND	330	170
DI-N-BUTYLPHTHALATE	ND	330	170
DI-N-OCTYLPHTHALATE	ND	330	170
DIBENZOFURAN	ND	330	170
DIETHYLPHTHALATE	ND	330	170
DIMETHYLPHTHALATE	ND	330	170
FLUORANTHENE	ND	330	170
FLUORENE	ND	330	170
HEXACHLOROBUTADIENE	ND	330	170
HEXACHLOROCYCLOPENTADIENE	ND	330	170
HEXACHLOROETHANE	ND	330	170
N-NITROSODIPHENYLAMINE (2)	ND	330	170
NAPHTHALENE	ND	330	170
NITROBENZENE	ND	330	170
PENTACHLOROPHENOL	ND	200	170
PHENANTHRENE	ND	330	170
PHENOL	ND	330	170
PYRENE	ND	330	170

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
2,4,6-TRIBROMOPHENOL	64	25-144
2-FLUOROBIPHENYL	68	34-135
2-FLUOROPHENOL	61	25-135
NITROBENZENE-D5	82	25-135
PHENOL-D5	69	25-135
TERPHENYL-D14	81	32-136

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

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 3550A/8270B

MATRIX: SOIL % MOISTURE: NA

DILUTION FACTOR:	1	1	1
SAMPLE ID:	MBLK1S		
LAB SAMP ID:	SVD005SB	SVD005SL	SVD005SC
LAB FILE ID:	RDX113	RDX114	RDX115
DATE EXTRACTED:	04/03/0312:30	04/03/0312:30	04/03/0312:30
DATE ANALYZED:	04/07/0315:59	04/07/0316:33	04/07/0317:06
PREP. BATCH:	SVD005S	SVD005S	SVD005S
CALIB. REF:	RCX007	RCX007	RCX007

DATE COLLECTED: NA
DATE RECEIVED: NA

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
1,2,4-Trichlorobenzene	ND	3330	2320	70	3330	2510	75	8	34-152	30
1,4-Dichlorobenzene	ND	3330	2120	64	3330	2350	71	10	25-135	30
2,4-Dinitrotoluene	ND	3330	2580	77	3330	2640	79	2	29-149	30
2-Chlorophenol	ND	5000	3060	61	5000	3350	67	9	31-135	30
4-Chloro-3-Methylphenol	ND	5000	3310	66	5000	3410	68	3	34-135	30
4-Nitrophenol	ND	5000	3200	64	5000	3270	65	2	25-141	30
Acenaphthene	ND	3330	2320	70	3330	2500	75	7	39-135	30
Pentachlorophenol	ND	5000	3370	67	5000	3290	66	3	38-146	30
Phenol	ND	5000	3110	62	5000	3300	66	6	25-135	30
Pyrene	ND	3330	2510	75	3330	2560	77	2	37-146	30

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
2,4,6-Tribromophenol	5000	3420	68	5000	3560	71	25-144
2-Fluorobiphenyl	3330	2180	65	3330	2410	72	34-135
2-Fluorophenol	5000	2950	59	5000	3160	63	25-135
Nitrobenzene-d5	3330	2570	77	3330	2630	79	25-135
Phenol-d5	5000	3250	65	5000	3600	72	25-135
Terphenyl-d14	3330	2660	80	3330	2670	80	32-136

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 12:30
Sample ID:	818655-3255	Date Analyzed:	04/03/03 19:49
Lab Samp ID:	D011-02	Dilution Factor:	1
Lab File ID:	RDZ051	Matrix :	SOIL
Ext Btch ID:	SVD005S	% Moisture :	8.9
Calib. Ref.:	RBZ127	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	36	11
BIS(2-CHLOROETHYL)ETHER	ND	36	16
DIBENZO(A,H)ANTHRACENE	ND	36	11
HEXACHLOROBENZENE	ND	82	11
INDENO(1,2,3-CD)PYRENE	ND	38	11
N-NITROSO-DI-N-PROPYLAMINE	ND	36	11

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	51	32-136

RL: Reporting Limit

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 12:30
Sample ID:	818655-3256	Date Analyzed:	04/03/03 20:19
Lab Samp ID:	D011-03	Dilution Factor:	1
Lab File ID:	RDZ052	Matrix :	SOIL
Ext Btch ID:	SVD005S	% Moisture :	6.6
Calib. Ref.:	RBZ127	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	35	11
BIS(2-CHLOROETHYL)ETHER	ND	35	16
DIBENZO(A,H)ANTHRACENE	ND	35	11
HEXACHLOROBENZENE	ND	80	11
INDENO(1,2,3-CD)PYRENE	ND	37	11
N-NITROSO-DI-N-PROPYLAMINE	ND	35	11

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	69	32-136

RL: Reporting Limit

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

C' t	: SHAW E&I	Date Collected:	04/02/03
P t	: EL TORO, CTO 0024	Date Received:	04/02/03
Batch No.	: 03D011	Date Extracted:	04/03/03 12:30
Sample ID:	818655-3257	Date Analyzed:	04/03/03 20:49
Lab Samp ID:	D011-04	Dilution Factor:	1
Lab File ID:	RDZ053	Matrix :	SOIL
Ext Btch ID:	SVD005S	% Moisture :	6.4
Calib. Ref.:	RBZ127	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	35	11
BIS(2-CHLOROETHYL)ETHER	ND	35	16
DIBENZO(A,H)ANTHRACENE	ND	35	11
HEXACHLOROBENZENE	ND	80	11
INDENO(1,2,3-CD)PYRENE	ND	37	11
N-NITROSO-DI-N-PROPYLAMINE	ND	35	11

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	64	32-136

RL: Reporting Limit

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 13:30
Sample ID:	818655-3216	Date Analyzed:	03/31/03 20:45
Lab Samp ID:	C131-02	Dilution Factor:	1
Lab File ID:	RCZ164	Matrix :	SOIL
Ext Btch ID:	SVC035S	% Moisture :	8.6
Calib. Ref.:	RBZ127	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	36	11
BIS(2-CHLOROETHYL)ETHER	ND	36	16
DIBENZO(A,H)ANTHRACENE	ND	36	11
HEXACHLOROBENZENE	ND	82	11
INDENO(1,2,3-CD)PYRENE	ND	38	11
N-NITROSO-DI-N-PROPYLAMINE	ND	36	11

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	73	32-136

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

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

Client	: SHAW E&I	Date Collected:	03/25/03
P t	: EL TORO, CTO 0024	Date Received:	03/26/03
Ba No.	: 03C131	Date Extracted:	03/27/03 13:30
Sample ID:	818655-3217	Date Analyzed:	03/31/03 21:15
Lab Samp ID:	C131-03	Dilution Factor:	1
Lab File ID:	RCZ165	Matrix :	SOIL
Ext Btch ID:	SVC035S	% Moisture :	6.9
Calib. Ref.:	RBZ127	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	35	11
BIS(2-CHLOROETHYL)ETHER	ND	35	16
DIBENZO(A,H)ANTHRACENE	ND	35	11
HEXACHLOROBENZENE	ND	81	11
INDENO(1,2,3-CD)PYRENE	ND	38	11
N-NITROSO-DI-N-PROPYLAMINE	ND	35	11

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	83	32-136

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

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
Batch No.	: 03C131	Date Extracted:	03/27/03 13:30
Sample ID:	818655-3218	Date Analyzed:	03/31/03 21:45
Lab Samp ID:	C131-04	Dilution Factor:	1
Lab File ID:	RCZ166	Matrix :	SOIL
Ext Btch ID:	SVC035S	% Moisture :	6.6
Calib. Ref.:	RBZ127	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	35	11
BIS(2-CHLOROETHYL)ETHER	ND	35	16
DIBENZO(A,H)ANTHRACENE	ND	35	11
HEXACHLOROBENZENE	ND	80	11
INDENO(1,2,3-CD)PYRENE	ND	37	11
N-NITROSO-DI-N-PROPYLAMINE	ND	35	11

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	82	32-136

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

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	NA
Batch No.	: 03C131	Date Extracted:	03/27/03 13:30
Sample ID:	MBLK1S	Date Analyzed:	03/31/03 18:15
Lab Samp ID:	SVC035SB	Dilution Factor:	1
Lab File ID:	RCZ159	Matrix :	SOIL
Ext Btch ID:	SVC035S	% Moisture :	NA
Calib. Ref.:	RBZ127	Instrument ID :	T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	33	10
BIS(2-CHLOROETHYL)ETHER	ND	33	15
DIBENZO(A,H)ANTHRACENE	ND	33	10
HEXACHLOROBENZENE	ND	75	10
INDENO(1,2,3-CD)PYRENE	ND	35	10
N-NITROSO-DI-N-PROPYLAMINE	ND	33	10

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	89	32-136

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

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: SW 3550B/8270C SIM

MATRIX:	SOIL			% MOISTURE:	NA
DILUTION FACTOR:	1	2	2		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	SVC035SB	SVC035SL	SVC035SC		
LAB FILE ID:	RCZ159	RCZ160	RCZ161		
DATE EXTRACTED:	03/27/0313:30	03/27/0313:30	03/27/0313:30	DATE COLLECTED:	NA
DATE ANALYZED:	03/31/0318:15	03/31/0318:45	03/31/0319:15	DATE RECEIVED:	NA
PREP. BATCH:	SVC035S	SVC035S	SVC035S		
CALIB. REF:	RBZ127	RBZ127	RBZ127		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
n-Nitroso-di-n-propylamine	ND	2670	1390	52	2670	1670	62	18	27-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
Terphenyl-d14	3330	2600	78	3330	2880	86	32-136

SW 3550B/8270C SIM
SEMI VOLATILE ORGANICS BY GC/MS/SIM

Client : SHAW E&I	Date Collected: NA
Project : EL TORO, CTO 0024	Date Received: NA
Batch No. : 03D011	Date Extracted: 04/03/03 12:30
Sample ID: MBLK1S	Date Analyzed: 04/03/03 18:20
Lab Samp ID: SVD005SB	Dilution Factor: 1
Lab File ID: RDZ048	Matrix : SOIL
Ext Btch ID: SVD005S	% Moisture : NA
Calib. Ref.: RBZ127	Instrument ID : T-048

PARAMETERS	RESULTS (ug/kg)	RL (ug/kg)	MDL (ug/kg)
BENZO(A)PYRENE	ND	33	10
BIS(2-CHLOROETHYL)ETHER	ND	33	15
DIBENZO(A,H)ANTHRACENE	ND	33	10
HEXACHLOROBENZENE	ND	75	10
INDENO(1,2,3-CD)PYRENE	ND	35	10
N-NITROSO-DI-N-PROPYLAMINE	ND	33	10

SURROGATE PARAMETERS	% RECOVERY	QC LIMIT
TERPHENYL-D14	69	32-136

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: SW 3550B/8270C SIM

MATRIX: SOIL % MOISTURE: NA

DILUTION FACTOR:	1	2	2		
SAMPLE ID:	MBLK1S				
LAB SAMP ID:	SVD005SB	SVD005SL	SVD005SC		
LAB FILE ID:	RDZ048	RDZ049	RDZ050		
DATE EXTRACTED:	04/03/0312:30	04/03/0312:30	04/03/0312:30	DATE COLLECTED:	NA
DATE ANALYZED:	04/03/0318:20	04/03/0318:50	04/03/0319:19	DATE RECEIVED:	NA
PREP. BATCH:	SVD005S	SVD005S	SVD005S		
CALIB. REF:	RBZ127	RBZ127	RBZ127		

