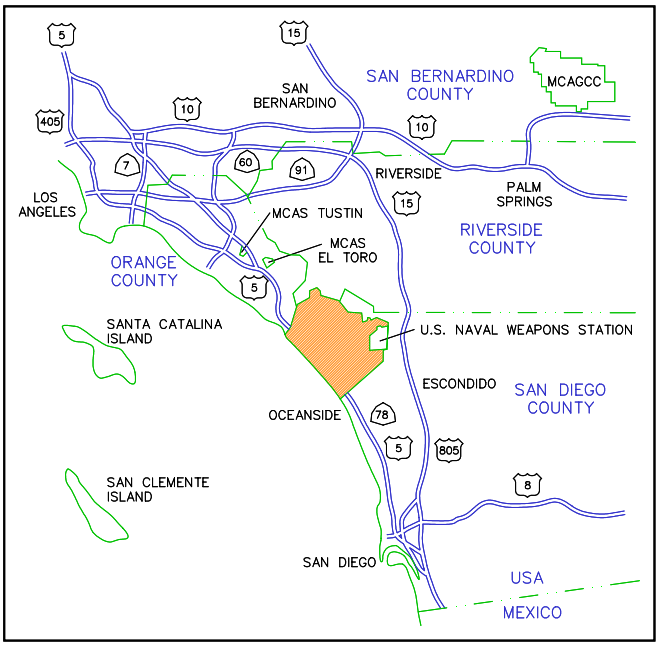
Site Close-Out Summary Report

(Includes: Site Closure Letter, Documentation of 1st, 2nd, and 3rd Quarter 2005 Groundwater Monitoring, and Well Abandonment Activities)

Marine Corps Air Station and Former Fuel Farm
Marine Corps Base Camp Pendleton



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The Marine Corps Air Station and Former Fuel Farm

Marine Corps Base Camp Pendleton

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ABBREVIATIONS AND ACRONYMS

AB	Assembly Bill
AST	aboveground storage tank
bgs	below ground surface
BTEX	benzene, toluene, ethylbenzene, and total xylenes
CAO	cleanup and abatement order
DEH	Department of Environmental Health
DHS	Department of Health Services
DI	deionized
DO	dissolved oxygen
EDF	Electronic Data Format
FF	Fuel Farm
FL	flight line
IAS	in situ air sparging
ID	identification
IT Corp.	International Technology Corporation
JEG	Jacobs Engineering Group, Inc.
JP5	jet propellant 5
L	liters
MCAS	Marine Corps Air Station
MCB	Marine Corps Base
MTBE	methyl-*tert*-butyl ether
MW	monitoring well
NA	not analyzed/applicable/available
ND	not detected
NFESC	Naval Facilities Engineering Service Center
NM	not measured
NS	not sampled
ORP	oxidation-reduction potential
PNA	polynuclear aromatic hydrocarbon
PW	production well
QA/QC	quality assurance/quality control
RWQCB	Regional Water Quality Control Board

ABBREVIATIONS AND ACRONYMS (CONTINUED)

SAM	Site Assessment and Mitigation

SWRCB	State Water Resources Control Board
TOT	taste and odor threshold
TPH	total petroleum hydrocarbons
TPH-D	total petroleum hydrocarbons extractable as diesel
TPH-G	total petroleum hydrocarbons purgeable as gasoline
TPH-JP5	total petroleum hydrocarbons extractable as jet propellant 5
U.S. EPA	United States Environmental Protection Agency
VOC	volatile organic compound

Section 1.0: INTRODUCTION AND SITE DESCRIPTION

This annual summary report contains groundwater monitoring data collected from the Marine Corps Air Station (MCAS) and former Fuel Farm, Marine Corps Base (MCB) Camp Pendleton. The information presented in this report is from the first, second, and third quarterly groundwater sampling events of 2005. In addition, this report contains the site closure letter and a description of the well abandonment activities. The work was conducted in accordance with the requirements of the Regional Water Quality Control Board (RWQCB), San Diego Region, Cleanup and Abatement Order (CAO) No. 95-09, Addendum No. 1. The Navy Public Works Center, Environmental Department, monitored and sampled the MCAS groundwater monitoring wells between June 1995 and September 1998, and the Fuel Farm monitoring wells from March 1997 to September 1998. Battelle assumed the quarterly groundwater monitoring responsibilities in December 1998 under Delivery Order No. 0066 for the Naval Facilities Engineering Service Center (NFESC) Contract No. N47408-95-D-0730. The quarterly groundwater monitoring program was transitioned to Delivery Order No. 0083 in November 1999 as part of the corrective action activities performed by Battelle at the former MCAS Fuel Farm. In November 2002, work under NFESC Contract No. N47408-95-D-0730 expired, and groundwater monitoring and remediation of the MCAS former Fuel Farm was transferred to contract N47408-01-D-8207, Task Order 0039. Finally, when Task Order 0039 expired in February of 2005, all work was transitioned to Task Order 0105 of the same contract. Reporting of the quarterly groundwater monitoring events has been performed on an annual basis. On October 31, 2005 the site closure was granted by the RWQCB and groundwater monitoring activities ceased.

The MCAS and former Fuel Farm are located in the 23 Area of MCB Camp Pendleton. The former Fuel Farm is situated in the northeast corner of the MCAS near the intersection of Vandegrift Boulevard and Basilone Road and is located approximately 2,200 ft south of the Santa Margarita River. Figures 1 and 2 show the location of the MCAS and Fuel Farm within Camp Pendleton and the location of the former Fuel Farm in relation to the MCAS, respectively.

In July and early August 1993, a release of jet propellant 5 (JP5) at the Fuel Farm was discovered. In response to the release, four early-detection groundwater monitoring wells, MW-06, MW-07, MW-08, and MW-12, were installed in September 1993 to assess the potential migration of the fuel hydrocarbons towards nearby water production wells PW-2363, PW-2373, and PW-2393. In August 1999, MW-12 was destroyed during excavation of contaminated soils, but was subsequently replaced with MW-12R at the same location.

To further assess the potential migration of fuel hydrocarbons, seven early-detection groundwater monitoring wells, FL-01 through FL-07 (flight line), were installed in October 1993 in the vicinity of PW-2363, PW-2373, and PW-2393. Figure 3 shows the locations of these monitoring and production wells at the flight line. Following well installation, International Technology Corporation (IT Corp.) conducted groundwater monitoring and sampling in October and November 1993. Seven additional groundwater monitoring wells, FF-MW-01 through FF-MW-07 (Fuel Farm), were installed in October and November of 1996 by Brown and Caldwell. Monitoring wells FF-MW-01 through FF-MW-04 were installed within the fenced perimeter of the Fuel Farm. The remaining wells were placed outside the fenced perimeter of the Fuel Farm to the northwest. Figure 4 shows the location of these monitoring wells in relation to the Fuel Farm.

From September to October 1999, soil excavation and removal of one underground storage tank and two underground clarifiers were performed by Battelle at the Fuel Farm in order to meet the requirements of the CAO (Battelle, 1999). An in situ air sparging (IAS) system was installed and began operating in late November 1999 to begin treating residual contaminated soils. During the summer of 2000, the Fuel Farm was permanently closed and fueling operations were transferred to newly constructed

facilities located at the southern portion of the MCAS. Subsequently, the old Fuel Farm was dismantled and the four aboveground storage tanks (ASTs) and associated piping and pumps were hauled off site. After all the aboveground structures were removed, approximately 1,500 yd^3 of petroleum-hydrocarbon impacted soils were excavated within the former Fuel Farm compound. In 2001, the remaining underground feed-and-return lines to Refuel Island 5 were removed along with an asbestos stormwater drain line (Battelle, 2001).

The MCAS and former Fuel Farm lie in the Santa Margarita River floodplain, about 5 miles east of the Pacific Ocean. The site and the adjacent air station were constructed on quaternary alluvial material eroded from the surrounding hills and mountains and deposited by fluvial processes (Jacobs Engineering Group, Inc. [JEG], 1994). The alluvium consists of fine- to coarse-grained sand interbedded with silty sand, clayey sand, clay, and gravel (JEG, 1993; Walewender and Craig, 1984; Schlemon, 1979; Moyle, 1973). The alluvium is disconformably underlain by Eocene-aged marine sandstones, siltstones, and conglomerates of the Santiago Formation (JEG, 1993; Walewender and Craig, 1984; Schlemon, 1979; Moyle, 1973; Rogers, 1965). According to boring logs included in a site assessment report prepared by IT Corp., following installation of the 10 early-detection groundwater monitoring wells, a fine- to coarse-grained, poorly graded sand interbedded with silty sand and sand with silt was encountered to approximately 100 ft below ground surface (bgs). A poorly consolidated sand, silty sand, and clay, reported to belong to the Santiago Formation, also was encountered between 100-150 ft bgs (JEG, 1994).

Based on a review of the San Diego County RWQCB Basin Map, the site lies within the Ysidora Hydrographic Subunit of the Santa Margarita Hydrologic Unit (RWQCB, 1995). Surface water within the subunit has been designated as having existing beneficial uses for municipal, agricultural, industrial, recreational, and wildlife habitat purposes. Groundwater within the subunit is designated as having existing beneficial uses for municipal, agricultural, industrial, and groundwater recharge purposes (RWQCB, 1991). There are no perennial surface waters in the vicinity of the former Fuel Farm; however, two ephemeral streams, the Santa Margarita River and the MCAS drainage ditch, are located within one-half mile of the facility.

The three drinking water production wells, PW-2363, PW-2373, and PW-2393, are located approximately 3,200, 1,200, and 1,600 ft to the southwest, west, and northwest of the former Fuel Farm, respectively. During 2004, only two of the three production wells were in service. PW-2363 has been abandoned since December 1998. PW-2373 was offline during the April and July sampling events and as of July 10, 2005, approximately 367,034,000 gallons of water has been pumped from the well. It should be noted that PW-2373 was not sampled in January 2005, and the July 2005 volume data represents the most recent data available for this well. PW-2393 also was offline during the April and July sampling events, but was accessible during these sampling events. The pump meter indicated that 1,314,697,000 gallons of water had been produced as of July 11, 2005. The quarterly pump meter readings are presented in Table 1.

Based on the analytical data from the two years preceding March 20, 2003, and concurrence from the RWQCB, the sparge system was shut down and put on standby. Quarterly groundwater sampling events to monitor the site for contaminant rebound subsequently began during the second quarter 2003. After four quarters of post-IAS monitoring, no contaminant rebound occurred and a recommendation to dismantle and remove the IAS systems was made (Battelle 2004a). In October 2004, approval was granted by the RWQCB to dismantle and remove the IAS system, which was conducted in November 2004. As part of the post corrective process, verification soil sampling was conducted in July 2004. Based on the analytical results from groundwater monitoring and verification soil sampling, a Closure Report was submitted in December 2004 recommending no further action. Quarterly groundwater monitoring continued at the site as per the CAO until the RWQCB concurred with the recommendation and granted site closure on October 31, 2005.

Section 2.0: WATER-LEVEL MEASUREMENTS AND GROUNDWATER SAMPLING

A majority of all 18 groundwater monitoring wells were sampled at the MCAS and former Fuel Farm during the January, April, and July 2005 groundwater sampling events. Before collection of groundwater samples during each quarterly sampling event, depth to groundwater was measured in each of the monitoring wells and recorded. Analyses for the groundwater samples included on-site water quality parameter readings, as well as analyses for various organic compounds by a stationary laboratory. The following subsections describe procedures followed in the field, as well as the various analyses performed on groundwater samples collected from the MCAS and former Fuel Farm.

2.1 Field Data Collection

As part of the field data collection procedure, two days are allotted for groundwater monitoring and sampling at the MCAS and former Fuel Farm. The work is typically conducted on weekends when operations at the air station are at a minimum and access to monitoring wells on the tarmac and flight line is available. Usually the former Fuel Farm wells are sampled on a Saturday and the flight line wells, PW-2373, and PW-2393 (if accessible), are sampled on a Sunday.

2.1.1 Water-Level Measurements. Water-level measurements were collected in accordance with the procedures provided in the *Work Plan for Basewide Groundwater Monitoring/Free-Product Removal at Marine Corps Base Camp Pendleton, Oceanside, California* (Battelle, 1998). An oil-water interface probe was used to monitor groundwater levels and check for the presence of free product. During the 2005 quarterly monitoring, no free product was observed in any monitoring well.

Quarterly water-level measurements were taken from the top of casing and the results tabulated in Table 1 along with historical data. Water levels in 2005 were similar to those observed during previous measurements. The groundwater flow direction at the former Fuel Farm was determined from the FF-MW-01 through FF-MW-07 monitoring wells. Flow directions were determined for all the quarterly events and are generally oriented southwesterly. The flow direction for the shallow aquifer groundwater measured from select flight line wells is southwest. A flow direction (and gradient) for the deep aquifer groundwater could not be determined for 2005 because a third groundwater level measurement could not be obtained during any of the quarterly monitoring events. The groundwater gradient at the former Fuel Farm during 2005 ranged from 0.0022 to 0.0052, and the gradient for the shallow groundwater aquifer in the vicinity of the flight line wells was 0.0019 during each of the sampling events. Site maps showing the July 2005 water-level elevations and the three quarterly flow directions and groundwater gradients for the MCAS flight line and the former Fuel Farm are shown in Figures 3 and 4, respectively.

2.1.2 Water Quality Parameters. Water quality parameters, including temperature, pH, conductivity, dissolved oxygen (DO), turbidity, salinity, and oxidation-reduction potential (ORP), were collected during the purging process. If sufficient groundwater was present from each of the 18 groundwater monitoring wells (at the MCAS flight line and former Fuel Farm), the well was micropurged, which involves pumping at much lower rates than traditional purging methods. The objective of micropurging is to minimize the stress to the groundwater system by decreasing drawdown caused by pumping. Pumping at low flowrates effectively isolates the screened interval from the overlying (stagnant) casing water, thereby sampling water from the screened interval only. Typically, flowrates on the order of 0.1 to 0.5 L/min are used during micropurging. Groundwater was purged from each well until field measurements of pH, temperature, DO, ORP, specific conductivity, and turbidity stabilized. Groundwater samples were then collected immediately following parameter stabilization. Copies of the original field data collection log sheets for each of the 2005 quarterly sampling events are provided in Appendix A.

2.2 Analytical Results

Groundwater samples were collected in accordance with the *Site Assessment and Mitigation (SAM) Manual* (DEH, 2004). All samples were shipped via overnight delivery under chain-of-custody documentation and delivered to Alpha Analytical Laboratories of Sparks, NV, for organic analyses. Alpha Analytical Laboratories is a California Department of Health Services (DHS)-certified laboratory. The groundwater samples were analyzed for total petroleum hydrocarbons (TPH) quantified as diesel (D), JP5, and gasoline (G) during the three sampling events. Volatile organic compounds (VOCs) benzene, toluene, ethylbenzene, and total xylenes (BTEX), and methyl-*tert*-butyl ether (MTBE) also were sampled for during the three quarterly events. Polynuclear aromatic hydrocarbons (PNAs) were only sampled for and analyzed during the first quarter 2005 event. A tabulated summary of groundwater analytical results for the 2005 and historic sampling events are presented in Tables 2 and 3, and shown in Figures 5 and 6. Copies of laboratory analytical reports and data validation documentation are presented in Appendix B. Copies of the chain-of-custody forms are provided in Appendix C.

Analytical results from the quarterly monitoring events in 2005 show minimal concentrations of petroleum hydrocarbons. TPH-G and TPH-JP5 were detected in MW-06; and only TPH-JP5 was detected in FF-MW-05. MW-06, which has historically contained the highest concentrations of petroleum hydrocarbons, reported TPH-G above the detection limit during the April and July 2005 sampling events, at 0.29 and 0.26 mg/L, respectively. TPH-JP5 was measured in MW-06 during all three of the 2005 sampling events at concentrations of 1.2, 0.84, 0.96 mg/L, respectively. TPH-JP5 was detected in FF-MW-05 during the January sampling event at a concentration of 0.23 mg/L. Historically, FF-MW-05 has displayed measurable concentrations of MTBE since 2000. However, no detectable concentrations of MTBE were detected during the 2005 sampling events. No other VOCs were detected during the 2005 quarterly sampling events.

PNAs were only sampled and analyzed for during the first quarter 2005. No PNAs were detected in any of the wells during the 2005 sampling event.

One well exceeded the TPH-G taste and odor threshold (TOT) value of 5 µg/L during 2005 (MW-06). In MW-06, TPH-G concentrations above 5 µg/L were reported during the April and July sampling events with the highest occurring in April at 0.29 mg/L.

TPH-JP5 does not have a corresponding TOT in the Basin Water Quality Objectives Plan, but for the purposes of the remedial activities at the MCAS and former Fuel Farm, is held to the same TOT as TPH-D (0.1 mg/L). MW-06 and FF-MW-05 contained TPH-JP5 concentrations that exceeded the TOT threshold during 2005. TPH-JP5 was detected at concentrations above 0.1 mg/L during each sampling event with the highest concentration (1.2 mg/L) being measured in MW-06 during the first quarter.

The trends of TPH-G, TPH-D, TPH-JP5, and the BTEX compound concentrations in select wells since the startup of the active IAS system in November 1999 and subsequent shutdown in March 2003 are displayed graphically in Figure 7. A decreasing trend for all contaminants is apparent in MW-06 and MW-12R, the wells within the radius of influence of the then active IAS system. Contaminant concentration trends in FF-MW-01, FF-MW-02, FF-MW-03, and FF-MW-04, slightly outside the radius of influence of the then active IAS system, show the contaminant concentrations (TPH-D) have decreased.

The extent of TPH-JP5 and benzene contamination in groundwater before and after the operation of the IAS system up until the July 2005 sampling event is shown on Figures 8 and 9, respectively. Benzene was not detected in any well during any of the three monitoring events in 2005, where it extended over a relatively large area prior to the start of the IAS system. The areal extent and the

dissolved concentrations of TPH-JP5 has been dramatically reduced since before the IAS system operation.

2.3 Electronic Delivery Submittal

In accordance with Assembly Bill (AB) 2886 (Water Code Sections 13195-13198), Battelle has completed electronic data format (EDF) uploads for the MCAS and Former Fuel Farm via the Internet to the State Water Resources Control Board (SWRCB) GeoTracker System. These submissions included groundwater laboratory data, location data (i.e., location and elevation of groundwater monitoring wells), water levels for all three 2005 quarterly monitoring events, and site maps.

Electronic data uploads included the following major activities:

1. Obtaining a unique Global Identification (ID) for each site.
2. Uploading a list of "Field_Point_Names" to Geo Tracker.
3. Providing the Global ID and Field Point Names to the analytical laboratory on the chain of custody.
4. Ensuring that the field point names, Global ID, and all laboratory data were correct within each electronic submission file.
5. Submitting electronic compliance data via the GeoTracker Internet site.

All data submittals for the first, second, and third quarterly groundwater monitoring events in 2005 have been submitted to the GeoTracker Web site. Copies of the confirmation sheets for the three MCAS and former Fuel Farm 2005 quarterly groundwater data are included in Appendix D.

Section 3.0: QUALITY ASSURANCE/QUALITY CONTROL

All groundwater samples were collected and preserved in accordance with the United States Environmental Protection Agency (U.S. EPA) methods stated in the *SAM Manual* (DEH, 2004), and all organic samples were analyzed within the relevant analytical holding times. Alpha Analytical Laboratories, Inc., of Sparks, NV, a California DHS-certified and NFESC-approved laboratory, performed the analytical services.

Groundwater samples from all three quarterly groundwater monitoring events were analyzed by Alpha Analytical according to their in-house quality assurance/quality control (QA/QC) plan. Laboratory QC summaries are included with the analytical reports in Appendix B and are summarized on Table 4. Review of these summaries confirmed that data quality objectives were met.

Collected data were subject to a verification process, which included proofreading and editing hard-copy data reports to ensure that data correctly represented the analytical measurements. Data verification also was used to identify nontechnical errors in the data package that could be corrected (e.g., typographical errors) and to verify that the sample identifications on laboratory reports (hard-copy) matched those on the chain-of-custody record. Additionally the analytical data, along with the associated laboratory QC information, was forwarded to an independent data validation service, Laboratory Data Consultants of Carlsbad, CA, for data validation. A U.S. EPA Level III data validation was performed on 90% of the groundwater samples, the remaining 10% of the samples underwent a Level IV review. The results indicated that the data generally met all analytical criteria. The individual laboratory data validation sheets for the samples are also included in Appendix B.

QA/QC measurements were taken in the field to ensure that meaningful and representative data sets were generated at the MCAS and former Fuel Farm. Field duplicate samples were collected at a rate of >5% of the total number of groundwater monitoring wells sampled for Task Order 0105. These samples were collected to ensure the consistency and integrity of sample collection methods. A duplicate sample was collected at MW-06 during all three quarterly events. Results from the duplicate samples were consistent with the initial sample collected from the well, and it was verified that proper sample collection methods were followed.

Field blanks were collected each day of sampling to detect any possible contamination of the sample from airborne hydrocarbons during the sample collection process. Trip blanks were sent with every shipment of samples to ensure that no contamination occurred during transportation. The field and trip blanks were analyzed only if VOCs were detected in the groundwater. No VOCs were detected in the field blank or trip blank associated with groundwater samples collected at the MCAS and former Fuel Farm during any of the 2005 quarterly sampling events.

Equipment rinsate blanks were also collected to ensure that the sampling devices were not a source of contamination for the samples. The rinsates were analyzed for TPH. Results of the rinsate samples from the MCAS and former Fuel Farm indicated that, prior to groundwater sampling, equipment did not contain TPH concentrations above reporting limits for three of the 2005 quarterly monitoring events (January, April, and July 2005). Refer to Table 4 for the results of all field QA/QC analyses. Appendix B provides the laboratory data sheets for the field QA/QC samples.

Section 4.0: WASTE MANAGEMENT

The purging equipment was decontaminated with soapy deionized (DI) water followed by a double DI water rinse. Purged groundwater and decontamination water was discharged to a 55-gallon drum on the sampling trailer and was later transferred to a 550-gallon polyethylene tank stored in a fenced drum yard in 12 Area of the Base. EFR Environmental Services, Inc., of Alpine, CA, provided disposal of the purge water from the monitoring wells during all three quarterly sampling events in 2005. A total of 96 liters (L) of purge water was disposed of during the January 2005 quarterly sampling event, 410 L during the April 2005 sampling event, and 395 L during the July 2005 quarterly sampling event. Following analysis by a stationary analytical laboratory, EFR Environmental Services, Inc., the water was transported for nonhazardous disposal after each quarterly groundwater sampling event. Approximately 110 gallons of soil were produced during well abandonment activities. The soil was stored in 55-gallon drums prior to transportation for nonhazardous disposal. Copies of the manifests for waste removal are provided in Appendix E. Because purge water also was generated from groundwater monitoring activities at other Camp Pendleton sites during each quarter, the total quantity (in gallons) on the waste manifest includes the waste liquid generated from the MCAS and former Fuel Farm sampling.

Section 5.0: SITE CLOSE-OUT ACTIVITIES

Site Closure was granted by the RWQCB on October 31, 2005 and as a result, CAO No. 95-09 was rescinded. A copy of the closure letter is presented in Appendix F. As part of the site closure activities, 14 of the 18 groundwater monitoring wells located at the MCAS and former Fuel Farm were abandoned from December 1 to December 3, 2005. A consensual agreement was made by the RWQCB, MCAS Environmental, and the MCB Camp Pendleton AC/S ES office to retain four of the monitoring wells for the MCB Camp Pendleton CERCLA program. The following wells were destroyed during the abandonment process:

- FF-MW-02, FF-MW-03, FF-MW04, FF-MW06, FF-MW-07, FL-01, FL-02, FL-04, FL-05, FL-07 MW04, MW07, MW08, and MW12R.

As requested, the following four groundwater monitoring wells were retained for use as part of the CERCLA program:

- FF-MW-01, FF-MW-05, FL-03, and FL-06.

Each of the wells was abandoned according to the methods provided in the SAM Manual Section 5, II, E-4. For each well, the well box was removed and broken up, the surface seal was overdrilled and the well casing was pulled. Following the removal of the casing, each well was overdrilled to remove the well construction material and then bentonite grout was emplaced into to seal off the borehole. For those wells located on the tarmac of the air station, a concrete was used to finish off the surface seal. For deep well FL-05, the well was abandoned by pressure grouting grout into the casing. Documentation of the well destruction activities are provided in Appendix G and includes copies of the well permit, well destruction diagrams, and waste manifest for the drill cuttings.

Section 6.0: CONCLUSIONS

This summary report contains groundwater monitoring data collected from the MCAS and former Fuel Farm, MCB Camp Pendleton, during the past three (3) quarterly sampling events (January 2005, April 2005, and July 2005). The information presented is from each of the quarterly sampling events, with more emphasis on the most recent data collected (July 2005). In addition, documentation of site closure and subsequent site close-out activities are also presented.

TPH-G and TPH-JP5 were the only contaminants detected at the MCAS and former Fuel Farm above their reporting limit during the last quarterly monitoring event, third quarter 2005. Both contaminants, TPH-G and TPH-JP5, detected above their respective reporting limits were in samples collected from MW-06. The TPH-G concentration was detected at 0.26 mg/L and the TPH-JP5 concentration was detected at 0.96 mg/L in July 2005 (3rd Quarter). The MW-06 TPH-G concentration decreased from 0.29 mg/L in April 2005 to 0.26 mg/L in July 2005. The TPH-JP5 concentration increased slightly from 0.84 mg/L in April to 0.96 mg/L in July 2005, although the relative increase is considered insignificant. TPH-JP5 was also detected in FF-MW-05, at a concentration of 0.23 mg/L, although that was during the first quarter of 2005. The second and third quarters (April and July) of 2005 did not detect TPH-JP5 in samples collected from FF-MW-05.

In each of the three quarterly monitoring events conducted in 2005, with the exception of the wells and contaminants identified in the above paragraph, no detections of contaminants were above their respective reporting limits.

PNAs were only sampled and analyzed for during the first quarter 2005. No PNAs were detected above their reporting limits during any of the quarterly sampling events.

Official site closure was granted by the RWQCB on October 31, 2005. With the acceptance of site closure from the RWQCB, Battelle completed the abandonment of 14 of the 18 monitoring wells located at the site. The four remaining wells were left for future CERCLA activities. The 14 wells were abandonded according to methods presented in the SAM Manual, and the notification of abandonment was submitted to the RWQCB as part of this report (Appendix G).