ACCESSION:

PARAMETER	BLNK RSLT (ug/kg)	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	RPD (%)	QC LIMIT (%)	MAX RPD (%)
n-Nitroso-di-n-propylamine	ND	2670	2210	83	2670	2330	88	5	27-135	30

SURROGATE PARAMETER	SPIKE AMT (ug/kg)	BS RSLT (ug/kg)	BS % REC	SPIKE AMT (ug/kg)	BSD RSLT (ug/kg)	BSD % REC	QC LIMIT (%)
Terphenyl-d14	3330	2260	68	3330	2240	67	32-136

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
SDG	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID	: 818655-3255	Date Analyzed:	04/07/03 12:52
Lab Samp ID	: D011-02	Dilution Factor:	1
Lab File ID	: I07D008029	Matrix	: SOIL
Ext Btch ID	: IPD008S	% Moisture	: 8.9
Calib. Ref.	: I07D008026	Instrument ID	: EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	8970	50	4.48
Antimony	ND	5	2.1
Barium	46.1	1	.124
Beryllium	.322	.2	.118
Cadmium	.633	.5	.362
Calcium	2010	100	6.8
Chromium	5.84	2	.614
Cobalt	3.07	1	.691
Copper	4.48	2	.472
Iron	7990	20	1.53
Magnesium	2860	100	7.99
Manganese	143	2	.188
Molybdenum	ND	5	.738
Nickel	3.78	2	.55
Potassium	2230	100	71.6
Silver	ND	2	.628
Sodium	144	100	7.01
Vanadium	20.3	2	.438
Zinc	24.4	1	.288

RL Reporting Limit

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
SDG NO.	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID:	818655-3255	Date Analyzed:	04/07/03 15:52
Lab Samp ID:	D011-02	Dilution Factor:	1
Lab File ID:	I31D007028	Matrix :	SOIL
Ext Btch ID:	IPD008S	% Moisture :	8.9
Calib. Ref.:	I31D007025	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	2.56	1	.21
Lead	2.2	1	.174
Selenium	ND	1	.285
Thallium	.52J	1	.305

RL: Reporting Limit

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
SDG No.	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID:	818655-3256	Date Analyzed:	04/07/03 13:02
Lab Samp ID:	D011-03	Dilution Factor:	1
Lab File ID:	I07D008031	Matrix :	SOIL
Ext Btch ID:	IPD008S	% Moisture :	6.6
Calib. Ref.:	I07D008026	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	6620	50	4.48
Antimony	ND	5	2.1
Barium	35.6	1	.124
Beryllium	.247	.2	.118
Cadmium	ND	.5	.362
Calcium	1610	100	6.8
Chromium	4.44	2	.614
Cobalt	2.52	1	.691
Copper	3.05	2	.472
Iron	6060	20	1.53
Magnesium	2220	100	7.99
Manganese	123	2	.188
Molybdenum	ND	5	.738
Nickel	2.9	2	.55
Potassium	1750	100	71.6
Silver	ND	2	.628
Sodium	140	100	7.01
Vanadium	15.8	2	.438
Zinc	18.6	1	.288

RL Reporting Limit

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
SDG NO.	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID:	818655-3256	Date Analyzed:	04/07/03 16:02
Lab Samp ID:	D011-03	Dilution Factor:	1
Lab File ID:	I31D007030	Matrix :	SOIL
Ext Btch ID:	IPD008S	% Moisture :	6.6
Calib. Ref.:	I31D007025	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	1.11	1	.21
Lead	1.56	1	.174
Selenium	ND	1	.285
Thallium	ND	1	.305

RL: Reporting Limit

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	04/02/03
P t	: EL TORO, CTO 0024	Date Received:	04/02/03
S J.	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID:	818655-3257	Date Analyzed:	04/07/03 13:08
Lab Samp ID:	D011-04	Dilution Factor:	1
Lab File ID:	I07D008032	Matrix :	SOIL
Ext Btch ID:	IPD008S	% Moisture :	6.4
Calib. Ref.:	I07D008026	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	6880	50	4.48
Antimony	2.97J	5	2.1
Barium	33	1	.124
Beryllium	.251	.2	.118
Cadmium	ND	.5	.362
Calcium	1790	100	6.8
Chromium	3.96	2	.614
Cobalt	2.71	1	.691
Copper	4.03	2	.472
Iron	6150	20	1.53
Magnesium	2280	100	7.99
Manganese	113	2	.188
Molybdenum	ND	5	.738
Nickel	2.8	2	.55
Potassium	1670	100	71.6
Silver	ND	2	.628
Sodium	132	100	7.01
Vanadium	15.8	2	.438
Zinc	17.7	1	.288

R porting Limit

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
SDG NO.	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID:	818655-3257	Date Analyzed:	04/07/03 16:07
Lab Samp ID:	D011-04	Dilution Factor:	1
Lab File ID:	I31D007031	Matrix :	SOIL
Ext Btch ID:	IPD008S	% Moisture :	6.4
Calib. Ref.:	I31D007025	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	1.18	1	.21
Lead	1.72	1	.174
Selenium	ND	1	.285
Thallium	ND	1	.305

RL: Reporting Limit

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG No.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	818655-3216	Date Analyzed:	03/31/03 15:29
Lab Samp ID:	C131-02	Dilution Factor:	1
Lab File ID:	I07C020019	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	8.6
Calib. Ref.:	I07C020014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	7570	54.7	4.9
Antimony	ND	5.47	2.3
Barium	54.2	1.09	.136
Beryllium	.328	.219	.129
Cadmium	.512J	.547	.396
Calcium	2000	109	7.44
Chromium	6.81	2.19	.672
Cobalt	3.1	1.09	.756
Copper	5.35	2.19	.516
Iron	7910	21.9	1.67
Magnesium	2860	109	8.75
Manganese	138	2.19	.206
Molybdenum	ND	5.47	.807
Nickel	4.89	2.19	.602
Potassium	2260	109	78.3
Silver	ND	2.19	.687
Sodium	290	109	7.67
Vanadium	20	2.19	.479
Zinc	24.3	1.09	.315

RL Reporting Limit

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG NO.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	818655-3216	Date Analyzed:	03/31/03 15:32
Lab Samp ID:	C131-02	Dilution Factor:	1
Lab File ID:	I31C019019	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	8.6
Calib. Ref.:	I31C019014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	1.31	1.09	.23
Lead	2.54	1.09	.19
Selenium	.467J	1.09	.312
Thallium	.347J	1.09	.334

RL: Reporting Limit

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG NO.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	818655-3217	Date Analyzed:	03/31/03 15:35
Lab Samp ID:	C131-03	Dilution Factor:	1
Lab File ID:	I07C020020	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	6.9
Calib. Ref.:	I07C020014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	6720	53.7	4.81
Antimony	ND	5.37	2.26
Barium	45.5	1.07	.133
Beryllium	.271	.215	.127
Cadmium	ND	.537	.389
Calcium	1750	107	7.3
Chromium	6.41	2.15	.66
Cobalt	2.42	1.07	.742
Copper	4.44	2.15	.507
Iron	6750	21.5	1.64
Magnesium	2560	107	8.59
Manganese	122	2.15	.202
Molybdenum	ND	5.37	.793
Nickel	4.45	2.15	.591
Potassium	1920	107	76.9
Silver	ND	2.15	.675
Sodium	285	107	7.53
Vanadium	18.3	2.15	.47
Zinc	23	1.07	.309

RL Reporting Limit

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG NO.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	818655-3217	Date Analyzed:	03/31/03 15:38
Lab Samp ID:	C131-03	Dilution Factor:	1
Lab File ID:	I31C019020	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	6.9
Calib. Ref.:	I31C019014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	1.41	1.07	.226
Lead	2.16	1.07	.187
Selenium	ND	1.07	.306
Thallium	ND	1.07	.328

RL: Reporting Limit

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG No.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	818655-3218	Date Analyzed:	03/31/03 15:40
Lab Samp ID:	C131-04	Dilution Factor:	1
Lab File ID:	I07C020021	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	6.6
Calib. Ref.:	I07C020014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	5570	53.5	4.8
Antimony	4.07J	5.35	2.25
Barium	39.1	1.07	.133
Beryllium	.224	.214	.126
Cadmium	ND	.535	.388
Calcium	1820	107	7.28
Chromium	5.19	2.14	.657
Cobalt	2.87	1.07	.74
Copper	3.47	2.14	.505
Iron	5950	21.4	1.63
Magnesium	2270	107	8.56
Manganese	113	2.14	.201
Molybdenum	ND	5.35	.79
Nickel	3.66	2.14	.589
Potassium	1630	107	76.6
Silver	ND	2.14	.672
Sodium	248	107	7.5
Vanadium	15.6	2.14	.469
Zinc	18.1	1.07	.308

RL Reporting Limit

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG NO.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	818655-3218	Date Analyzed:	03/31/03 15:43
Lab Samp ID:	C131-04	Dilution Factor:	1
Lab File ID:	I31C019021	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	6.6
Calib. Ref.:	I31C019014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	1.21	1.07	.225
Lead	2.21	1.07	.186
Selenium	ND	1.07	.305
Thallium	ND	1.07	.327

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG No.	: 03C131	Date Extracted:	03/28/03 13:50
Sample ID:	818655-3223	Date Analyzed:	03/31/03 12:58
Lab Samp ID:	C131-09	Dilution Factor:	1
Lab File ID:	I07C019022	Matrix :	WATER
Ext Btch ID:	IPC044W	% Moisture :	NA
Calib. Ref.:	I07C019014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	500	61
Antimony	ND	500	40
Barium	ND	100	2
Beryllium	ND	10	1.0
Cadmium	ND	5	2
Calcium	101J	1000	32
Chromium	ND	50	6
Cobalt	ND	50	11
Copper	8.05J	50	5
Iron	33.5J	1000	25
Magnesium	ND	1000	54
Manganese	ND	20	3
Molybdenum	ND	100	7
Nickel	ND	150	10
Potassium	ND	5000	750
Silver	ND	50	11
Sodium	843J	1000	70
Vanadium	ND	100	5
Zinc	ND	20	5

Reporting Limit

METHOD 3010A/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	03/25/03
Project	: EL TORO, CTO 0024	Date Received:	03/26/03
SDG NO.	: 03C131	Date Extracted:	03/28/03 13:50
Sample ID:	818655-3223	Date Analyzed:	03/31/03 13:26
Lab Samp ID:	C131-09	Dilution Factor:	1
Lab File ID:	I31C018022	Matrix :	WATER
Ext Btch ID:	IPC044W	% Moisture :	NA
Calib. Ref.:	I31C018014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	5	4
Lead	ND	5	2
Selenium	ND	5	5
Thallium	7.29J	10	6