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FIGURES

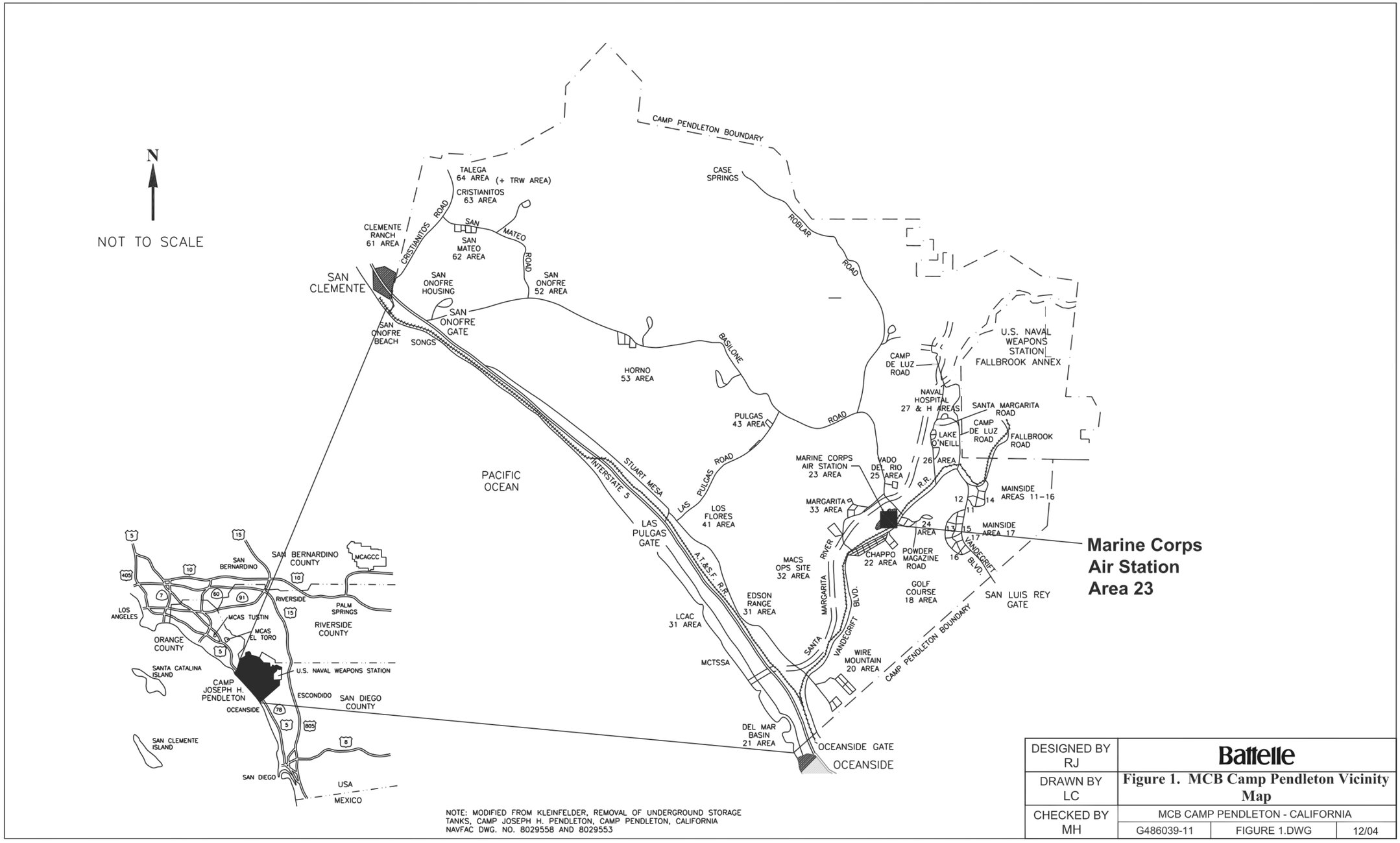


Figure 1. MCB Camp Pendleton Vicinity Map

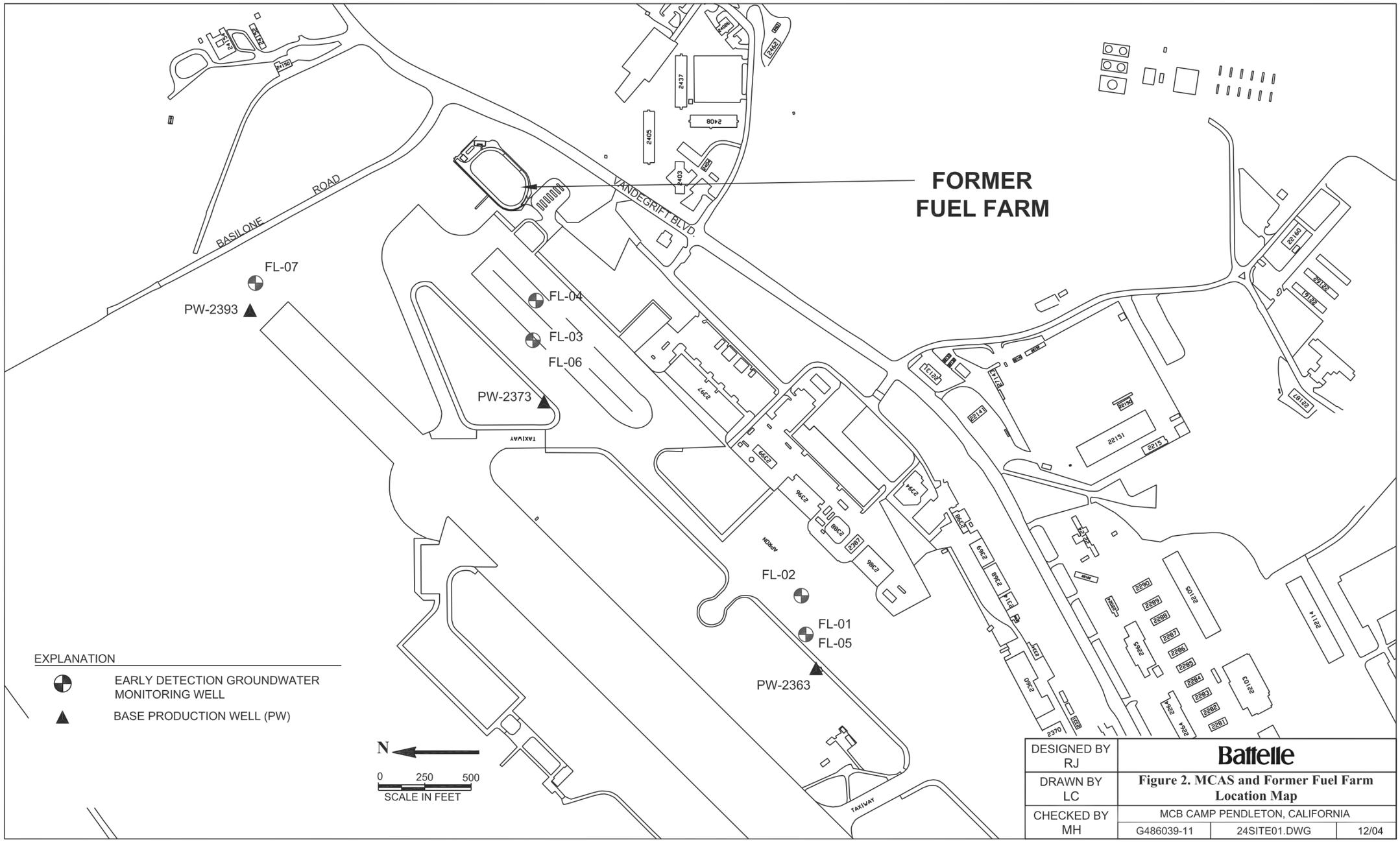


Figure 2. MCAS and Former Fuel Farm Location Map

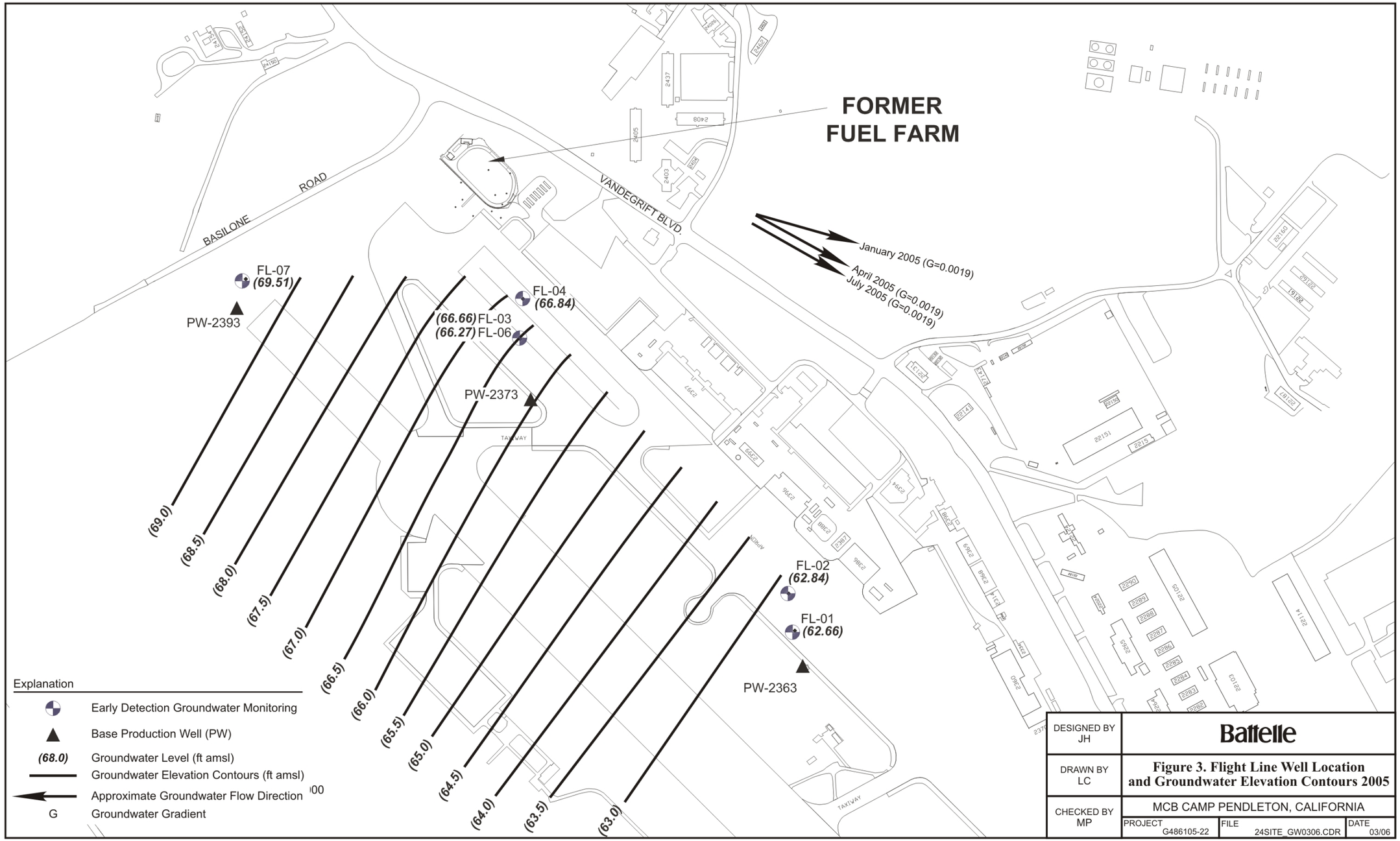


Figure 3. MCAS Flight Line Well Location and Groundwater Elevations

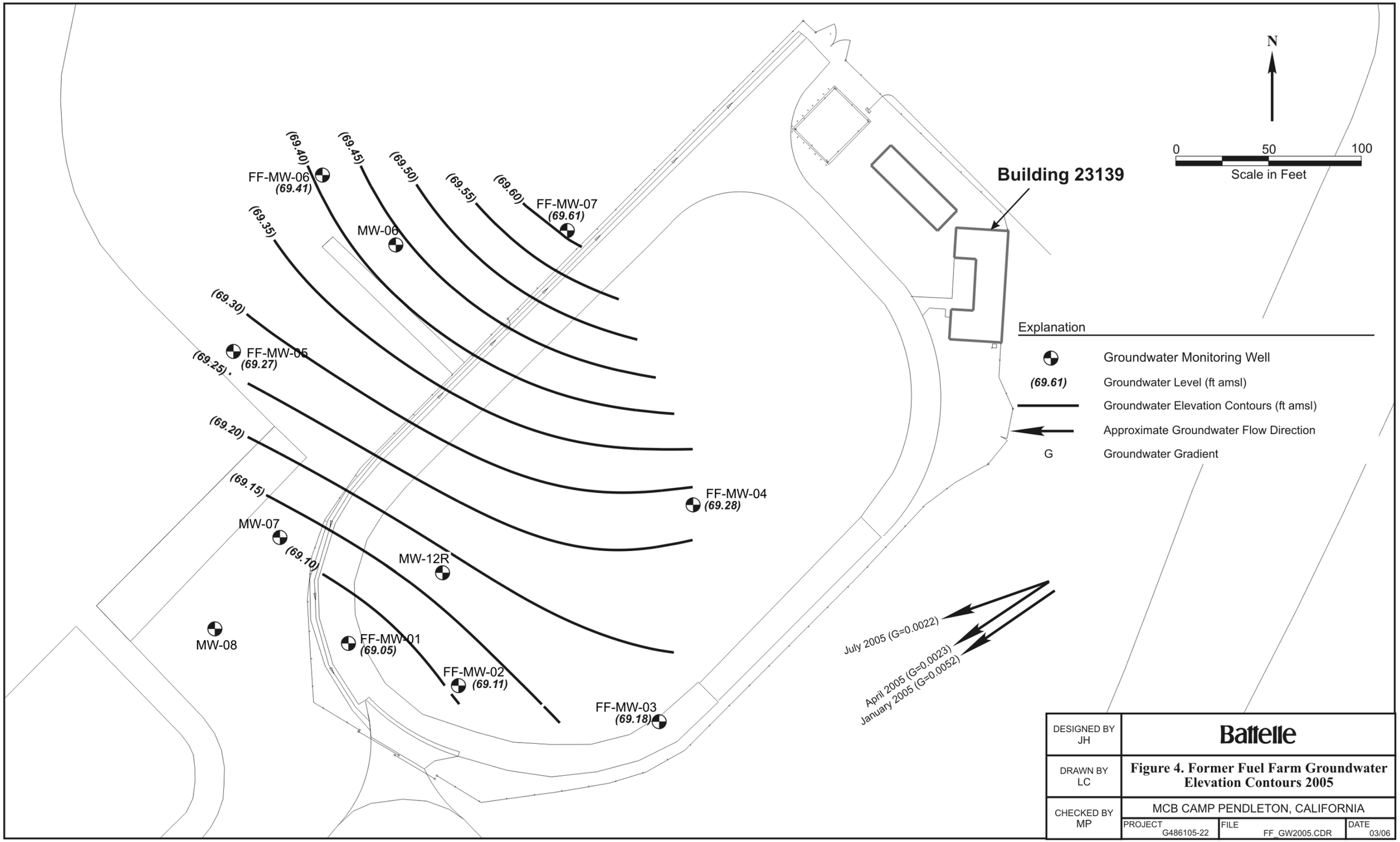
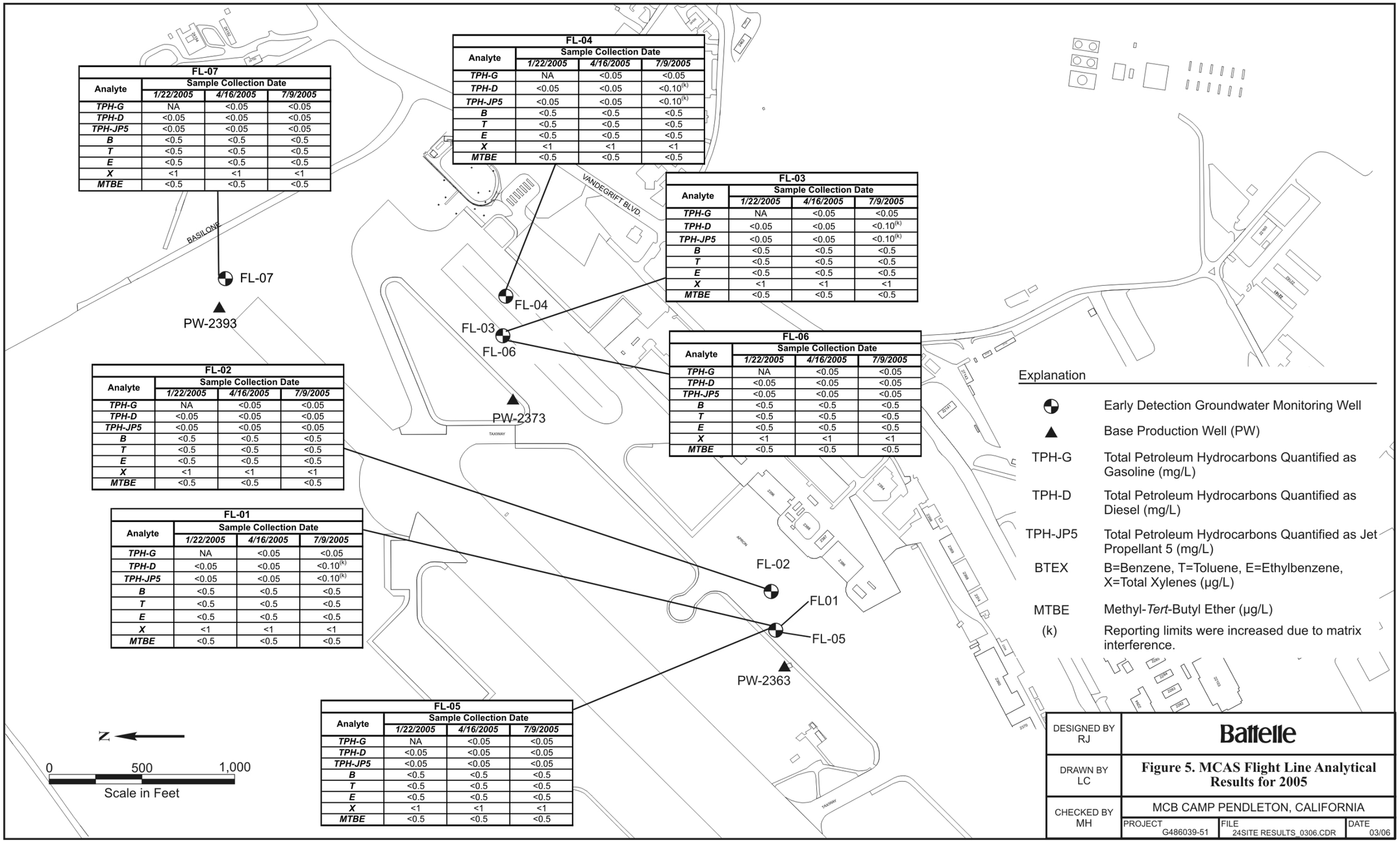


Figure 4. Former Fuel Farm Well Location and Groundwater Gradient Map, Shallow Aquifer, Fourth Quarter 2004



FL-07

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FL-04

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.10[k]
TPH-JP5	<0.05	<0.05	<0.10[k]
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FL-03

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.10[k]
TPH-JP5	<0.05	<0.05	<0.10[k]
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FL-06

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FL-02

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

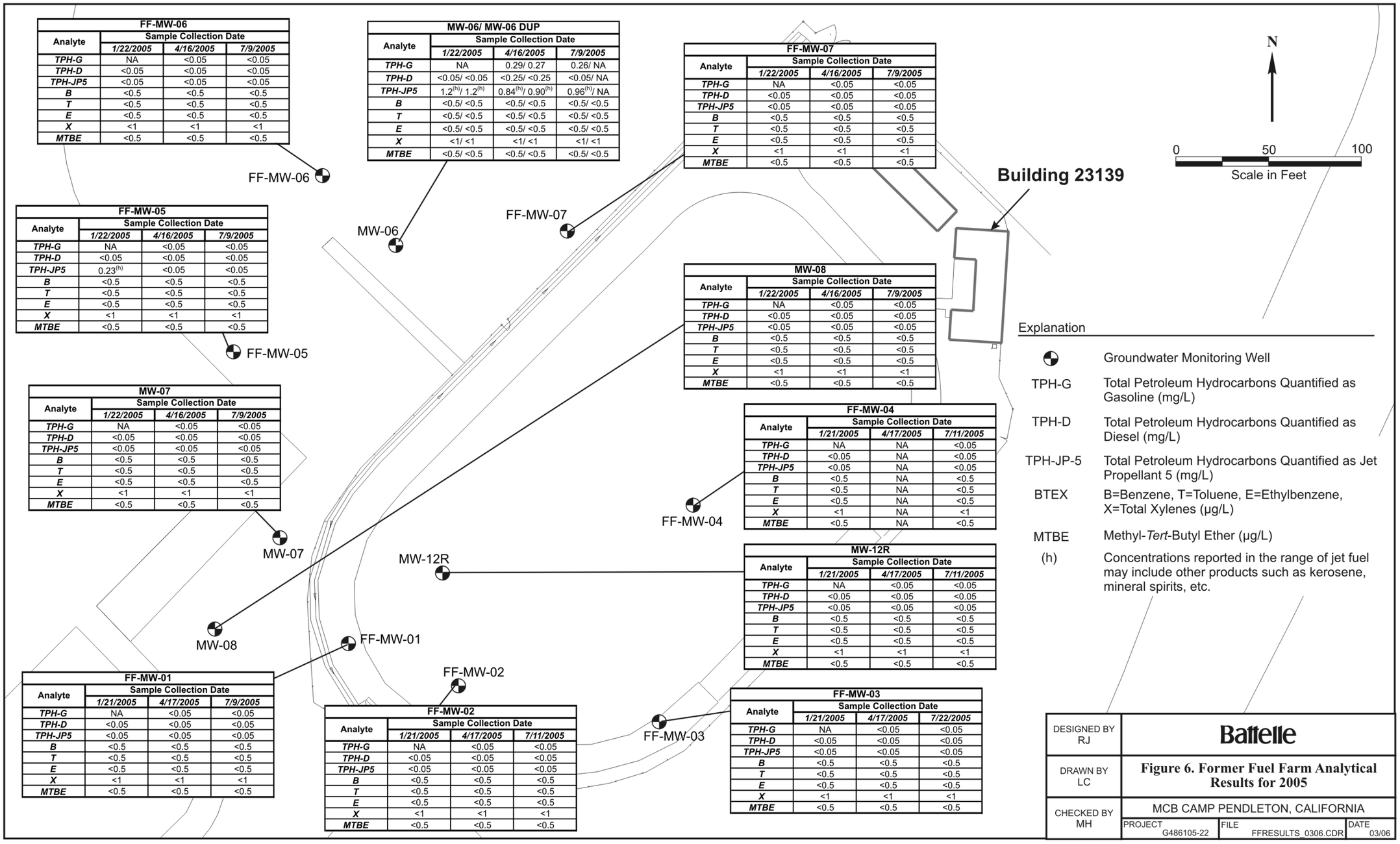
FL-01

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.10[k]
TPH-JP5	<0.05	<0.05	<0.10[k]
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FL-05

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

Figure 5. MCAS Flight Line Analytical Results for 2004



FF-MW-06

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

MW-06/ MW-06 DUP

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	0.29/ 0.27	0.26/ NA
TPH-D	<0.05/ <0.05	<0.25/ <0.25	<0.05/ NA
TPH-JP5	1.2[h]/ 1.2[h]	0.84[h]/ 0.90[h]	0.96[h]/ NA
B	<0.5/ <0.5	<0.5/ <0.5	<0.5/ <0.5
T	<0.5/ <0.5	<0.5/ <0.5	<0.5/ <0.5
E	<0.5/ <0.5	<0.5/ <0.5	<0.5/ <0.5
X	<1/ <1	<1/ <1	<1/ <1
MTBE	<0.5/ <0.5	<0.5/ <0.5	<0.5/ <0.5

FF-MW-07

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FF-MW-05

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	0.23[h]	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

MW-08

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

MW-07

Analyte	Sample Collection Date		
	1/22/2005	4/16/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FF-MW-04

Analyte	Sample Collection Date		
	1/21/2005	4/17/2005	7/11/2005
TPH-G	NA	NA	<0.05
TPH-D	<0.05	NA	<0.05
TPH-JP5	<0.05	NA	<0.05
B	<0.5	NA	<0.5
T	<0.5	NA	<0.5
E	<0.5	NA	<0.5
X	<1	NA	<1
MTBE	<0.5	NA	<0.5

MW-12R

Analyte	Sample Collection Date		
	1/21/2005	4/17/2005	7/11/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FF-MW-01

Analyte	Sample Collection Date		
	1/21/2005	4/17/2005	7/9/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

FF-MW-02

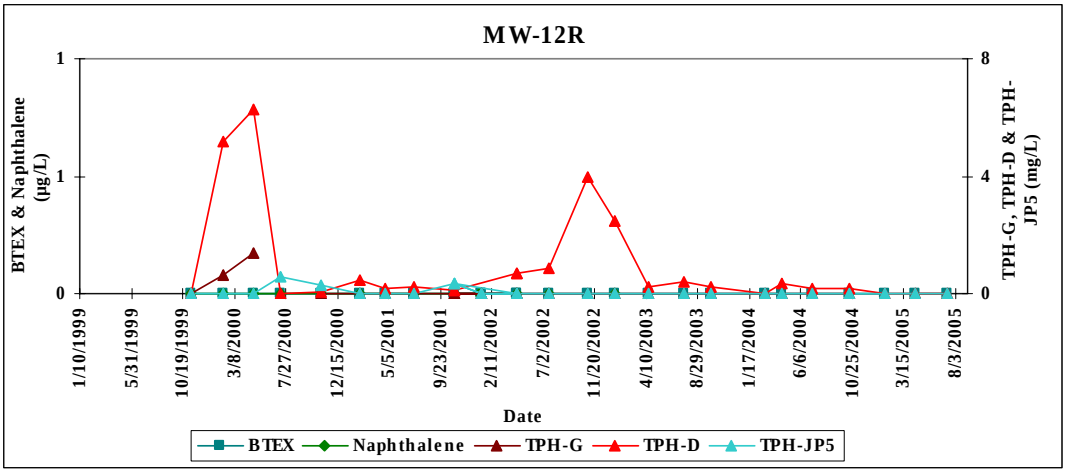
Analyte	Sample Collection Date		
	1/21/2005	4/17/2005	7/11/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

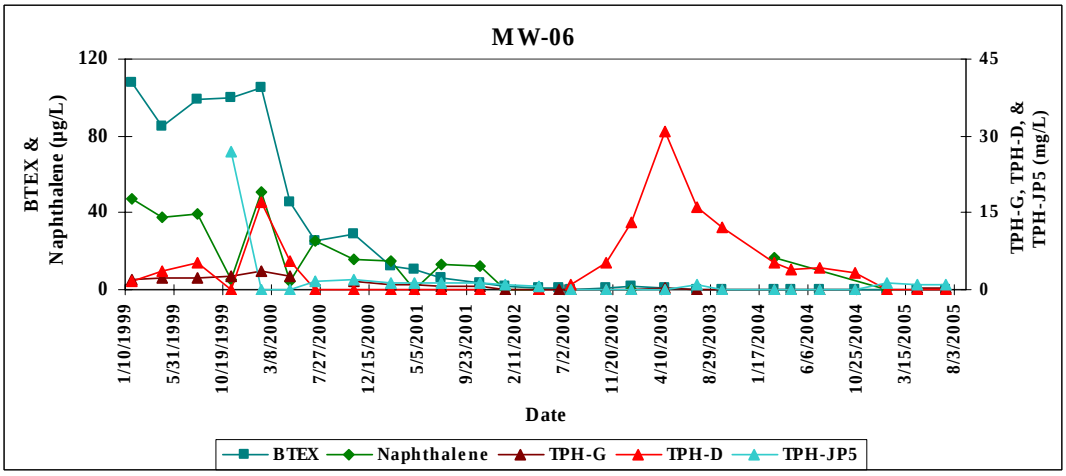
FF-MW-03

Analyte	Sample Collection Date		
	1/21/2005	4/17/2005	7/22/2005
TPH-G	NA	<0.05	<0.05
TPH-D	<0.05	<0.05	<0.05
TPH-JP5	<0.05	<0.05	<0.05
B	<0.5	<0.5	<0.5
T	<0.5	<0.5	<0.5
E	<0.5	<0.5	<0.5
X	<1	<1	<1
MTBE	<0.5	<0.5	<0.5

Figure 6. Former Fuel Farm Analytical Results for 2004

Figure 7. Contaminant Concentrations, MCAS And Former Fuel Farm, MCB Camp Pendleton (Page 1 of 6)