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	04/02/03
P t	: EL TORO, CTO 0024	Date Received:	04/02/03
SL J.	: 03D011	Date Extracted:	04/03/03 18:45
Sample ID:	818655-3260	Date Analyzed:	04/07/03 12:07
Lab Samp ID:	D011-07	Dilution Factor:	1
Lab File ID:	I07D008021	Matrix :	WATER
Ext Btch ID:	IPD009W	% Moisture :	NA
Calib. Ref.:	I07D008014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	500	61
Antimony	ND	500	40
Barium	ND	100	2
Beryllium	ND	10	1.0
Cadmium	2.33J	5	2
Calcium	ND	1000	32
Chromium	ND	50	6
Cobalt	ND	50	11
Copper	ND	50	5
Iron	ND	1000	25
Magnesium	ND	1000	54
Manganese	ND	20	3
Molybdenum	ND	100	7
Nickel	ND	150	10
Potassium	ND	5000	750
Silver	ND	50	11
Sodium	133J	1000	70
Vanadium	ND	100	5
Zinc	ND	20	5

R porting Limit

METHOD 3010A/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	04/02/03
Project	: EL TORO, CTO 0024	Date Received:	04/02/03
SDG NO.	: 03D011	Date Extracted:	04/03/03 18:45
Sample ID:	818655-3260	Date Analyzed:	04/07/03 15:07
Lab Samp ID:	D011-07	Dilution Factor:	1
Lab File ID:	I31D007020	Matrix :	WATER
Ext Btch ID:	IPD009W	% Moisture :	NA
Calib. Ref.:	I31D007014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	5	4
Lead	ND	5	2
Selenium	ND	5	5
Thallium	ND	10	6

RL: Reporting Limit

METHOD 3010A/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	03/28/03
SDG No.	: 03C131	Date Extracted:	03/28/03 13:50
Sample ID:	MBLK1W	Date Analyzed:	03/31/03 12:26
Lab Samp ID:	IPC044WB	Dilution Factor:	1
Lab File ID:	I07C019016	Matrix :	WATER
Ext Btch ID:	IPC044W	% Moisture :	NA
Calib. Ref.:	I07C019014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	500	61
Antimony	ND	500	40
Barium	ND	100	2
Beryllium	ND	10	1.0
Cadmium	ND	5	2
Calcium	ND	1000	32
Chromium	ND	50	6
Cobalt	ND	50	11
Copper	ND	50	5
Iron	ND	1000	25
Magnesium	ND	1000	54
Manganese	ND	20	3
Molybdenum	ND	100	7
Nickel	ND	150	10
Potassium	ND	5000	750
Silver	ND	50	11
Sodium	703J	1000	70
Vanadium	ND	100	5
Zinc	ND	20	5

Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 3010A/6010B

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IPC044WB	IPC044WL	IPC044WC		
LAB FILE ID:	I07C019016	I07C019017	I07C019018		
DATIME EXTRCTD:	03/28/0313:50	03/28/0313:50	03/28/0313:50	DATE COLLECTED:	NA
DATIME ANALYZD:	03/31/0312:26	03/31/0312:31	03/31/0312:36	DATE RECEIVED:	03/28/03
PREP. BATCH:	IPC044W	IPC044W	IPC044W		
CALIB. REF:	I07C019014	I07C019014	I07C019014		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Aluminum	ND	10000	10200	102	10000	10100	101	1	80-120	15
Antimony	ND	5000	4810	96	5000	4750	95	1	80-120	15
Barium	ND	1000	982	98	1000	972	97	1	80-120	15
Beryllium	ND	1000	1060	106	1000	1040	104	1	80-120	15
Cadmium	ND	1000	1040	104	1000	1030	103	1	80-120	15
Calcium	ND	50000	52000	104	50000	51500	103	1	80-120	15
Chromium	ND	1000	1060	106	1000	1050	105	1	80-120	15
Cobalt	ND	1000	1030	103	1000	1020	102	1	80-120	15
Copper	ND	1000	1030	103	1000	1020	102	1	80-120	15
Iron	ND	10000	10300	103	10000	10200	102	1	80-120	15
Magnesium	ND	50000	52200	104	50000	52400	105	0	80-120	15
Manganese	ND	1000	1040	104	1000	1030	103	1	80-120	15
Molybdenum	ND	1000	990	99	1000	977	98	1	80-120	15
Nickel	ND	1000	985	99	1000	970	97	2	80-120	15
Potassium	ND	50000	51400	103	50000	50800	102	1	80-120	15
Silver	ND	1000	1040	104	1000	1030	103	1	80-120	15
Sodium	703J	50000	51400	101	50000	51300	101	0	80-120	15
Vanadium	ND	1000	1040	104	1000	1040	104	1	80-120	15
Zinc	ND	1000	1070	107	1000	1060	106	1	80-120	15

METHOD 3010A/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	03/28/03
SDG No.	: 03C131	Date Extracted:	03/28/03 13:50
Sample ID:	MBLK1W	Date Analyzed:	03/31/03 12:54
Lab Samp ID:	IPC044WB	Dilution Factor:	1
Lab File ID:	I31C018016	Matrix :	WATER
Ext Btch ID:	IPC044W	% Moisture :	NA
Calib. Ref.:	I31C018014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	5	4
Lead	ND	5	2
Selenium	ND	5	5
Thallium	ND	10	6

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 3010A/6010B

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IPC044WB	IPC044WL	IPC044WC		
LAB FILE ID:	I31C018016	I31C018017	I31C018018		
DATIME EXTRCTD:	03/28/0313:50	03/28/0313:50	03/28/0313:50	DATE COLLECTED:	NA
DATIME ANALYZD:	03/31/0312:54	03/31/0312:59	03/31/0313:04	DATE RECEIVED:	03/28/03
PREP. BATCH:	IPC044W	IPC044W	IPC044W		
CALIB. REF:	I31C018014	I31C018014	I31C018014		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	1000	1040	104	1000	1040	104	0	80-120	15
Lead	ND	1000	1050	105	1000	1040	104	1	80-120	15
Selenium	ND	1000	1070	107	1000	1070	107	0	80-120	15
Thallium	ND	1000	1020	102	1000	1010	101	0	80-120	15

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	NA
P t	: EL TORO, CTO 0024	Date Received:	03/28/03
SL J.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	MBLK1S	Date Analyzed:	03/31/03 15:11
Lab Samp ID:	IPC043SB	Dilution Factor:	1
Lab File ID:	I07C020016	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	NA
Calib. Ref.:	I07C020014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	ND	50	4.48
Antimony	ND	5	2.1
Barium	ND	1	.124
Beryllium	ND	.2	.118
Cadmium	ND	.5	.362
Calcium	ND	100	6.8
Chromium	ND	2	.614
Cobalt	ND	1	.691
Copper	ND	2	.472
Iron	ND	20	1.53
Magnesium	ND	100	7.99
Manganese	ND	2	.188
Molybdenum	ND	5	.738
Nickel	ND	2	.55
Potassium	ND	100	71.6
Silver	ND	2	.628
Sodium	ND	100	7.01
Vanadium	ND	2	.438
Zinc	ND	1	.288

R porting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	IPC043SB	IPC043SL	IPC043SC		
LAB FILE ID:	I07C020016	I07C020017	I07C020018		
DATIME EXTRCTD:	03/28/0314:50	03/28/0314:50	03/28/0314:50	DATE COLLECTED:	NA
DATIME ANALYZD:	03/31/0315:11	03/31/0315:17	03/31/0315:22	DATE RECEIVED:	03/28/03
PREP. BATCH:	IPC043S	IPC043S	IPC043S		
CALIB. REF:	I07C020014	I07C020014	I07C020014		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Aluminum	ND	1000	934	93	1000	937	94	0	80-120	25
Antimony	ND	500	441	88	500	444	89	1	80-120	25
Barium	ND	100	92.2	92	100	92.9	93	1	80-120	25
Beryllium	ND	100	98.1	98	100	98.5	99	0	80-120	25
Cadmium	ND	100	95.4	95	100	95.6	96	0	80-120	25
Calcium	ND	5000	4660	93	5000	4680	94	0	80-120	25
Chromium	ND	100	97.6	98	100	97.9	98	0	80-120	25
Cobalt	ND	100	94.1	94	100	94.5	94	0	80-120	25
Copper	ND	100	95.7	96	100	96.4	96	1	80-120	25
Iron	ND	1000	941	94	1000	946	95	1	80-120	25
Magnesium	ND	5000	4700	94	5000	4760	95	1	80-120	25
Manganese	ND	100	95.9	96	100	96.3	96	0	80-120	25
Molybdenum	ND	100	90.3	90	100	91	91	1	80-120	25
Nickel	ND	100	91.6	92	100	91.3	91	0	80-120	25
Potassium	ND	5000	4670	93	5000	4710	94	1	80-120	25
Silver	ND	100	96.4	96	100	96.8	97	0	80-120	25
Sodium	ND	5000	4730	95	5000	4740	95	0	80-120	25
Vanadium	ND	100	96.8	97	100	97.1	97	0	80-120	25
Zinc	ND	100	97.3	97	100	97.6	98	0	80-120	25

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	03/28/03
Sub NO.	: 03C131	Date Extracted:	03/28/03 14:50
Sample ID:	MBLK1S	Date Analyzed:	03/31/03 15:15
Lab Samp ID:	IPC043SB	Dilution Factor:	1
Lab File ID:	I31C019016	Matrix :	SOIL
Ext Btch ID:	IPC043S	% Moisture :	NA
Calib. Ref.:	I31C019014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	ND	1	.21
Lead	.283J	1	.174
Selenium	ND	1	.285
Thallium	ND	1	.305

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	IPC043SB	IPC043SL	IPC043SC		
LAB FILE ID:	I31C019016	I31C019017	I31C019018		
DATIME EXTRCTD:	03/28/0314:50	03/28/0314:50	03/28/0314:50	DATE COLLECTED:	NA
DATIME ANALYZD:	03/31/0315:15	03/31/0315:20	03/31/0315:25	DATE RECEIVED:	03/28/03
PREP. BATCH:	IPC043S	IPC043S	IPC043S		
CALIB. REF:	I31C019014	I31C019014	I31C019014		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	100	92	92	100	91.4	91	1	80-120	25
Lead	.283J	100	93.5	93	100	93.6	93	0	80-120	25
Selenium	ND	100	94.3	94	100	94.4	94	0	80-120	25
Thallium	ND	100	90.5	90	100	90	90	0	80-120	25

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
B NO.: 03C131
ME /: METHOD 3010A/6010B

==========

MATRIX: WATER % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: XX0220 XX0220DL
EMAX SAMP ID: C138-01 C138-01T
LAB FILE ID: I07C019020 I07C019021
DATE EXTRACTED: 03/28/0313:50 03/28/0313:50 DATE COLLECTED: 03/25/03
DATE ANALYZED: 03/31/0312:47 03/31/0312:52 DATE RECEIVED: 03/27/03
PREP. BATCH: IPC044W IPC044W
CALIB. REF: I07C019014 I07C019014

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Aluminum	279J	ND	NA	10
Antimony	ND	ND	0	10
Barium	29.3J	28.5J	NA	10
Beryllium	ND	ND	0	10
Cadmium	ND	ND	0	10
Calcium	51500	51900	1	10
Chromium	12J	ND	NA	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Iron	ND	ND	0	10
Magnesium	206J	353J	NA	10
Manganese	ND	ND	0	10
Mo denum	36.4J	51.6J	NA	10
N	ND	ND	0	10
Potassium	16300	14700J	NA	10
Silver	ND	ND	0	10
Sodium	13200	16400	24*	10
Vanadium	ND	ND	0	10
Zinc	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 3010A/6010B

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	XX0220	XX0220DL		
EMAX SAMP ID:	C138-01	C138-01T		
LAB FILE ID:	I31C018020	I31C018021		
DATE EXTRACTED:	03/28/0313:50	03/28/0313:50	DATE COLLECTED:	03/25/03
DATE ANALYZED:	03/31/0313:16	03/31/0313:21	DATE RECEIVED:	03/27/03
PREP. BATCH:	IPC044W	IPC044W		
CALIB. REF:	I31C018014	I31C018014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Arsenic	ND	ND	0	10
Lead	ND	ND	0	10
Selenium	ND	ND	0	10
Thallium	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 3050B/6010B

==========

MATRIX: SOIL % MOISTURE: 11.6

DILUTION FACTOR:	1	5		
SAMPLE ID:	818655-3230	818655-3230DL		
EMAX SAMP ID:	C132-07	C132-07T		
LAB FILE ID:	I07C020033	I07C020034		
DATE EXTRACTED:	03/28/0314:50	03/28/0314:50	DATE COLLECTED:	03/26/03
DATE ANALYZED:	03/31/0316:43	03/31/0316:51	DATE RECEIVED:	03/26/03
PREP. BATCH:	IPC043S	IPC043S		
CALIB. REF:	I07C020026	I07C020026		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Aluminum	11500	11700	1	10
Antimony	ND	ND	0	10
Barium	125	125	0	10
Beryllium	.455	ND	NA	10
Cadmium	ND	ND	0	10
Calcium	3400	3510	3	10
Chromium	10.5	11.6	10	10
Cobalt	6.12	4.01J	NA	10
Copper	7.04	7.8J	NA	10
Iron	12700	13100	4	10
Magnesium	5330	5560	4	10
Manganese	237	243	2	10
Molybdenum	ND	ND	0	10
Nickel	6.62	11.3J	NA	10
Potassium	4130	3930	5	10
Silver	ND	ND	0	10
Sodium	162	203J	NA	10
Vanadium	31.2	33.6	7	10
Zinc	40	73.5	84*	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 3050B/6010B

MATRIX: SOIL % MOISTURE: 11.6

DILUTION FACTOR:	1	5		
SAMPLE ID:	818655-3230	818655-3230DL		
EMAX SAMP ID:	C132-07	C132-07T		
LAB FILE ID:	I31C019033	I31C019034		
DATE EXTRACTED:	03/28/0314:50	03/28/0314:50	DATE COLLECTED:	03/26/03
DATE ANALYZED:	03/31/0316:43	03/31/0316:50	DATE RECEIVED:	03/26/03
PREP. BATCH:	IPC043S	IPC043S		
CALIB. REF:	I31C019026	I31C019026		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Arsenic	2.11	1.79J	NA	10
Lead	3.41	2.79J	NA	10
Selenium	ND	ND	0	10
Thallium	.469J	ND	NA	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
NO.: 03C131
METHOD: METHOD 3010A/6010B

==========

MATRIX: WATER % MOISTURE: NA
DILTN FACTR: 1 1
SAMPLE ID: XX0220
CONTROL NO.: C138-01 C138-01A
LAB FILE ID: I07C019020 I07C019019
DATIME EXTRCTD: 03/28/0313:50 03/28/0313:50 DATE COLLECTED: 03/25/03
DATIME ANALYZD: 03/31/0312:47 03/31/0312:42 DATE RECEIVED: 03/27/03
PREP. BATCH: IPC044W IPC044W
CALIB. REF: I07C019014 I07C019014

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Aluminum	279J	10000	9810	95	75-125
Antimony	ND	5000	4390	88	75-125
Barium	29.3J	1000	947	92	75-125
Beryllium	ND	1000	985	99	75-125
Cadmium	ND	1000	976	98	75-125
Calcium	51500	50000	97300	92	75-125
Chromium	12J	1000	1000	99	75-125
Cobalt	ND	1000	947	95	75-125
Copper	ND	1000	959	96	75-125
Iron	ND	10000	9650	97	75-125
Magnesium	206J	50000	49400	98	75-125
Manganese	ND	1000	969	97	75-125
Molybdenum	36.4J	1000	983	95	75-125
Nickel	ND	1000	943	94	75-125
Potassium	16300	50000	64000	95	75-125
Silver	ND	1000	899	90	75-125
Sodium	13200	50000	60700	95	75-125
Vanadium	ND	1000	984	98	75-125
Zinc	ND	1000	990	99	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 3010A/6010B

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	XX0220			
CONTROL NO.:	C138-01	C138-01A		
LAB FILE ID:	I31C018020	I31C018019		
DATIME EXTRCTD:	03/28/0313:50	03/28/0313:50	DATE COLLECTED:	03/25/03
DATIME ANALYZD:	03/31/0313:16	03/31/0313:09	DATE RECEIVED:	03/27/03
PREP. BATCH:	IPC044W	IPC044W		
CALIB. REF:	I31C018014	I31C018014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Arsenic	ND	1000	938	94	75-125
Lead	ND	1000	955	96	75-125
Selenium	ND	1000	986	99	75-125
Thallium	ND	1000	939	94	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
'O.: 03C131
JD: METHOD 3050B/6010B

==========

MATRIX:	SOIL		% MOISTURE:	11.6
DILTN FACTR:	1	1		
SAMPLE ID:	818655-3230			
CONTROL NO.:	C132-07	C132-07A		
LAB FILE ID:	I07C020033	I07C020035		
DATIME EXTRCTD:	03/28/0314:50	03/28/0314:50	DATE COLLECTED:	03/26/03
DATIME ANALYZD:	03/31/0316:43	03/31/0316:59	DATE RECEIVED:	03/26/03
PREP. BATCH:	IPC043S	IPC043S		
CALIB. REF:	I07C020026	I07C020026		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Aluminum	11500	1130	12200	62*	75-125
Antimony	ND	566	473	84	75-125
Barium	125	113	222	86	75-125
Beryllium	.455	113	110	97	75-125
Cadmium	ND	113	106	94	75-125
Calcium	3400	5660	8430	89	75-125
Chromium	10.5	113	119	96	75-125
Cobalt	6.12	113	109	91	75-125
Copper	7.04	113	113	94	75-125
Iron	12700	1130	13100	40*	75-125
Magnesium	5330	5660	10400	90	75-125
Manganese	237	113	333	85	75-125
Molybdenum	ND	113	103	91	75-125
[illegible]l	6.62	113	110	91	75-125
Potassium	4130	5660	9310	92	75-125
Silver	ND	113	99.5	88	75-125
Sodium	162	5660	5400	93	75-125
Vanadium	31.2	113	137	93	75-125
Zinc	40	113	147	95	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 3050B/6010B

==========

MATRIX:	SOIL		% MOISTURE:	11.6
DILTN FACTR:	1	1		
SAMPLE ID:	818655-3230			
CONTROL NO.:	C132-07	C132-07A		
LAB FILE ID:	I31C019033	I31C019035		
DATIME EXTRCTD:	03/28/0314:50	03/28/0314:50	DATE COLLECTED:	03/26/03
DATIME ANALYZD:	03/31/0316:43	03/31/0316:55	DATE RECEIVED:	03/26/03
PREP. BATCH:	IPC043S	IPC043S		
CALIB. REF:	I31C019026	I31C019026		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Arsenic	2.11	113	97.3	84	75-125
Lead	3.41	113	102	88	75-125
Selenium	ND	113	104	92	75-125
Thallium	.469J	113	93.4	82	75-125

METHOD 3010A/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	NA
Pr	: EL TORO, CTO 0024	Date Received:	04/03/03
SD	: 03D011	Date Extracted:	04/03/03 18:45
Sample ID:	MBLK1W	Date Analyzed:	04/07/03 11:43
Lab Samp ID:	IPD009WB	Dilution Factor:	1
Lab File ID:	I07D008017	Matrix :	WATER
Ext Btch ID:	IPD009W	% Moisture :	NA
Calib. Ref.:	I07D008014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Aluminum	ND	500	61
Antimony	ND	500	40
Barium	ND	100	2
Beryllium	ND	10	1.0
Cadmium	ND	5	2
Calcium	ND	1000	32
Chromium	ND	50	6
Cobalt	ND	50	11
Copper	ND	50	5
Iron	ND	1000	25
Magnesium	ND	1000	54
Manganese	ND	20	3
Molybdenum	ND	100	7
Nickel	ND	150	10
Potassium	ND	5000	750
Silver	ND	50	11
Sodium	133J	1000	70
Vanadium	ND	100	5
Zinc	ND	20	5

RL porting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 3010A/6010B

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IPD009WB	IPD009WL	IPD009WC		
LAB FILE ID:	I07D008017	I07D008018	I07D008019		
DATIME EXTRCTD:	04/03/0318:45	04/03/0318:45	04/03/0318:45	DATE COLLECTED:	NA
DATIME ANALYZD:	04/07/0311:43	04/07/0311:49	04/07/0311:54	DATE RECEIVED:	04/03/03
PREP. BATCH:	IPD009W	IPD009W	IPD009W		
CALIB. REF:	I07D008014	I07D008014	I07D008014		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Aluminum	ND	10000	10000	100	10000	10100	101	1	80-120	15
Antimony	ND	5000	4740	95	5000	4790	96	1	80-120	15
Barium	ND	1000	955	96	1000	961	96	1	80-120	15
Beryllium	ND	1000	1020	102	1000	1030	103	0	80-120	15
Cadmium	ND	1000	1010	101	1000	1020	102	1	80-120	15
Calcium	ND	50000	50200	100	50000	50400	101	0	80-120	15
Chromium	ND	1000	1020	102	1000	1030	103	1	80-120	15
Cobalt	ND	1000	985	99	1000	986	99	0	80-120	15
Copper	ND	1000	996	100	1000	996	100	0	80-120	15
Iron	ND	10000	10100	101	10000	10100	101	0	80-120	15
Magnesium	ND	50000	49900	100	50000	50700	101	2	80-120	15
Manganese	ND	1000	1000	100	1000	1010	101	0	80-120	15
Molybdenum	ND	1000	971	97	1000	981	98	1	80-120	15
Nickel	ND	1000	960	96	1000	967	97	1	80-120	15
Potassium	ND	50000	50300	101	50000	50300	101	0	80-120	15
Silver	ND	1000	1010	101	1000	1010	101	1	80-120	15
Sodium	133J	50000	49900	100	50000	50400	100	1	80-120	15
Vanadium	ND	1000	1000	100	1000	1010	101	1	80-120	15
Zinc	ND	1000	1020	102	1000	1030	103	1	80-120	15

METHOD 3010A/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	04/03/03
SDG No.	: 03D011	Date Extracted:	04/03/03 18:45
Sample ID:	MBLK1W	Date Analyzed:	04/07/03 14:45
Lab Samp ID:	IPD009WB	Dilution Factor:	1
Lab File ID:	I31D007016	Matrix :	WATER
Ext Btch ID:	IPD009W	% Moisture :	NA
Calib. Ref.:	I31D007014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (ug/L)	RL (ug/L)	MDL (ug/L)
Arsenic	ND	5	4
Lead	ND	5	2
Selenium	ND	5	5
Thallium	ND	10	6