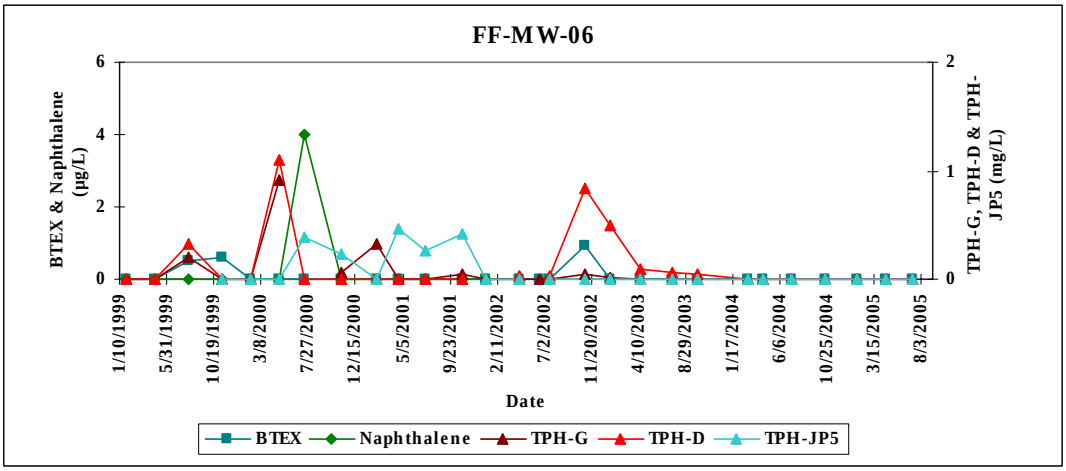
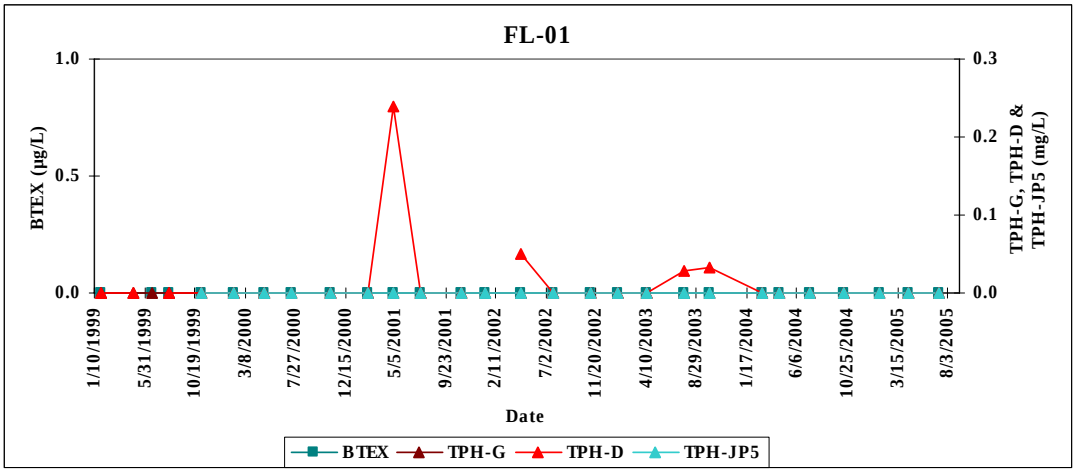
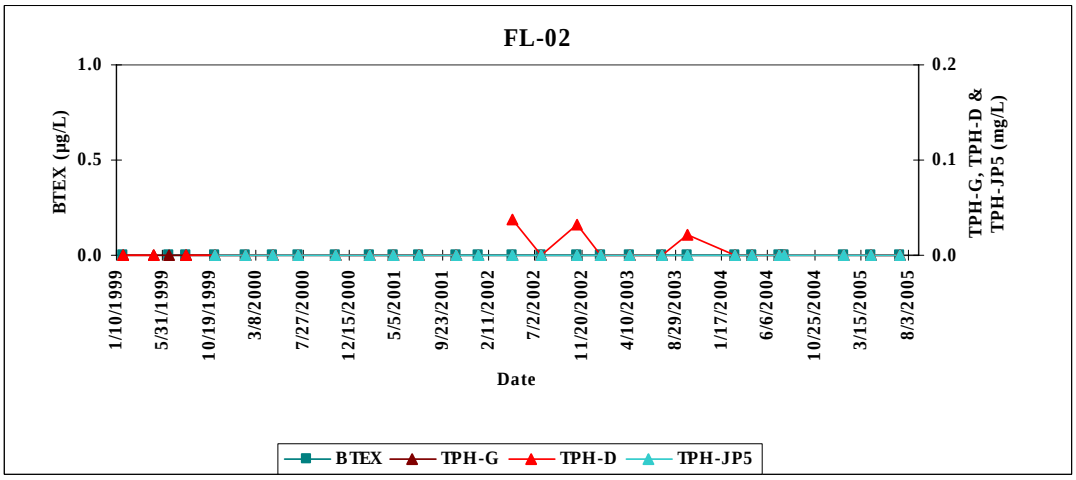


Figure 7. Contaminant Concentrations, MCAS and Former Fuel Farm, MCB Camp Pendleton (Page 2 of 6)





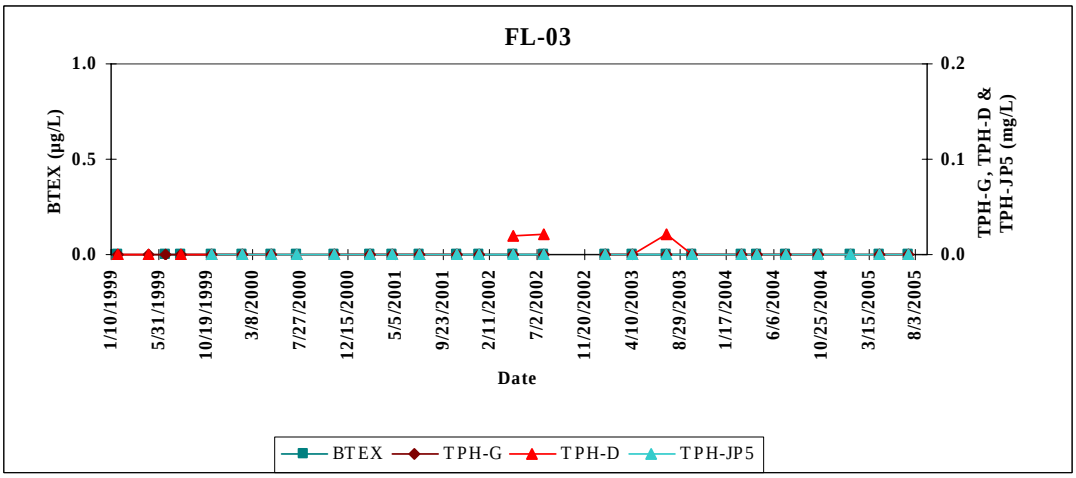
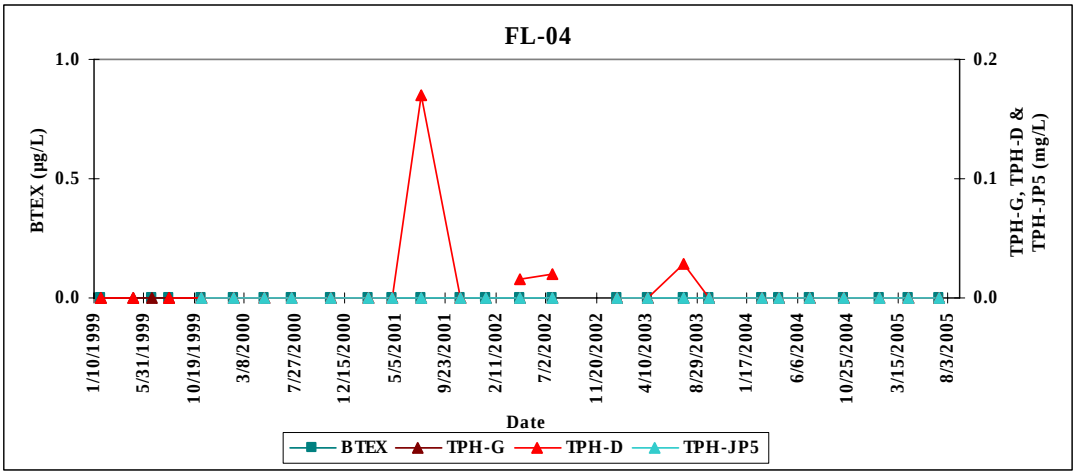
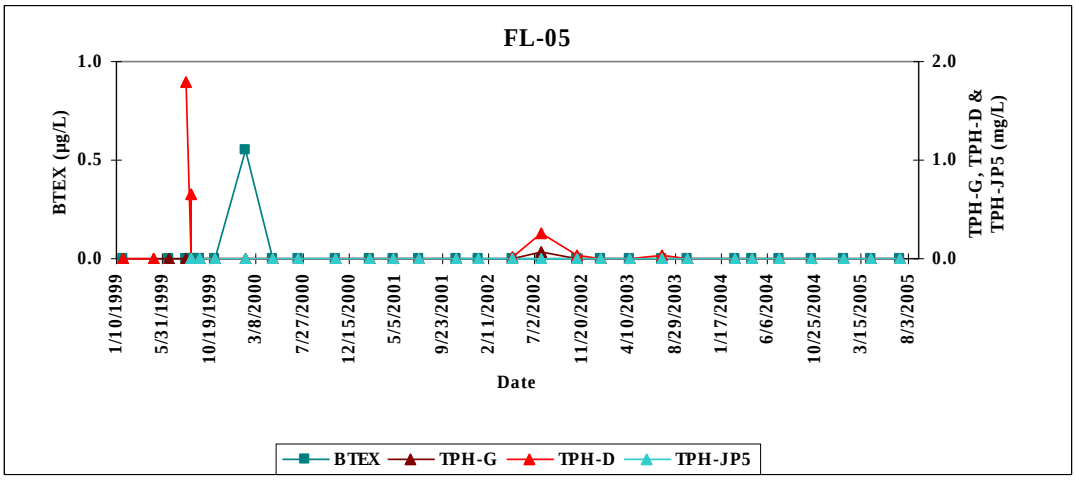


Figure 7. Contaminant Concentrations, MCAS and Former Fuel Farm, MCB Camp Pendleton (Page 3 of 6)





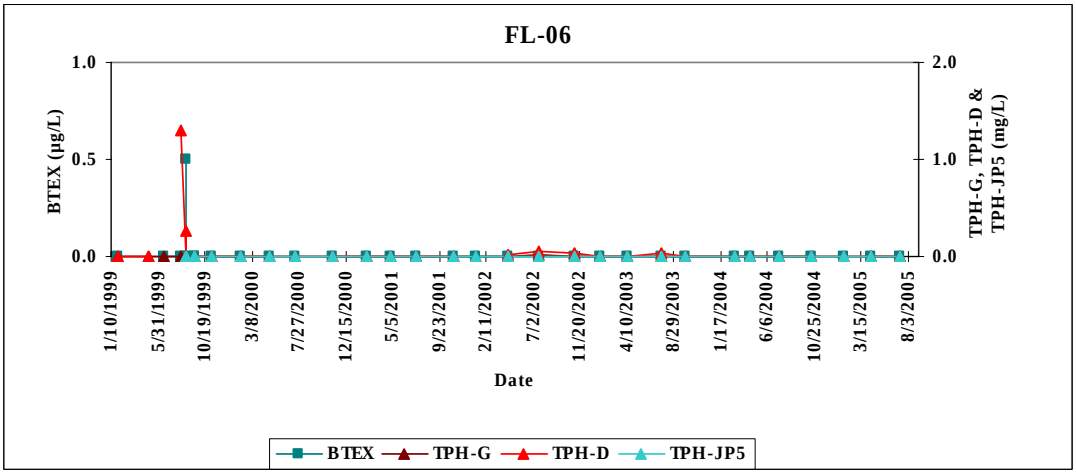
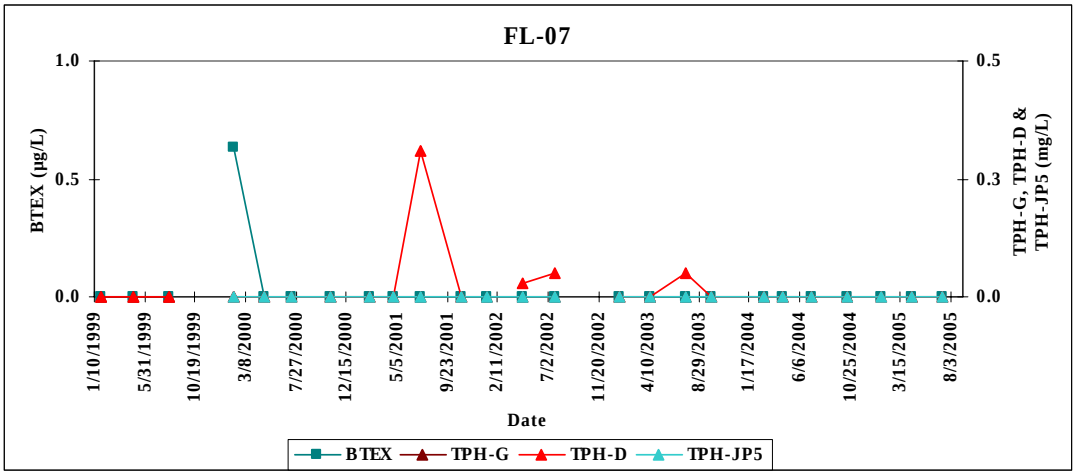
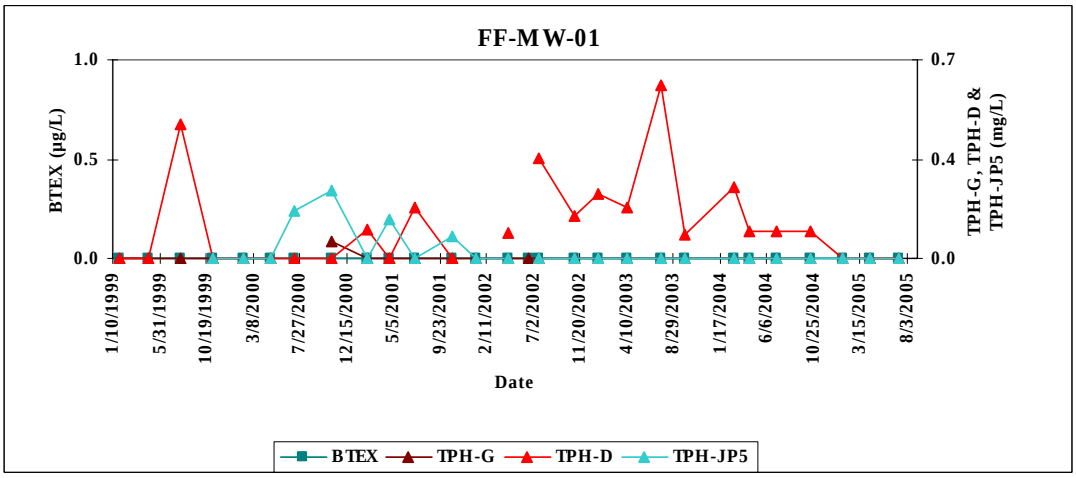