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 3050B/6010B

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	IPD008SB	IPD008SL	IPD008SC		
LAB FILE ID:	I31D007022	I31D007023	I31D007024		
DATIME EXTRCTD:	04/03/0317:10	04/03/0317:10	04/03/0317:10	DATE COLLECTED:	NA
DATIME ANALYZD:	04/07/0315:19	04/07/0315:24	04/07/0315:29	DATE RECEIVED:	04/03/03
PREP. BATCH:	IPD008S	IPD008S	IPD008S		
CALIB. REF:	I31D007014	I31D007014	I31D007014		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	100	93.7	94	100	93.4	93	0	80-120	25
Lead	ND	100	92.1	92	100	92.1	92	0	80-120	25
Selenium	ND	100	92	92	100	92.1	92	0	80-120	25
Thallium	ND	100	93	93	100	92.7	93	0	80-120	25

METHOD 3050B/6010B
METALS BY ICP

Client	: SHAW E&I	Date Collected:	NA
Project	: EL TORO, CTO 0024	Date Received:	04/03/03
S.D.	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID:	MBLK1S	Date Analyzed:	04/07/03 12:20
Lab Samp ID:	IPD008SB	Dilution Factor:	1
Lab File ID:	I07D008023	Matrix :	SOIL
Ext Btch ID:	IPD008S	% Moisture :	NA
Calib. Ref.:	I07D008014	Instrument ID :	EMAXTI07

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Aluminum	ND	50	4.48
Antimony	ND	5	2.1
Barium	ND	1	.124
Beryllium	ND	.2	.118
Cadmium	ND	.5	.362
Calcium	ND	100	6.8
Chromium	ND	2	.614
Cobalt	ND	1	.691
Copper	ND	2	.472
Iron	ND	20	1.53
Magnesium	ND	100	7.99
Manganese	ND	2	.188
Molybdenum	ND	5	.738
Nickel	ND	2	.55
Potassium	ND	100	71.6
Silver	ND	2	.628
Sodium	11.4J	100	7.01
Vanadium	ND	2	.438
Zinc	ND	1	.288

RL Reporting Limit

EMAX QUALITY CONTROL DATA
LCS ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 3050B/6010B

==========

MATRIX:	SOIL		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	MBLK1S			
CONTROL NO.:	IPD008SB	IPD008SC		
LAB FILE ID:	I07D008023	I07D008025		
DATIME EXTRCTD:	04/03/0317:10	04/03/0317:10	DATE COLLECTED:	NA
DATIME ANALYZD:	04/07/0312:20	04/07/0312:30	DATE RECEIVED:	04/03/03
PREP. BATCH:	IPD008S	IPD008S		
CALIB. REF:	I07D008014	I07D008014		

ACCESSION:

PARAMETER	BLNK RSLT (mg/kg)	SPIKE AMT (mg/kg)	BS RSLT (mg/kg)	BS % REC	QC LIMIT (%)
Aluminum	ND	1000	933	93	80-120
Antimony	ND	500	437	87	80-120
Barium	ND	100	89.4	89	80-120
Beryllium	ND	100	94.6	95	80-120
Cadmium	ND	100	93.3	93	80-120
Calcium	ND	5000	4720	94	80-120
Chromium	ND	100	94.2	94	80-120
Cobalt	ND	100	91.1	91	80-120
Copper	ND	100	92.4	92	80-120
Iron	ND	1000	938	94	80-120
Magnesium	ND	5000	4760	95	80-120
Manganese	ND	100	93.4	93	80-120
Molybdenum	ND	100	89.3	89	80-120
Nickel	ND	100	88.9	89	80-120
Potassium	ND	5000	4760	95	80-120
Silver	ND	100	93.7	94	80-120
Sodium	11.4J	5000	4730	94	80-120
Vanadium	ND	100	93.7	94	80-120
Zinc	ND	100	94	94	80-120

METHOD 3050B/6010B
METALS BY TRACE ICP

Client	: SHAW E&I	Date Collected:	NA
Pr t	: EL TORO, CTO 0024	Date Received:	04/03/03
SD	: 03D011	Date Extracted:	04/03/03 17:10
Sample ID:	MBLK1S	Date Analyzed:	04/07/03 15:19
Lab Samp ID:	IPD008SB	Dilution Factor:	1
Lab File ID:	I31D007022	Matrix :	SOIL
Ext Btch ID:	IPD008S	% Moisture :	NA
Calib. Ref.:	I31D007014	Instrument ID :	EMAXTI31

PARAMETERS	RESULTS (mg/kg)	RL (mg/kg)	MDL (mg/kg)
Arsenic	ND	1	.21
Lead	ND	1	.174
Selenium	ND	1	.285
Thallium	ND	1	.305

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 3010A/6010B

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	IPD009WB	IPD009WL	IPD009WC		
LAB FILE ID:	I31D007016	I31D007017	I31D007018		
DATIME EXTRCTD:	04/03/0318:45	04/03/0318:45	04/03/0318:45	DATE COLLECTED:	NA
DATIME ANALYZD:	04/07/0314:45	04/07/0314:50	04/07/0314:55	DATE RECEIVED:	04/03/03
PREP. BATCH:	IPD009W	IPD009W	IPD009W		
CALIB. REF:	I31D007014	I31D007014	I31D007014		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Arsenic	ND	1000	1020	102	1000	1030	103	1	80-120	15
Lead	ND	1000	990	99	1000	990	99	0	80-120	15
Selenium	ND	1000	1020	102	1000	1030	103	1	80-120	15
Thallium	ND	1000	1000	100	1000	1010	101	1	80-120	15

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BA IO.: 03D011
ME : METHOD 3010A/6010B

==========

MATRIX: WATER % MOISTURE: NA

DILUTION FACTOR:	1	5		
SAMPLE ID:	818655-3260	818655-3260DL		
EMAX SAMP ID:	D011-07	D011-07T		
LAB FILE ID:	I07D008021	I07D008022		
DATE EXTRACTED:	04/03/0318:45	04/03/0318:45	DATE COLLECTED:	04/02/03
DATE ANALYZED:	04/07/0312:07	04/07/0312:12	DATE RECEIVED:	04/02/03
PREP. BATCH:	IPD009W	IPD009W		
CALIB. REF:	I07D008014	I07D008014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Aluminum	ND	ND	0	10
Antimony	ND	ND	0	10
Barium	ND	ND	0	10
Beryllium	ND	ND	0	10
Cadmium	2.33J	ND	NA	10
Calcium	ND	ND	0	10
Chromium	ND	ND	0	10
Cobalt	ND	ND	0	10
Copper	ND	ND	0	10
Iron	ND	ND	0	10
Magnesium	ND	ND	0	10
Manganese	ND	ND	0	10
Mo[illegible]denum	ND	36.2J	NA	10
N[illegible]	ND	ND	0	10
Potassium	ND	ND	0	10
Silver	ND	ND	0	10
Sodium	133J	664J	400R	10
Vanadium	ND	ND	0	10
Zinc	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 3010A/6010B

==========

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	818655-3260	818655-3260DL		
EMAX SAMP ID:	D011-07	D011-07T		
LAB FILE ID:	I31D007020	I31D007021		
DATE EXTRACTED:	04/03/0318:45	04/03/0318:45	DATE COLLECTED:	04/02/03
DATE ANALYZED:	04/07/0315:07	04/07/0315:12	DATE RECEIVED:	04/02/03
PREP. BATCH:	IPD009W	IPD009W		
CALIB. REF:	I31D007014	I31D007014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Arsenic	ND	ND	0	10
Lead	ND	ND	0	10
Selenium	ND	ND	0	10
Thallium	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BA[illegible] NO.: 03D011
ME[illegible]: METHOD 3050B/6010B

==========

MATRIX: SOIL % MOISTURE: NA

DILUTION FACTOR:	1	5		
SAMPLE ID:	818655-3255	818655-3255DL		
EMAX SAMP ID:	D011-02	D011-02T		
LAB FILE ID:	I07D008029	I07D008030		
DATE EXTRACTED:	04/03/0317:10	04/03/0317:10	DATE COLLECTED:	04/02/03
DATE ANALYZED:	04/07/0312:52	04/07/0312:57	DATE RECEIVED:	04/02/03
PREP. BATCH:	IPD008S	IPD008S		
CALIB. REF:	I07D008026	I07D008026		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Aluminum	8970	9530	6	10
Antimony	ND	ND	0	10
Barium	46.1	48.4	5	10
Beryllium	.322	ND	NA	10
Cadmium	.633	ND	NA	10
Calcium	2010	2170	8	10
Chromium	5.84	4.24J	NA	10
Cobalt	3.07	ND	NA	10
Copper	4.48	3.84J	NA	10
Iron	7990	8620	8	10
Magnesium	2860	3130	9	10
Manganese	143	153	7	10
Mo[illegible]enum	ND	ND	0	10
N[illegible]	3.78	ND	NA	10
Potassium	2230	2360	6	10
Silver	ND	ND	0	10
Sodium	144	72.9J	NA	10
Vanadium	20.3	22.3	10	10
Zinc	24.4	25.2	3	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 3050B/6010B

==========

MATRIX: SOIL % MOISTURE: NA
DILUTION FACTOR: 1 5
SAMPLE ID: 818655-3255 818655-3255DL
EMAX SAMP ID: D011-02 D011-02T
LAB FILE ID: I31D007028 I31D007029
DATE EXTRACTED: 04/03/0317:10 04/03/0317:10 DATE COLLECTED: 04/02/03
DATE ANALYZED: 04/07/0315:52 04/07/0315:57 DATE RECEIVED: 04/02/03
PREP. BATCH: IPD008S IPD008S
CALIB. REF: I31D007025 I31D007025

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Arsenic	2.56	2.8J	NA	10
Lead	2.2	2.87J	NA	10
Selenium	ND	ND	0	10
Thallium	.52J	ND	NA	10

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
[illegible]D: 03D011
M[illegible]OD: METHOD 3010A/6010B

==========

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	818655-3260			
CONTROL NO.:	D011-07	D011-07A		
LAB FILE ID:	I07D008021	I07D008020		
DATIME EXTRCTD:	04/03/0318:45	04/03/0318:45	DATE COLLECTED:	04/02/03
DATIME ANALYZD:	04/07/0312:07	04/07/0311:59	DATE RECEIVED:	04/02/03
PREP. BATCH:	IPD009W	IPD009W		
CALIB. REF:	I07D008014	I07D008014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Aluminum	ND	10000	9710	97	80-120
Antimony	ND	5000	4410	88	80-120
Barium	ND	1000	922	92	80-120
Beryllium	ND	1000	994	99	80-120
Cadmium	2.33J	1000	985	98	80-120
Calcium	ND	50000	48800	98	80-120
Chromium	ND	1000	990	99	80-120
Cobalt	ND	1000	944	94	80-120
Copper	ND	1000	960	96	80-120
Iron	ND	10000	9770	98	80-120
Magnesium	ND	50000	49100	98	80-120
Manganese	ND	1000	974	97	80-120
M[illegible]denum	ND	1000	940	94	80-120
[illegible]l	ND	1000	965	97	80-120
Potassium	ND	50000	49000	98	80-120
Silver	ND	1000	893	89	80-120
Sodium	133J	50000	48400	97	80-120
Vanadium	ND	1000	976	98	80-120
Zinc	ND	1000	991	99	80-120

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 3010A/6010B

==========

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	818655-3260			
CONTROL NO.:	D011-07	D011-07A		
LAB FILE ID:	I31D007020	I31D007019		
DATIME EXTRCTD:	04/03/0318:45	04/03/0318:45	DATE COLLECTED:	04/02/03
DATIME ANALYZD:	04/07/0315:07	04/07/0315:00	DATE RECEIVED:	04/02/03
PREP. BATCH:	IPD009W	IPD009W		
CALIB. REF:	I31D007014	I31D007014		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Arsenic	ND	1000	1010	101	75-125
Lead	ND	1000	980	98	75-125
Selenium	ND	1000	1050	105	75-125
Thallium	ND	1000	1010	101	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
NO.: 03D011
METHOD: METHOD 3050B/6010B

MATRIX: SOIL % MOISTURE: 8.9
DILTN FACTR: 1 1
SAMPLE ID: 818655-3255
CONTROL NO.: D011-02 D011-02A
LAB FILE ID: I07D008029 I07D008028
DATIME EXTRCTD: 04/03/0317:10 04/03/0317:10 DATE COLLECTED: 04/02/03
DATIME ANALYZD: 04/07/0312:52 04/07/0312:46 DATE RECEIVED: 04/02/03
PREP. BATCH: IPD008S IPD008S
CALIB. REF: I07D008026 I07D008026

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Aluminum	8970	1100	10900	172*	75-125
Antimony	ND	549	443	81	75-125
Barium	46.1	110	147	92	75-125
Beryllium	.322	110	102	92	75-125
Cadmium	.633	110	99.8	90	75-125
Calcium	2010	5490	7130	93	75-125
Chromium	5.84	110	107	93	75-125
Cobalt	3.07	110	98.2	87	75-125
Copper	4.48	110	105	91	75-125
Iron	7990	1100	9640	150*	75-125
Magnesium	2860	5490	8120	96	75-125
Manganese	143	110	255	102	75-125
Molybdenum	ND	110	94.3	86	75-125
Nickel	3.78	110	102	90	75-125
Potassium	2230	5490	7650	99	75-125
Silver	ND	110	90.8	83	75-125
Sodium	144	5490	5190	92	75-125
Vanadium	20.3	110	121	92	75-125
Zinc	24.4	110	125	91	75-125

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 3050B/6010B

==========

MATRIX:	SOIL		% MOISTURE:	8.9
DILTN FACTR:	1	1		
SAMPLE ID:	818655-3255			
CONTROL NO.:	D011-02	D011-02A		
LAB FILE ID:	I31D007028	I31D007027		
DATIME EXTRCTD:	04/03/0317:10	04/03/0317:10	DATE COLLECTED:	04/02/03
DATIME ANALYZD:	04/07/0315:52	04/07/0315:44	DATE RECEIVED:	04/02/03
PREP. BATCH:	IPD008S	IPD008S		
CALIB. REF:	I31D007025	I31D007025		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Arsenic	2.56	110	104	92	75-125
Lead	2.2	110	101	90	75-125
Selenium	ND	110	100	91	75-125
Thallium	.52J	110	101	92	75-125

METHOD IA
MERCURY BY COLD VAPOR

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03D011

Matrix : SOIL
Instrument ID : TI074

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	HGD004SB	ND	1	NA	.1	.033	04/04/0315:02	04/04/0312:45	M74D005011	M74D005009	HGD004S	NA	04/04/03
LCS1S	HGD004SL	.797	1	NA	.1	.033	04/04/0315:04	04/04/0312:45	M74D005012	M74D005009	HGD004S	NA	04/04/03
LCD1S	HGD004SC	.802	1	NA	.1	.033	04/04/0315:06	04/04/0312:45	M74D005013	M74D005009	HGD004S	NA	04/04/03
818655-3255AS	D011-02A	.373	1	8.9	.11	.0362	04/04/0315:08	04/04/0312:45	M74D005014	M74D005009	HGD004S	04/02/03	04/02/03
818655-3255	D011-02	ND	1	8.9	.11	.0362	04/04/0315:11	04/04/0312:45	M74D005015	M74D005009	HGD004S	04/02/03	04/02/03
818655-3255DL	D011-02T	ND	5	8.9	.549	.181	04/04/0315:14	04/04/0312:45	M74D005016	M74D005009	HGD004S	04/02/03	04/02/03
818655-3255MS	D011-02M	.957	1	8.9	.11	.0362	04/04/0315:16	04/04/0312:45	M74D005017	M74D005009	HGD004S	04/02/03	04/02/03
818655-3255MSD	D011-02S	.962	1	8.9	.11	.0362	04/04/0315:18	04/04/0312:45	M74D005018	M74D005009	HGD004S	04/02/03	04/02/03
818655-3256	D011-03	ND	1	6.6	.107	.0353	04/04/0315:20	04/04/0312:45	M74D005019	M74D005009	HGD004S	04/02/03	04/02/03
818655-3257	D011-04	ND	1	6.4	.107	.0353	04/04/0315:22	04/04/0312:45	M74D005020	M74D005009	HGD004S	04/02/03	04/02/03
818655-3258	D011-05	ND	1	8.2	.109	.0359	04/04/0315:28	04/04/0312:45	M74D005023	M74D005021	HGD004S	04/02/03	04/02/03
818655-3259	D011-06	ND	1	8.6	.109	.0361	04/04/0315:30	04/04/0312:45	M74D005024	M74D005021	HGD004S	04/02/03	04/02/03

RL: Reporting Limit

METHOD 7471A
MERCURY BY COLD VAPOR

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03C131

Matrix : SOIL
Instrument ID : TI074

SAMPLE ID	EMAX SAMPLE ID	RESULTS (mg/kg)	DLF	MOIST	RL (mg/kg)	MDL (mg/kg)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1S	HGC025SB	ND	1	NA	.1	.033	03/28/0316:53	03/28/0313:25	M74C024011	M74C024009	HGC025S	NA	03/28/03
LCS1S	HGC025SL	.863	1	NA	.1	.033	03/28/0316:55	03/28/0313:25	M74C024012	M74C024009	HGC025S	NA	03/28/03
LCD1S	HGC025SC	.83	1	NA	.1	.033	03/28/0316:57	03/28/0313:25	M74C024013	M74C024009	HGC025S	NA	03/28/03
818655-3216	C131-02	ND	1	8.6	.109	.0361	03/28/0317:24	03/28/0313:25	M74C024026	M74C024021	HGC025S	03/25/03	03/26/03
818655-3217	C131-03	ND	1	6.9	.107	.0354	03/28/0317:26	03/28/0313:25	M74C024027	M74C024021	HGC025S	03/25/03	03/26/03
818655-3218	C131-04	ND	1	6.6	.107	.0353	03/28/0317:28	03/28/0313:25	M74C024028	M74C024021	HGC025S	03/25/03	03/26/03
818655-3219	C131-05	ND	1	16.2	.119	.0394	03/28/0317:30	03/28/0313:25	M74C024029	M74C024021	HGC025S	03/25/03	03/26/03
818655-3220	C131-06	ND	1	6.7	.107	.0354	03/28/0317:32	03/28/0313:25	M74C024030	M74C024021	HGC025S	03/25/03	03/26/03
818655-3221	C131-07	ND	1	9.5	.11	.0365	03/28/0317:35	03/28/0313:25	M74C024031	M74C024021	HGC025S	03/25/03	03/26/03
818655-3222	C131-08	ND	1	5.7	.106	.035	03/28/0317:37	03/28/0313:25	M74C024032	M74C024021	HGC025S	03/25/03	03/26/03

RL: Reporting Limit

METHOD A
MERCURY BY COLD VAPOR

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03C131

Matrix : WATER
Instrument ID : TI074

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGC024WB	ND	1	NA	.2	.1	03/28/0315:26	03/28/0314:05	M74C023011	M74C023009	HGC024W	NA	03/28/03
LCS1W	HGC024WL	4.62	1	NA	.2	.1	03/28/0315:29	03/28/0314:05	M74C023012	M74C023009	HGC024W	NA	03/28/03
LCD1W	HGC024WC	4.65	1	NA	.2	.1	03/28/0315:31	03/28/0314:05	M74C023013	M74C023009	HGC024W	NA	03/28/03
818655-3223	C131-09	ND	1	NA	.2	.1	03/28/0315:46	03/28/0314:05	M74C023020	M74C023009	HGC024W	03/25/03	03/26/03

RL: Reporting Limit

METHOD 7470A
MERCURY BY COLD VAPOR

Client : SHAW E&I
Project : EL TORO, CTO 0024
Batch No. : 03D011

Matrix : WATER
Instrument ID : TI074

SAMPLE ID	EMAX SAMPLE ID	RESULTS (ug/L)	DLF	MOIST	RL (ug/L)	MDL (ug/L)	Analysis DATETIME	Extraction DATETIME	LFID	CAL REF	PREP BATCH	Collection DATETIME	Received DATETIME
MBLK1W	HGD005WB	ND	1	NA	.2	.1	04/07/0315:45	04/07/0314:00	M74D006011	M74D006009	HGD005W	NA	04/07/03
LCS1W	HGD005WL	5.28	1	NA	.2	.1	04/07/0315:48	04/07/0314:00	M74D006012	M74D006009	HGD005W	NA	04/07/03
LCD1W	HGD005WC	5.23	1	NA	.2	.1	04/07/0315:50	04/07/0314:00	M74D006013	M74D006009	HGD005W	NA	04/07/03
818655-3260	D011-07	ND	1	NA	.2	.1	04/07/0316:06	04/07/0314:00	M74D006020	M74D006009	HGD005W	04/02/03	04/02/03

RL: Reporting Limit

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 7470A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	HGD005WB	HGD005WL	HGD005WC		
LAB FILE ID:	M74D006011	M74D006012	M74D006013		
DATIME EXTRCTD:	04/07/0314:00	04/07/0314:00	04/07/0314:00	DATE COLLECTED:	NA
DATIME ANALYZD:	04/07/0315:45	04/07/0315:48	04/07/0315:50	DATE RECEIVED:	04/07/03
PREP. BATCH:	HGD005W	HGD005W	HGD005W		
CALIB. REF:	M74D006009	M74D006009	M74D006009		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5	5.28	106	5	5.23	105	1	77-120	15

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 7471A

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	HGD004SB	HGD004SL	HGD004SC		
LAB FILE ID:	M74D005011	M74D005012	M74D005013		
DATIME EXTRCTD:	04/04/0312:45	04/04/0312:45	04/04/0312:45	DATE COLLECTED:	NA
DATIME ANALYZD:	04/04/0315:02	04/04/0315:04	04/04/0315:06	DATE RECEIVED:	04/04/03
PREP. BATCH:	HGD004S	HGD004S	HGD004S		
CALIB. REF:	M74D005009	M74D005009	M74D005009		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	.833	.797	96	.833	.802	96	1	77-120	25