Figure 7. Contaminant Concentrations, MCAS and Former Fuel Farm, MCB Camp Pendleton (Page 4 of 6)





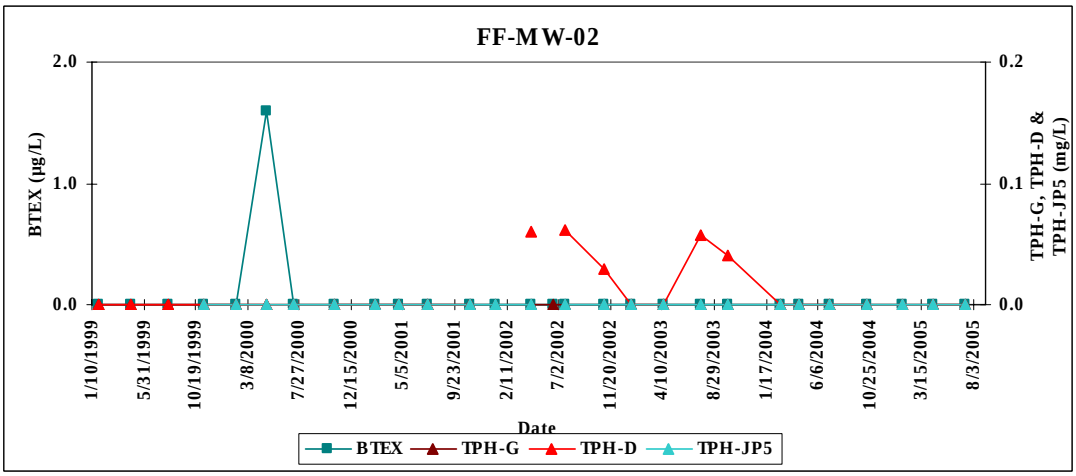
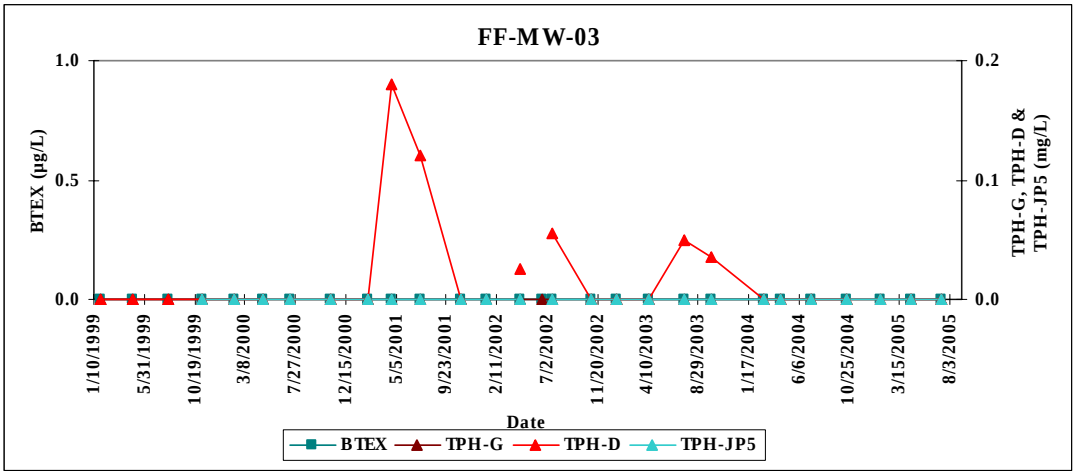
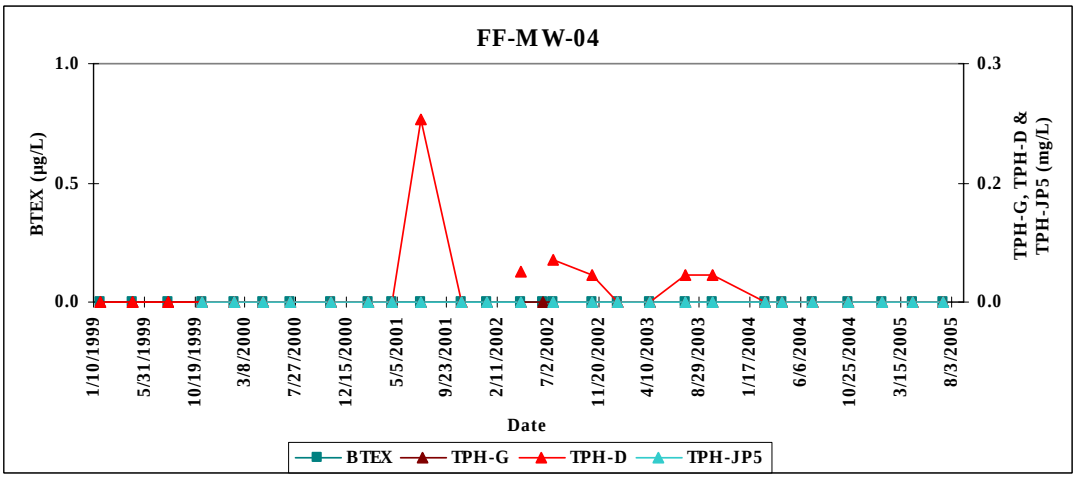


Figure 7. Contaminant Concentrations, MCAS and Former Fuel Farm, MCB Camp Pendleton (Page 5 of 6)





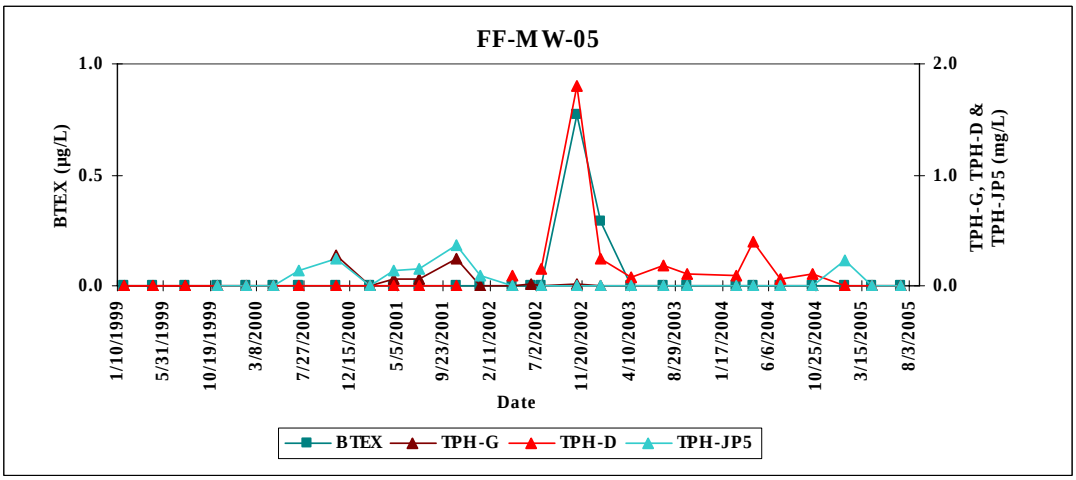
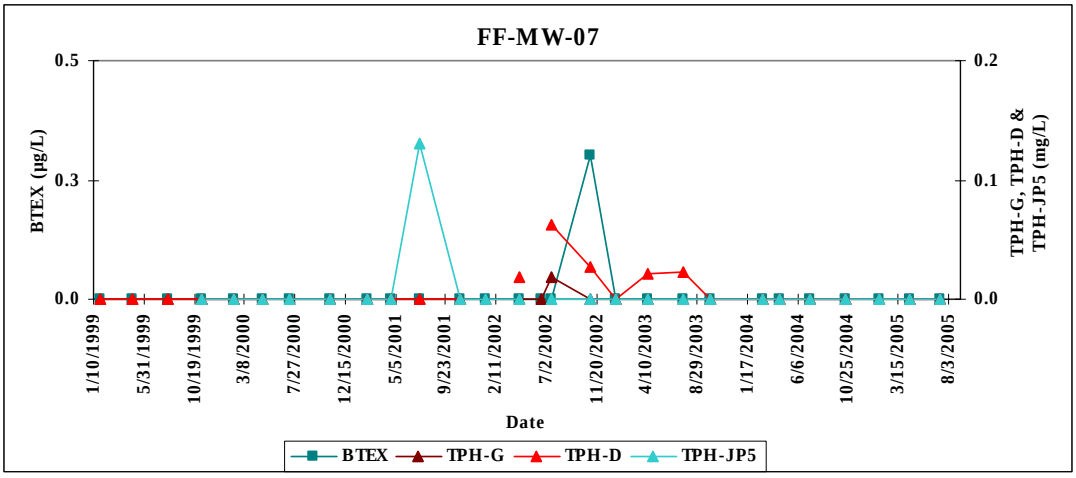
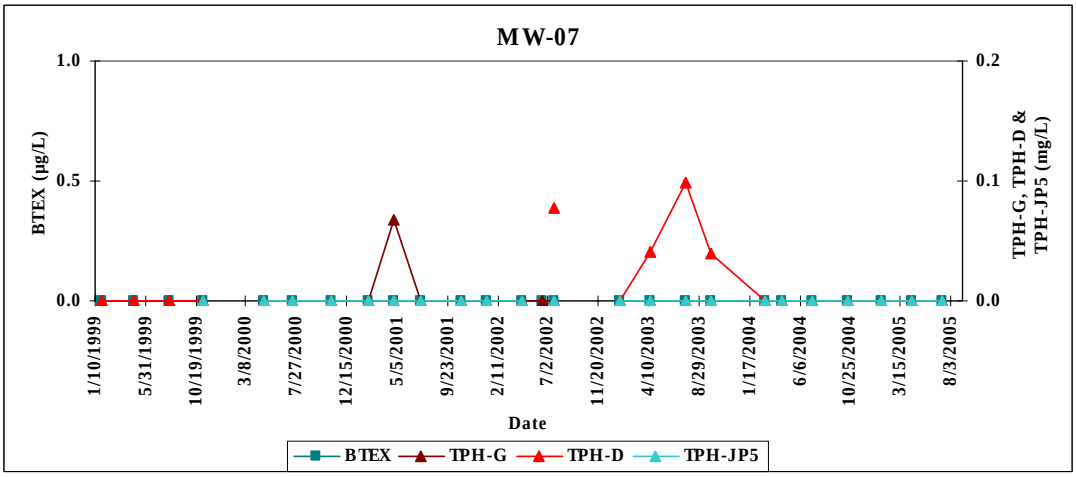
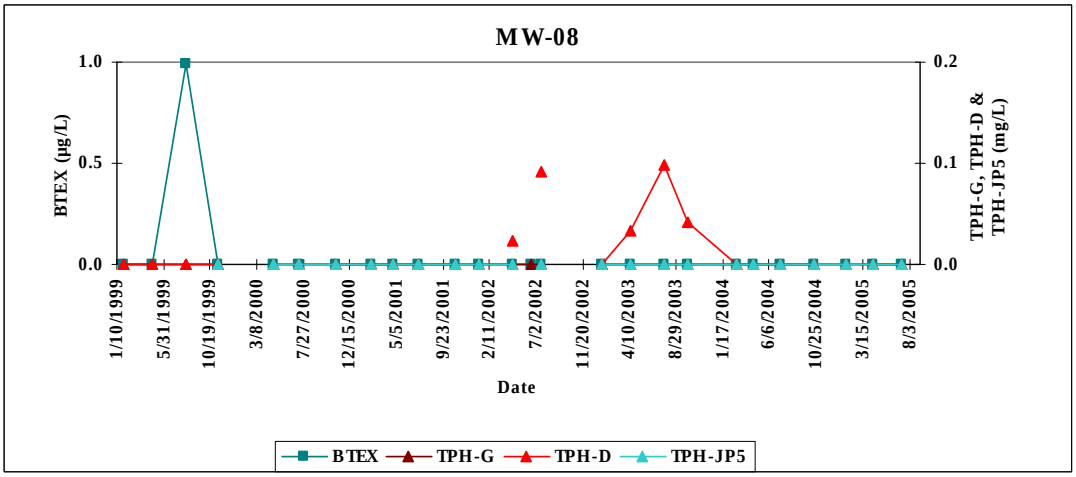


Figure 7. Contaminant Concentrations, MCAS and Former Fuel Farm, MCB Camp Pendleton (Page 6 of 6)







TABLES

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 1 of 33)

Well Information		Production Well Data							
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)	Pumping Rate (gpm)	Well Production Total Gallons (10^6)
PW-2373*	1/29/1999	72	7.3	64.70	172	112	60	NA	NA
PW-2373*	5/1/1999	72	7.01	64.99	172	112	60	NA	NA
PW-2373*	8/7/1999	72	10.25	61.75	172	112	60	NA	NA
PW-2373*	11/10/1999	72	13.02	58.98	172	112	60	NA	NA
PW-2373*	2/6/2000	72	13.90	58.10	172	112	60	NA	NA
PW-2373*	4/30/2000	72	8.04	63.96	172	112	60	NA	NA
PW-2373*	4/15/2003	72	NA	NA	172	112	60	1,400	7.896
PW-2373	7/23/2003	72	NA	NA	172	112	60	NA	78.711
PW-2373	10/6/2003	72	NA	NA	172	112	60	NA	147.005
PW-2373[(m)]	4/15/2005	72	NA	NA	172	112	60	NA	367.042
PW-2373[(m)]	7/10/2005	72	NA	NA	172	112	60	NA	367.034
PW-2393*	1/29/1999	79	8.5	70.50	109	89	20	NA	250.597
PW-2393*	5/1/1999	79	8.77	70.23	109	89	20	NA	250.597
PW-2393*	8/7/1999	79	NM	NA	109	89	20	NM	NA
PW-2393	11/10/1999	79	17.84	61.16	109	89	20	NA	277.047
PW-2393	2/7/2000	79	25.95	53.05	109	89	20	NA	377.848
PW-2393	4/30/2000	79	NM	NA	109	89	20	NM	NA
PW-2393	7/14/2000	79	53.52	25.48	109	89	20	NA	479.082
PW-2393	11/1/2000	79	12.92	66.08	109	89	20	NA	491.445
PW-2393	11/1/2002	79	NM	NM	109	89	20	NA	773.372
PW-2393	1/15/2003	79	NA	NA	109	89	20	NA	815.433
PW-2393	4/15/2003	79	NA	NA	109	89	20	NA	869.710
PW-2393	7/23/2003	79	NA	NA	109	89	20	NA	937.032
PW-2393	10/6/2003	79	NA	NA	109	89	20	NA	966.78
PW-2393[(m)]	4/20/2005	79	NA	NA	109	89	20	NA	225.908
PW-2393[(m)]	7/11/2005	79	NA	NA	109	89	20	NA	314.697