7050

EMAX QUALITY CONTROL DATA
MS/MSD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 7471A

MATRIX:	SOIL			% MOISTURE:	8.9
DILTN FACTR:	1	1	1		
SAMPLE ID:	818655-3255				
CONTROL NO.:	D011-02	D011-02M	D011-02S		
LAB FILE ID:	M74D005015	M74D005017	M74D005018		
DATIME EXTRCTD:	04/04/0312:45	04/04/0312:45	04/04/0312:45	DATE COLLECTED:	04/02/03
DATIME ANALYZD:	04/04/0315:11	04/04/0315:16	04/04/0315:18	DATE RECEIVED:	04/02/03
PREP. BATCH:	HGD004S	HGD004S	HGD004S		
CALIB. REF:	M74D005009	M74D005009	M74D005009		

ACCESSION:

PARAMETER	SMPL RSLT mg/kg	SPIKE AMT mg/kg	MS RSLT mg/kg	MS % REC	SPIKE AMT mg/kg	MSD RSLT mg/kg	MSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	.914	.957	105	.914	.962	105	1	77-120	25

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 7470A

==========

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	TP3005	TP3005DL		
EMAX SAMP ID:	D020-02	D020-02T		
LAB FILE ID:	M74D006015	M74D006016		
DATE EXTRACTED:	04/07/0314:00	04/07/0314:00	DATE COLLECTED:	04/01/03
DATE ANALYZED:	04/07/0315:55	04/07/0315:57	DATE RECEIVED:	04/03/03
PREP. BATCH:	HGD005W	HGD005W		
CALIB. REF:	M74D006009	M74D006009		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03D011
METHOD: METHOD 7471A

==========

MATRIX:	SOIL		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	818655-3255	818655-3255DL		
EMAX SAMP ID:	D011-02	D011-02T		
LAB FILE ID:	M74D005015	M74D005016		
DATE EXTRACTED:	04/04/0312:45	04/04/0312:45	DATE COLLECTED:	04/02/03
DATE ANALYZED:	04/04/0315:11	04/04/0315:14	DATE RECEIVED:	04/02/03
PREP. BATCH:	HGD004S	HGD004S		
CALIB. REF:	M74D005009	M74D005009		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

7053

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 7470A

==========

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	TP3005			
CONTROL NO.:	D020-02	D020-02A		
LAB FILE ID:	M74D006015	M74D006014		
DATIME EXTRCTD:	04/07/0314:00	04/07/0314:00	DATE COLLECTED:	04/01/03
DATIME ANALYZD:	04/07/0315:55	04/07/0315:52	DATE RECEIVED:	04/03/03
PREP. BATCH:	HGD005W	HGD005W		
CALIB. REF:	M74D006009	M74D006009		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Mercury	ND	2	2.18	109	85-115

7054

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03D011
METHOD: METHOD 7471A

MATRIX:	SOIL		% MOISTURE:	8.9
DILTN FACTR:	1	1		
SAMPLE ID:	818655-3255			
CONTROL NO.:	D011-02	D011-02A		
LAB FILE ID:	M74D005015	M74D005014		
DATIME EXTRCTD:	04/04/0312:45	04/04/0312:45	DATE COLLECTED:	04/02/03
DATIME ANALYZD:	04/04/0315:11	04/04/0315:08	DATE RECEIVED:	04/02/03
PREP. BATCH:	HGD004S	HGD004S		
CALIB. REF:	M74D005009	M74D005009		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Mercury	ND	.365	.373	102	85-115

7058

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 7470A

MATRIX:	WATER			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1W				
CONTROL NO.:	HGC024WB	HGC024WL	HGC024WC		
LAB FILE ID:	M74C023011	M74C023012	M74C023013		
DATIME EXTRCTD:	03/28/0314:05	03/28/0314:05	03/28/0314:05	DATE COLLECTED:	NA
DATIME ANALYZD:	03/28/0315:26	03/28/0315:29	03/28/0315:31	DATE RECEIVED:	03/28/03
PREP. BATCH:	HGC024W	HGC024W	HGC024W		
CALIB. REF:	M74C023009	M74C023009	M74C023009		

ACCESSION:

PARAMETER	BLNK RSLT ug/L	SPIKE AMT ug/L	BS RSLT ug/L	BS % REC	SPIKE AMT ug/L	BSD RSLT ug/L	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	5	4.62	92	5	4.65	93	1	77-120	15

7150

EMAX QUALITY CONTROL DATA
LCS/LCD ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 7471A

MATRIX:	SOIL			% MOISTURE:	NA
DILTN FACTR:	1	1	1		
SAMPLE ID:	MBLK1S				
CONTROL NO.:	HGC025SB	HGC025SL	HGC025SC		
LAB FILE ID:	M74C024011	M74C024012	M74C024013		
DATIME EXTRCTD:	03/28/0313:25	03/28/0313:25	03/28/0313:25	DATE COLLECTED:	NA
DATIME ANALYZD:	03/28/0316:53	03/28/0316:55	03/28/0316:57	DATE RECEIVED:	03/28/03
PREP. BATCH:	HGC025S	HGC025S	HGC025S		
CALIB. REF:	M74C024009	M74C024009	M74C024009		

ACCESSION:

PARAMETER	BLNK RSLT mg/kg	SPIKE AMT mg/kg	BS RSLT mg/kg	BS % REC	SPIKE AMT mg/kg	BSD RSLT mg/kg	BSD % REC	RPD %	QC LIMIT %	MAX RPD %
Mercury	ND	.833	.863	104	.833	.83	100	4	77-120	25

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 7470A

==========

MATRIX:	WATER		% MOISTURE:	NA
DILUTION FACTOR:	1	5		
SAMPLE ID:	TE3008	TE3008DL		
EMAX SAMP ID:	C122-01	C122-01T		
LAB FILE ID:	M74C023015	M74C023016		
DATE EXTRACTED:	03/28/0314:05	03/28/0314:05	DATE COLLECTED:	03/21/03
DATE ANALYZED:	03/28/0315:35	03/28/0315:37	DATE RECEIVED:	03/25/03
PREP. BATCH:	HGC024W	HGC024W		
CALIB. REF:	M74C023009	M74C023009		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SERIAL DIL RSLT (ug/L)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

7152

EMAX QUALITY CONTROL DATA
SERIAL DILUTION ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
BATCH NO.: 03C131
METHOD: METHOD 7471A

==========

MATRIX:	SOIL		% MOISTURE:	11.6
DILUTION FACTOR:	1	5		
SAMPLE ID:	818655-3230	818655-3230DL		
EMAX SAMP ID:	C132-07	C132-07T		
LAB FILE ID:	M74C024015	M74C024016		
DATE EXTRACTED:	03/28/0313:25	03/28/0313:25	DATE COLLECTED:	03/26/03
DATE ANALYZED:	03/28/0317:01	03/28/0317:03	DATE RECEIVED:	03/26/03
PREP. BATCH:	HGC025S	HGC025S		
CALIB. REF:	M74C024009	M74C024009		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SERIAL DIL RSLT (mg/kg)	DIF RSLT %	QC LIMIT (%)
Mercury	ND	ND	0	10

7153

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 7470A

==========

MATRIX:	WATER		% MOISTURE:	NA
DILTN FACTR:	1	1		
SAMPLE ID:	TE3008			
CONTROL NO.:	C122-01	C122-01A		
LAB FILE ID:	M74C023015	M74C023014		
DATIME EXTRCTD:	03/28/0314:05	03/28/0314:05	DATE COLLECTED:	03/21/03
DATIME ANALYZD:	03/28/0315:35	03/28/0315:33	DATE RECEIVED:	03/25/03
PREP. BATCH:	HGC024W	HGC024W		
CALIB. REF:	M74C023009	M74C023009		

ACCESSION:

PARAMETER	SMPL RSLT (ug/L)	SPIKE AMT (ug/L)	AS RSLT (ug/L)	AS % REC	QC LIMIT (%)
Mercury	ND	2	2.01	101	85-115

7154

EMAX QUALITY CONTROL DATA
ANALYTICAL SPIKE ANALYSIS

CLIENT: SHAW E&I
PROJECT: EL TORO, CTO 0024
SDG NO.: 03C131
METHOD: METHOD 7471A

==========

MATRIX:	SOIL		% MOISTURE:	11.6
DILTN FACTR:	1	1		
SAMPLE ID:	818655-3230			
CONTROL NO.:	C132-07	C132-07A		
LAB FILE ID:	M74C024015	M74C024014		
DATIME EXTRCTD:	03/28/0313:25	03/28/0313:25	DATE COLLECTED:	03/26/03
DATIME ANALYZD:	03/28/0317:01	03/28/0316:59	DATE RECEIVED:	03/26/03
PREP. BATCH:	HGC025S	HGC025S		
CALIB. REF:	M74C024009	M74C024009		

ACCESSION:

PARAMETER	SMPL RSLT (mg/kg)	SPIKE AMT (mg/kg)	AS RSLT (mg/kg)	AS % REC	QC LIMIT (%)
Mercury	ND	.377	.411	109	85-115

Appendix J
DV Report

The DV Group, Inc.

DATA VALIDATION REPORT

Project / Site Name:	MCAS El Toro, CTO #24
Project No.:	818655
Data Reviewer:	S. Obleas, The Data Validation Group, Inc
Review Date:	April 21, 2003
Matrix:	7 Soils / 2 Waters
Parameters:	M8015 Gasoline and Diesel; Volatiles 8260B; Semivolatiles 8270C; Semivolatiles-SIM 8270C; Pesticides 8081A; Mercury 7470/7471A; Metals 6010B
Validation Level:	EPA Level III
Laboratory:	EMAX Analytical Lab Inc.
Sample Delivery Group (SDG) No.:	03-C131
Sample Nos :	818655-3215 818655-3216 818655-3217 818655-3218 818655-3219 818655-3220 818655-3221 818655-3222 818655-3223
Collection Date(s):	March 25, 2003
Comments:	Field duplicates: 818655-3217 and 818655-3218. Trip Blank: 818655-3215 Equipment rinsate: 818655-3223

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (1999) and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (1994). In addition, the Data Validation Services Statement of Work for MCAS El Toro was used along with other EPA methods

SRObleas President

S.R. Obleas, President

CURSORY DATA VALIDATION SUMMARY TABLE

Analysis	Holding Times	Surrogates	MS/MSD	LCS	Blanks	Calibration	Internal Standards	Field Duplicates	Other
Method M8015 **Gasoline**	√	√	N/A	√	√	√	N/A	√	√
Method M8015 **Diesel**	√	√	N/A	√	√	√	N/A	√	√
Method 8260B **Volatiles**	√	√	N/A	√	√	**Pg. 4**	√	√	√
Method 8270C **Semivolatiles**	√	√	N/A	√	√	**Pg. 5**	√	√	√
Method 8270C **Semivolatiles-SIM**	√	√	N/A	√	√	√	√	√	√
Method 8081A **Pesticides**	√	√	N/A	√	√	√	N/A	√	√
Method 7470A/7471A **Mercury**	√	N/A	√	√	√	√	N/A	√	√
Method 6010B **Metals**	√	N/A	**Pg. 6**	√	**Pg. 6**	√	N/A	√	**Pg. 7**

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers are described in the text.