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 2 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FL-01	1/30/1999	67.40	5.6	61.80	15.5	5.5	10
	5/1/1999	67.40	5.58	61.82	15.5	5.5	10
	6/20/1999	67.40	6.12	61.28	15.5	5.5	10
	8/7/1999	67.40	7.74	59.66	15.5	5.5	10
	11/6/1999	67.40	9.49	57.92	15.5	5.5	10
	2/6/2000	67.40	11.43	55.97	15.5	5.5	10
	4/30/2000	67.40	5.59	61.81	15.5	5.5	10
	7/16/2000	67.40	7.75	59.65	15.5	5.5	10
	11/5/2000	67.40	10.73	56.67	15.5	5.5	10
	2/17/2001	67.40	6.75	60.65	15.5	5.5	10
	4/28/2001	67.40	4.57	62.83	15.5	5.5	10
	7/15/2001	67.40	6.22	61.18	15.5	5.5	10
	11/4/2001	67.40	8.37	59.03	15.5	5.5	10
	1/12/2002	67.40	6.60	60.80	15.5	5.5	10
	4/21/2002	67.40	5.90	61.50	15.5	5.5	10
	7/21/2002	67.40	9.16	58.24	15.5	5.5	10
	11/3/2002	67.40	12.93	54.47	15.5	5.5	10
	1/18/2003	67.40	10.06	57.34	15.5	5.5	10
	4/12/2003	67.40	5.59	61.81	15.5	5.5	10
	7/23/2003	67.40	4.74	62.66	15.5	5.5	10
	10/4/2003	67.40	6.50	60.90	15.5	5.5	10
	2/28/2004	67.40	5.26	62.14	15.5	5.5	10
	4/18/2004	67.40	5.62	61.78	15.5	5.5	10
	7/9/2004	67.40	6.55	60.85	15.5	5.5	10
	10/16/2004	67.40	8.20	59.20	15.5	5.5	10
	1/22/2005	67.40	4.61	62.79	15.5	5.5	10
	4/16/2005	67.40	4.05	63.35	15.5	5.5	10
	7/9/2005	67.40	4.74	62.66	15.5	5.5	10
FL-02	1/30/1999	67.41	5.41	62.00	15.5	5.5	10
	5/1/1999	67.41	5.33	62.08	15.5	5.5	10
	6/20/1999	67.41	5.88	61.53	15.5	5.5	10
	8/7/1999	67.41	7.53	59.88	15.5	5.5	10
	11/6/1999	67.41	9.34	58.07	15.5	5.5	10
	2/6/2000	67.41	11.28	56.13	15.5	5.5	10
	4/30/2000	67.41	6.39	61.02	15.5	5.5	10
	7/16/2000	67.41	7.54	59.87	15.5	5.5	10
	11/5/2000	67.41	10.59	56.82	15.5	5.5	10
	2/17/2001	67.41	5.56	61.85	15.5	5.5	10
	4/28/2001	67.41	5.40	62.01	15.5	5.5	10

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 3 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FL-02 (con't)	7/15/2001	67.41	5.02	62.39	15.5	5.5	10
	11/4/2001	67.41	9.08	58.33	15.5	5.5	10
	1/12/2002	67.41	6.38	61.03	15.5	5.5	10
	4/21/2002	67.41	6.68	60.73	15.5	5.5	10
	7/21/2002	67.41	8.88	58.53	15.5	5.5	10
	11/3/2002	67.41	12.73	54.68	15.5	5.5	10
	1/18/2003	67.41	9.87	57.54	15.5	5.5	10
	4/12/2003	67.41	5.45	61.96	15.5	5.5	10
	7/23/2003	67.41	5.61	61.80	15.5	5.5	10
	10/4/2003	67.41	6.34	61.07	15.5	5.5	10
	2/28/2004	67.41	5.13	62.28	15.5	5.5	10
	4/18/2004	67.41	5.44	61.97	15.5	5.5	10
	7/9/2004	67.41	6.43	60.98	15.5	5.5	10
	10/16/2004	67.41	7.82	59.59	15.5	5.5	10
	1/22/2005	67.41	4.52	62.89	15.5	5.5	10
	4/16/2005	67.41	3.86	63.55	15.5	5.5	10
	7/9/2005	67.41	4.57	62.84	15.5	5.5	10
FL-03	1/30/1999	73.15	6.38	66.77	15.5	5.5	10
	5/1/1999	73.15	6.32	66.83	15.5	5.5	10
	6/20/1999	73.15	7.05	66.10	15.5	5.5	10
	8/7/1999	73.15	9.42	63.73	15.5	5.5	10
	11/6/1999	73.15	11.53	61.62	15.5	5.5	10
	2/6/2000	73.15	13.63	59.52	15.5	5.5	10
	4/30/2000	73.15	7.61	65.54	15.5	5.5	10
	7/16/2000	73.15	9.20	63.95	15.5	5.5	10
	11/5/2000	73.15	12.57	60.58	15.5	5.5	10
	2/17/2001	73.15	7.66	65.49	15.5	5.5	10
	4/28/2001	73.15	5.94	67.21	15.5	5.5	10
	7/15/2001	73.15	7.44	65.71	15.5	5.5	10
	11/4/2001	73.15	9.93	63.22	15.5	5.5	10
	1/12/2002	73.15	7.60	65.55	15.5	5.5	10
	4/20/2002	73.15	9.97	63.18	15.5	5.5	10
	7/21/2002	73.15	9.93	63.22	15.5	5.5	10
	11/3/2002	73.15	14.83	58.32	15.5	5.5	10
	1/18/2003	73.15	11.32	61.83	15.5	5.5	10
	4/12/2003	73.15	7.38	65.77	15.5	5.5	10
	7/23/2003	73.15	7.53	65.62	15.5	5.5	10
	10/4/2003	73.15	7.51	65.64	15.5	5.5	10
	2/29/2004	73.15	7.45	65.70	15.5	5.5	10
	4/18/2004	73.15	7.42	65.73	15.5	5.5	10

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 4 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FL-03 (con't)	7/9/2004	73.15	8.2	64.95	15.5	5.5	10
	10/16/2004	73.15	10	63.15	15.5	5.5	10
	1/22/2005	73.15	6.75	66.40	15.5	5.5	10
	4/16/2005	73.15	5.72	67.43	15.5	5.5	10
	7/9/2005	73.15	6.49	66.66	15.5	5.5	10
FL-04	1/30/1999	73.23	6.26	66.97	15.5	5.5	10
	5/1/1999	73.23	6.16	67.07	15.5	5.5	10
	6/20/1999	73.23	6.90	66.33	15.5	5.5	10
	8/7/1999	73.23	9.20	64.03	15.5	5.5	10
	11/6/1999	73.23	11.60	61.63	15.5	5.5	10
	2/6/2000	73.23	13.59	59.64	15.5	5.5	10
	4/30/2000	73.23	7.59	65.64	15.5	5.5	10
	7/16/2000	73.23	8.02	65.21	15.5	5.5	10
	11/5/2000	73.23	11.50	61.73	15.5	5.5	10
	2/17/2001	73.23	6.03	67.20	15.5	5.5	10
	4/28/2001	73.23	6.80	66.43	15.5	5.5	10
	7/15/2001	73.23	7.30	65.93	15.5	5.5	10
	11/4/2001	73.23	9.69	63.54	15.5	5.5	10
	1/12/2002	73.23	7.50	65.73	15.5	5.5	10
	4/20/2002	73.23	8.81	64.42	15.5	5.5	10
	7/21/2002	73.23	9.65	63.58	15.5	5.5	10
	11/3/2002	73.23	14.88	58.35	15.5	5.5	10
	1/18/2003	73.23	11.65	61.58	15.5	5.5	10
	4/12/2003	73.23	6.30	66.93	15.5	5.5	10
	7/23/2003	73.23	7.45	65.78	15.5	5.5	10
	10/4/2003	73.23	8.41	64.82	15.5	5.5	10
	2/29/2004	73.23	7.43	65.80	15.5	5.5	10
	4/18/2004	73.23	7.34	65.89	15.5	5.5	10
	7/9/2004	73.23	8.10	65.13	15.5	5.5	10
	10/16/2004	73.23	9.80	63.43	15.5	5.5	10
	1/22/2005	73.23	6.69	66.54	15.5	5.5	10
	4/16/2005	73.23	5.59	67.64	15.5	5.5	10
	7/9/2005	73.23	6.39	66.84	15.5	5.5	10
FL-05	1/30/1999	67.27	5.72	61.55	150	140	10
	5/1/1999	67.27	5.58	61.69	150	140	10
	6/20/1999	67.27	6.38	60.89	150	140	10
	8/7/1999	67.27	8.15	59.12	150	140	10
	8/26/1999	67.27	8.71	58.56	150	140	10
	9/18/1999	67.27	8.88	58.39	150	140	10
	11/6/1999	67.27	10.10	57.17	150	140	10

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 5 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FL-05 (con't)	2/6/2000	67.27	11.48	55.79	150	140	10
	4/30/2000	67.27	6.39	60.88	150	140	10
	7/16/2000	67.27	7.80	59.47	150	140	10
	11/5/2000	67.27	9.60	57.67	150	140	10
	2/17/2001	67.27	6.40	60.87	150	140	10
	4/28/2001	67.27	5.53	61.74	150	140	10
	7/15/2001	67.27	6.38	60.89	150	140	10
	11/4/2001	67.27	9.19	58.08	150	140	10
	1/12/2002	67.27	6.20	61.07	150	140	10
	4/21/2002	67.27	6.72	60.55	150	140	10
	7/21/2002	67.27	9.03	58.24	150	140	10
	11/3/2002	67.27	13.07	54.20	150	140	10
	1/18/2003	67.27	9.96	57.31	150	140	10
	4/12/2003	67.27	5.58	61.69	150	140	10
	7/23/2003	67.27	5.90	61.37	150	140	10
	10/4/2003	67.27	6.29	60.98	150	140	10
	2/28/2004	67.27	4.89	62.38	150	140	10
	4/18/2004	67.27	5.52	61.75	150	140	10
	7/9/2004	67.27	7.11	60.16	150	140	10
	10/16/2004	67.27	8.91	58.36	150	140	10
	1/22/2005	67.27	4.95	62.32	150	140	10
	4/16/2005	67.27	4.05	63.22	150	140	10
	7/9/2005	67.27	4.82	62.45	150	140	10
FL-06	1/30/1999	72.82	6.25	66.57	150	140	10
	5/1/1999	72.82	6.27	66.55	150	140	10
	6/20/1999	72.82	7.34	65.48	150	140	10
	8/7/1999	72.82	10.08	62.74	150	140	10
	8/26/1999	72.82	10.53	62.29	150	140	10
	9/18/1999	72.82	10.42	62.40	150	140	10
	11/6/1999	72.82	12.05	60.77	150	140	10
	2/6/2000	72.82	12.85	59.97	150	140	10
	4/30/2000	72.82	7.14	65.68	150	140	10
	7/16/2000	72.82	9.02	63.80	150	140	10
	11/5/2000	72.82	11.34	61.48	150	140	10
	2/17/2001	72.82	7.12	65.70	150	140	10
	4/28/2001	72.82	6.63	66.19	150	140	10
	7/15/2001	72.82	7.45	65.37	150	140	10
	11/4/2001	72.82	9.49	63.33	150	140	10
	1/12/2002	72.82	7.08	65.74	150	140	10
	4/20/2002	72.82	8.10	64.72	150	140	10

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 6 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FL-06 (cont)	7/21/2002	72.82	10.52	62.30	150	140	10
	11/3/2002	72.82	15.48	57.34	150	140	10
	1/18/2003	72.82	8.95	63.87	150	140	10
	4/12/2003	72.82	7.15	65.67	150	140	10
	7/23/2003	72.82	7.63	65.19	150	140	10
	10/4/2003	72.82	7.80	65.02	150	140	10
	2/29/2004	72.82	6.58	66.24	150	140	10
	4/18/2004	72.82	7.09	65.73	150	140	10
	7/9/2004	72.82	8.10	64.72	150	140	10
	10/16/2004	72.82	10.50	62.32	150	140	10
	1/22/2005	72.82	8.25	64.57	150	140	10
	4/16/2005	72.82	5.68	67.14	150	140	10
	7/9/2005	72.82	6.55	66.27	150	140	10
FL-07	1/30/1999	81.26	10.51	70.75	15.5	5.5	10
	4/28/1999	81.26	10.77	70.49	15.5	5.5	10
	8/7/1999	81.26	16.75	64.51	15.5	5.5	10
	11/10/1999	81.26	19.25	62.01	15.5	5.5	10
	2/6/2000	81.26	16.98	64.28	15.5	5.5	10
	4/30/2000	81.26	10.59	70.67	15.5	5.5	10
	7/14/2000	81.26	13.10	68.16	15.5	5.5	10
	11/1/2000	81.26	15.89	65.37	15.5	5.5	10
	2/16/2001	81.26	10.45	70.81	15.5	5.5	10
	4/24/2001	81.26	10.43	70.83	15.5	5.5	10
	7/12/2001	81.26	10.94	70.32	15.5	5.5	10
	11/4/2001	81.26	12.76	68.50	15.5	5.5	10
	1/12/2002	81.26	10.35	70.91	15.5	5.5	10
	4/20/2002	81.26	12.39	68.87	15.5	5.5	10
	7/21/2002	81.26	15.81	65.45	15.5	5.5	10
	11/2/2002	81.26	19.10	62.16	15.5	5.5	10
	1/17/2003	81.26	14.18	67.08	15.5	5.5	10
	4/12/2003	81.26	12.64	68.62	15.5	5.5	10
	7/23/2003	81.26	12.96	68.30	15.5	5.5	10
	10/4/2003	81.26	12.58	68.68	15.5	5.5	10
	2/28/2004	81.26	11.50	69.76	15.5	5.5	10
	4/17/2004	81.26	12.22	69.04	15.5	5.5	10
	7/9/2004	81.26	12.70	68.56	15.5	5.5	10
	10/16/2004	81.26	16.41	64.85	15.5	5.5	10
	1/22/2005	81.26	11.69	69.57	15.5	5.5	10
	4/16/2005	81.26	11.15	70.11	15.5	5.5	10
	7/9/2005	81.26	11.75	69.51	15.5	5.5	10