SEMIVOLATILES (Method 8270C)

I. Calibrations

A. Due to continuing calibration problems, the following nondetected results are estimated (UJ).

- 2,6-Dinitrotoluene, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, and 4,6-Dinitro-2-methylphenol in all samples.
- Hexachlorocyclopentadiene in sample 818655-3223.

The following continuing calibrations had percent differences (%D) of >25%

Calibration Date	Compound	%D
3/27/03 1159	2,6-Dinitrotoluene	-29.2
	2,4-Dinitrophenol	-41.0
	2,4-Dinitrotoluene	-27.5
	4,6-Dinitro-2-methylphenol	-34.1
3/27/03 1228	Hexachlorocyclopentadiene	-25.5
	2,6-Dinitrotoluene	-25.5
	2,4-Dinitrophenol	-38.9
	2,4-Dinitrotoluene	-28.1
	4,6-Dinitro-2-methylphenol	-34.1

SEMIVOLATILES-SIM (Method 8270C)

I. Level III criteria met.

PESTICIDES (Method 8081A)

I. Level III criteria met.

MERCURY (Method 7470A/7471A)

I. Level III criteria met.

III. ICP Serial Dilution

A. Due to ICP serial dilution problems, the following detected and nondetected results are qualified as estimated (J).

- Zinc in samples 818655-3216, 818655-3217, 818655-3218, 818655-3219, 818655-3220, 818655-3221, and 818655-3222.
- Sodium in sample 818655-3223.

The percent difference between the original sample result and the serial dilution result was outside the QC limits of 10% for analyte concentrations greater than 10x the IDL as shown below.

Sample ID	Analyte	Original Concentration	10x IDL	%D
818655-3230	Zinc	40.0	2.88	84
C138-01	Sodium	13200	700	24

IV. Field Duplicate

A. The following RPD was obtained for the field duplicate samples 818655-3217 / 818655-3218:

- 200% for Antimony

For soil samples, the field RPD guideline is ± 50%. The data are not qualified on the basis of field duplicate results.

MCAS El Toro, CTO 24
Semivolatiles – Data Qualification Summary – SDG 03-C131

Continuing calibration qualifications

Sample	Compound	Qualification	Protocol / Advisory
818655-3216	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol
818655-3217	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol
818655-3218	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol
818655-3219	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol
818655-3220	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol
818655-3221	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol
818655-3222	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol
818655-3223	Hexachlorocyclopentadiene	UJ	Protocol
	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol

MCAS El Toro, CTO 24
Semivolatiles – Laboratory Blank Data Qualification Summary – SDG 03-C131

No Sample Data Qualified in this SDG.

MCAS El Toro, CTO 24
Semivolatiles-SIM – Data Qualification Summary – SDG 03-C131

No Sample Data Qualified in this SDG.

ICP serial dilution qualifications

Sample	Compound	Qualification	Protocol / Advisory
818655-3216	Zinc	J	Protocol
818655-3217	Zinc	J	Protocol
818655-3218	Zinc	J	Protocol
818655-3219	Zinc	J	Protocol
818655-3220	Zinc	J	Protocol
818655-3221	Zinc	J	Protocol
818655-3222	Zinc	J	Protocol
818655-3223	Sodium	J	Protocol

MCAS El Toro, CTO 24
Metals – Laboratory Blank Data Qualification Summary – SDG 03-C131

Calibration and method blank contamination qualifications

Compound	Associated Samples	Qualification	Protocol / Advisory
Selenium	818655-3216	0.467 U	Advisory
Sodium		290 U	Advisory
Thallium		0.347 U	Advisory
Sodium	818655-3217	285 U	Advisory
Sodium	818655-3218	248 U	Advisory
Selenium	818655-3219	0.394 U	Advisory
Sodium		180 U	Advisory
Sodium	818655-3220	162 U	Advisory
Sodium	818655-3221	167 U	Advisory
Sodium	818655-3222	127 U	Advisory
Sodium	818655-3223	843 U	Advisory
Thallium		7.29 U	Advisory

Equipment rinsate blank contamination qualifications

Compound	Associated Samples	Qualification	Protocol / Advisory
Copper	818655-3218	3.47 U	Advisory

FIELD DUPLICATE TABLE

Method	Analyte	Sample ID	Duplicate ID	Sample Value	Duplicate Value	RPD
Metals 6010	Antimony	818655-3217	818655-3218	ND	4.07	200

The DV Group, Inc.

DATA VALIDATION REPORT

Project / Site Name:	MCAS El Toro, CTO #24
Project No.:	818655
Data Reviewer:	S. Obleas, The Data Validation Group, Inc
Review Date:	May 5, 2003
Matrix:	5 Soils / 2 Waters
Parameters:	M8015 Gasoline and Diesel; Volatiles 8260B; Semivolatiles 8270C; Semivolatiles-SIM 8270C; Pesticides 8081A; Mercury 7470/7471A; Metals 6010B.
Validation Level:	EPA Level III
Laboratory:	EMAX Analytical Lab Inc.
Sample Delivery Group (SDG) No.:	03-D011
Sample Nos.:	818655-3254, 818655-3255, 818655-3256, 818655-3257, 818655-3258, 818655-3259, 818655-3260
Collection Date(s):	April 2, 2003
Comments:	Field duplicates: 818655-3255/ 818655-3256 Trip Blank: 818655-3254. Equipment rinsate: 818655-3260.

The data were qualified according to the U.S. Environmental Protection Agency (EPA) documents "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review" (1999) and "USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review" (1994). In addition, the Data Validation Services Statement of Work for MCAS El Toro was used along with other EPA methods.

S.R. Obleas, President

S.R. Obleas, President

CURSORY DATA VALIDATION SUMMARY TABLE

Analysis	Holding Times	Surrogates	MS/MSD	LCS	Blanks	Calibration	Internal Standards	Field Duplicates	Other
Method M8015 **Gasoline**	√	√	N/A	√	√	√	N/A	√	√
Method M8015 **Diesel**	√	√	N/A	√	√	√	N/A	√	√
Method 8260B **Volatiles**	√	√	N/A	√	√	√	√	√	√
Method 8270C **Semivolatiles**	√	√	N/A	√	√	**Pg. 4**	√	√	√
Method 8270C **Semivolatiles-SIM**	√	√	N/A	√	√	√	√	√	√
Method 8081A **Pesticides**	√	√	N/A	√	√	√	N/A	√	√
Method 7470A/7471A **Mercury**	√	N/A	√	√	√	√	N/A	√	√
Method 6010B **Metals**	√	N/A	**Pg. 6**	√	**Pg. 5**	√	N/A	**Pg. 6**	√

Notes:

√ indicates that all quality control criteria were met for the parameter as specified in the prescribed methods and data validation guidelines.

N/A indicates the parameter is not applicable to an analysis.

If criteria were not met and the data were qualified, a page number is indicated where the qualification is detailed.

The data were evaluated for all validation criteria and were found to be in control except where noted. Any outliers are described in the text.

SEMIVOLATILES-SIM (Method 8270C)

I. **Level III criteria met.**

PESTICIDES (Method 8081A)

I. **Level III criteria met.**

MERCURY (Method 7470A/7471A)

I. **Level III criteria met.**

METALS (Method 6010B)

I. **Blank Contamination**

A Due to calibration and method blank contamination, the following results are considered nondetected (U).

- Sodium in sample 818655-3260.

The following metals were detected in the associated calibration and method blanks at the concentrations noted below.

Analyte	Blank ID	Concentration, units
Sodium	PBW	133 ug/L

Detected results less than 5x the maximum blank contamination were qualified

B Due to equipment rinsate blank contamination, the following results are considered nondetected (U).

- Cadmium in samples 818655-3255 and 818655-3258.

The following analytes were detected in the associated equipment rinsate blanks at the concentrations noted below.

Analyte	Blank ID	Concentration
Cadmium	818655-3260	0.23 mg/Kg

Detected results less than 5x the maximum blank contamination were qualified.

MCAS El Toro, CTO 24
Gasoline – Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG

MCAS El Toro, CTO 24
Gasoline – Laboratory Blank Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG

MCAS El Toro, CTO 24
Diesel – Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG

MCAS El Toro, CTO 24
Diesel – Laboratory Blank Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG

MCAS El Toro, CTO 24
Volatiles – Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG

MCAS El Toro, CTO 24
Volatiles – Laboratory Blank Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG

MCAS El Toro, CTO 24
Semivolatiles – Data Qualification Summary – SDG 03-D011

Continuing calibration qualifications

Sample	Compound	Qualification	Protocol / Advisory
818655-3255	2-Nitrophenol	UJ	Protocol
	Hexachlorocyclopentadiene	UJ	Protocol
	2-Nitroaniline	UJ	Protocol
	2,6-Dinitrotoluene	UJ	Protocol
	2,4-Dinitrophenol	UJ	Protocol
	2,4-Dinitrotoluene	UJ	Protocol
	4,6-Dinitro-2-methylphenol	UJ	Protocol

MCAS El Toro, CTO 24
Semivolatiles-SIM – Laboratory Blank Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG.

MCAS El Toro, CTO 24
Pesticides – Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG.

MCAS El Toro, CTO 24
Pesticides – Laboratory Blank Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG.

MCAS El Toro, CTO 24
Mercury – Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG.

MCAS El Toro, CTO 24
Mercury – Laboratory Blank Data Qualification Summary – SDG 03-D011

No Sample Data Qualified in this SDG.

MCAS El Toro, CTO 24
Metals – Data Qualification Summary – SDG 03-D011

Analytical Spike qualifications

Sample	Compound	Qualification	Protocol / Advisory
818655-3255	Aluminum	J	Protocol
	Iron	J	Protocol
818655-3256	Aluminum	J	Protocol
	Iron	J	Protocol
818655-3257	Aluminum	J	Protocol
	Iron	J	Protocol
818655-3258	Aluminum	J	Protocol
	Iron	J	Protocol
818655-3259	Aluminum	J	Protocol
	Iron	J	Protocol

OVERALL ASSESSMENT OF DATA

I. Method Compliance and Additional Comments

A All analyses were conducted within all specifications of the requested methods

II. Usability

A. Due to continuing calibration problems in the Semivolatile analyses, the following were qualified as estimated: Hexachlorocyclopentadiene, 2-Nitroaniline, 2,6-Dinitrotoluene, 2,4-Dinitrophenol, 2,4-Dinitrotoluene, and 4,6-Dinitro-2-methylphenol for six samples, and 2-Nitrophenol in five samples.

B. Due to calibration and method blank contamination in the Metals analyses, the following were considered nondetected: Sodium for one sample. Due to equipment rinsate contamination, Cadmium was considered nondetected for two samples. Due to analytical spike recovery problems, Aluminum and Iron were qualified as estimated for five samples.

C The quality control criteria reviewed, other than those discussed above, were met and are considered acceptable. Sample results that were found to be rejected (R) are unusable for all purposes. Sample results that were found to be estimated (J) are usable for limited purposes only. Based upon the cursory and full data validation all other results are considered valid and usable for all purposes. In general, the absence of rejected data and the small number of qualifiers added to the data indicate high usability.