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 7 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
MW-06	1/29/1999	73.92	5.67	68.25	20	5.0	15
	4/27/1999	73.92	5.41	68.51	20	5.0	15
	8/5/1999	73.92	8.62	65.30	20	5.0	15
	11/10/1999	73.92	10.83	63.09	20	5.0	15
	2/7/2000	73.92	12.88	61.04	20	5.0	15
	4/29/2000	73.92	6.84	67.08	20	5.0	15
	7/14/2000	73.92	8.34	65.58	20	5.0	15
	11/1/2000	73.92	11.89	62.03	20	5.0	15
	2/16/2001	73.92	6.035	67.89	20	5.0	15
	4/24/2001	73.92	5.34	68.58	20	5.0	15
	7/12/2001	73.92	7.31	66.61	20	5.0	15
	11/1/2001	73.92	8.72	65.20	20	5.0	15
	1/11/2002	73.92	6.73	67.19	20	5.0	15
	4/20/2002	73.92	6.14	67.78	20	5.0	15
	6/17/2002	73.92	7.85	66.07	20	5.0	15
	7/19/2002	73.92	8.79	65.13	20	5.0	15
	11/2/2002	73.92	13.38	60.54	20	5.0	15
	1/14/2003	73.92	11.72	62.20	20	5.0	15
	4/15/2003	73.92	6.90	67.02	20	5.0	15
	7/22/2003	73.92	7.05	66.87	20	5.0	15
	10/3/2003	73.92	7.84	66.08	20	5.0	15
	2/29/2004	73.92	6.66	67.26	20	5.0	15
	4/17/2004	73.92	6.89	67.03	20	5.0	15
	7/9/2004	73.92	7.59	66.33	20	5.0	15
	10/17/2004	73.92	9.19	64.73	20	5.0	15
	1/22/2005	73.92	5.43	68.49	20	5.0	15
	4/16/2005	73.92	5.00	68.92	20	5.0	15
	7/9/2005	73.92	5.93	67.99	20	5.0	15
MW-07	1/29/1999	74.31	6.64	67.67	13.5	3.5	10
	4/27/1999	74.31	6.33	67.98	13.5	3.5	10
	8/5/1999	74.31	9.22	65.09	13.5	3.5	10
	11/10/1999	74.31	11.47	62.84	13.5	3.5	10
	2/7/2000	74.31	13.40	60.91	13.5	3.5	10
	4/29/2000	74.31	8.34	65.97	13.5	3.5	10
	7/14/2000	74.31	9.20	65.11	13.5	3.5	10
	11/1/2000	74.31	12.58	61.73	13.5	3.5	10
	2/16/2001	74.31	8.05	66.26	13.5	3.5	10
	4/24/2001	74.31	7.02	67.29	13.5	3.5	10
	7/12/2001	74.31	7.63	66.68	13.5	3.5	10
	11/1/2001	74.31	9.77	64.54	13.5	3.5	10

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 8 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
MW-07 (cont)	1/11/2002	74.31	6.89	67.42	13.5	3.5	10
	4/20/2002	74.31	7.18	67.13	13.5	3.5	10
	6/17/2002	74.31	8.81	65.50	13.5	3.5	10
	7/19/2002	74.31	9.56	64.75	13.5	3.5	10
	11/2/2002	74.31	13.36	60.95	13.5	3.5	10
	1/17/2003	74.31	11.61	62.70	13.5	3.5	10
	4/15/2003	74.31	7.70	66.61	13.5	3.5	10
	7/22/2003	74.31	6.86	67.45	13.5	3.5	10
	10/3/2003	74.31	7.75	66.56	13.5	3.5	10
	2/29/2004	74.31	7.52	66.79	13.5	3.5	10
	4/17/2004	74.31	7.75	66.56	13.5	3.5	10
	7/9/2004	74.31	8.42	65.89	13.5	3.5	10
	10/17/2004	74.31	9.96	64.35	13.5	3.5	10
	1/22/2005	74.31	6.50	67.81	13.5	3.5	10
	4/16/2005	74.31	5.83	68.48	13.5	3.5	10
	7/9/2005	74.31	6.76	67.55	13.5	3.5	10
MW-08	1/29/1999	74.75	7.24	67.51	14.5	4.5	10
	4/27/1999	74.75	6.93	67.82	14.5	4.5	10
	8/5/1999	74.75	9.76	64.99	14.5	4.5	10
	11/10/1999	74.75	12.05	62.70	14.5	4.5	10
	2/7/2000	74.75	14.00	60.75	14.5	4.5	10
	4/29/2000	74.75	7.90	66.85	14.5	4.5	10
	7/14/2000	74.75	9.73	65.02	14.5	4.5	10
	11/1/2000	74.75	13.12	61.63	14.5	4.5	10
	2/16/2001	74.75	8.66	66.09	14.5	4.5	10
	4/24/2001	74.75	7.62	67.13	14.5	4.5	10
	7/12/2001	74.75	8.21	66.54	14.5	4.5	10
	11/1/2001	74.75	10.38	64.37	14.5	4.5	10
	1/11/2002	74.75	8.50	66.25	14.5	4.5	10
	4/20/2002	74.75	8.95	65.80	14.5	4.5	10
	6/17/2002	74.75	9.41	65.34	14.5	4.5	10
	7/19/2002	74.75	10.15	64.60	14.5	4.5	10
	11/2/2002	74.75	14.18	60.57	14.5	4.5	10
	1/14/2003	74.75	13.53	61.22	14.5	4.5	10
	4/15/2003	74.75	8.29	66.46	14.5	4.5	10
	7/22/2003	74.75	8.41	66.34	14.5	4.5	10
	10/3/2003	74.75	9.34	65.41	14.5	4.5	10
	2/29/2004	74.75	8.14	66.61	14.5	4.5	10
	4/17/2004	74.75	8.34	66.41	14.5	4.5	10
	7/9/2004	74.75	8.98	65.77	14.5	4.5	10

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 9 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
MW-08 (con't)	10/17/2004	74.75	10.40	64.35	14.5	4.5	10
	1/22/2005	74.75	7.02	67.73	14.5	4.5	10
	4/16/2005	74.75	6.16	68.59	14.5	4.5	10
	7/9/2005	74.75	7.08	67.67	14.5	4.5	10
MW-12R	11/10/1999	72.18	9.51	62.67	13.54	3	10
	2/7/2000	72.18	11.73	60.45	13.54	3	10
	4/29/2000	72.18	6.78	65.40	13.54	3	10
	7/14/2000	72.18	6.11	66.07	13.54	3	10
	11/1/2000	72.18	10.33	61.86	13.54	3	10
	2/16/2001	72.18	6.02	66.16	13.54	3	10
	4/24/2001	72.18	6.34	65.84	13.54	3	10
	7/12/2001	72.18	5.62	66.56	13.54	3	10
	11/1/2001	72.18	7.79	64.39	13.54	3	10
	1/12/2002	72.18	5.88	66.30	13.54	3	10
	4/20/2002	72.18	6.01	66.17	13.54	3	10
	6/17/2002	72.18	6.70	65.48	13.54	3	10
	7/19/2002	72.18	7.57	64.61	13.54	3	10
	11/2/2002	72.18	12.40	59.78	13.54	3	10
	1/14/2003	72.18	10.97	61.21	13.54	3	10
	4/14/2003	72.18	4.46	67.72	13.54	3	10
	7/22/2003	72.18	5.82	66.36	13.54	3	10
	10/3/2003	72.18	6.66	65.52	13.54	3	10
	2/28/2004	72.18	2.20	69.98	13.54	3	10
	4/17/2004	72.18	5.59	66.59	13.54	3	10
	7/9/2004	72.18	6.33	65.85	13.54	3	10
	10/18/2004	72.18	7.60	64.58	13.54	3	10
	1/21/2005	72.18	2.89	69.29	13.54	3	10
	4/17/2005	72.18	3.71	68.47	13.54	3	10
	7/11/2005	72.18	4.85	67.33	13.54	3	10
FF-MW-01	1/29/1999	75.05	5.94	69.11	20.5	5	15.5
	4/27/1999	75.05	5.58	69.47	20.5	5	15.5
	8/5/1999	75.05	8.28	66.77	20.5	5	15.5
	11/10/1999	75.05	10.54	64.51	20.5	5	15.5
	2/7/2000	75.05	12.82	62.23	20.5	5	15.5
	4/29/2000	75.05	7.79	67.26	20.5	5	15.5
	7/14/2000	75.05	8.39	66.66	20.5	5	15.5
	11/1/2000	75.05	11.64	63.41	20.5	5	15.5
	2/16/2001	75.05	6.33	68.72	20.5	5	15.5
	4/24/2001	75.05	6.30	68.75	20.5	5	15.5
	7/12/2001	75.05	6.87	68.18	20.5	5	15.5

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 10 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FF-MW-01 (con't)	11/1/2001	75.05	8.94	66.11	20.5	5	15.5
	1/12/2002	75.05	7.18	67.87	20.5	5	15.5
	4/20/2002	75.05	7.36	67.69	20.5	5	15.5
	6/18/2002	75.05	8.03	67.02	20.5	5	15.5
	7/19/2002	75.05	8.80	66.25	20.5	5	15.5
	11/2/2002	75.05	13.72	61.33	20.5	5	15.5
	1/14/2003	75.05	12.32	62.73	20.5	5	15.5
	4/14/2003	75.05	6.94	68.11	20.5	5	15.5
	7/22/2003	75.05	6.07	68.98	20.5	5	15.5
	10/3/2003	75.05	7.55	67.50	20.5	5	15.5
	2/27/2004	75.05	6.52	68.53	20.5	5	15.5
	4/17/2004	75.05	6.92	68.13	20.5	5	15.5
	7/9/2004	75.05	7.59	67.46	20.5	5	15.5
	10/18/2004	75.05	9.06	65.99	20.5	5	15.5
	1/21/2005	75.05	5.52	69.53	20.5	5	15.5
	4/17/2005	75.05	5.03	70.02	20.5	5	15.5
	7/11/2005	75.05	6	69.05	20.5	5	15.5
FF-MW-02	1/29/1999	73.69	4.54	69.15	20.5	5	15.5
	4/27/1999	73.69	4.15	69.54	20.5	5	15.5
	8/5/1999	73.69	6.85	66.85	20.5	5	15.5
	11/10/1999	73.69	9.07	64.62	20.5	5	15.5
	2/7/2000	73.69	11.37	62.32	20.5	5	15.5
	4/29/2000	73.69	6.57	67.12	20.5	5	15.5
	7/14/2000	73.69	6.97	66.72	20.5	5	15.5
	11/1/2000	73.69	10.17	63.52	20.5	5	15.5
	2/16/2001	73.69	5.96	67.73	20.5	5	15.5
	4/24/2001	73.69	4.78	68.91	20.5	5	15.5
	7/12/2001	73.69	5.47	68.22	20.5	5	15.5
	11/1/2001	73.69	7.51	66.18	20.5	5	15.5
	1/12/2002	73.69	5.75	67.94	20.5	5	15.5
	4/20/2002	73.69	5.92	67.77	20.5	5	15.5
	6/18/2002	73.69	5.58	68.11	20.5	5	15.5
	7/19/2002	73.69	7.44	66.25	20.5	5	15.5
	11/2/2002	73.69	12.17	61.52	20.5	5	15.5
	1/14/2003	73.69	10.95	62.74	20.5	5	15.5
	4/14/2003	73.69	5.55	68.14	20.5	5	15.5
	7/22/2003	73.69	5.70	67.99	20.5	5	15.5
	10/3/2003	73.69	6.55	67.14	20.5	5	15.5
	2/27/2004	73.69	4.42	69.27	20.5	5	15.5
	4/17/2004	73.69	5.51	68.18	20.5	5	15.5

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 11 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FF-MW-02 (con't)	7/9/2004	73.69	6.24	67.45	20.5	5	15.5
	10/18/2004	73.69	7.58	66.11	20.5	5	15.5
	1/21/2005	73.69	4.50	69.19	20.5	5	15.5
	4/17/2005	73.69	3.66	70.03	20.5	5	15.5
	7/11/2005	73.69	4.58	69.11	20.5	5	15.5
FF-MW-03	1/29/1999	74.30	4.98	69.32	20.5	5	15.5
	4/27/1999	74.30	4.61	69.69	20.5	5	15.5
	8/5/1999	74.30	7.26	67.04	20.5	5	15.5
	11/10/1999	74.30	9.47	64.83	20.5	5	15.5
	2/7/2000	74.30	11.79	62.51	20.5	5	15.5
	4/29/2000	74.30	7.10	67.20	20.5	5	15.5
	7/14/2000	74.30	7.46	66.84	20.5	5	15.5
	11/1/2000	74.30	10.52	63.78	20.5	5	15.5
	2/16/2001	74.30	6.53	67.77	20.5	5	15.5
	4/24/2001	74.30	5.22	69.08	20.5	5	15.5
	7/12/2001	74.30	5.95	68.35	20.5	5	15.5
	11/1/2001	74.30	6.87	67.43	20.5	5	15.5
	1/12/2002	74.30	6.24	68.06	20.5	5	15.5
	4/20/2002	74.30	6.30	68.00	20.5	5	15.5
	6/18/2002	74.30	7.03	67.27	20.5	5	15.5
	7/19/2002	74.30	7.77	66.53	20.5	5	15.5
	11/2/2002	74.30	12.44	61.86	20.5	5	15.5
	1/14/2003	74.30	11.57	62.73	20.5	5	15.5
	4/14/2003	74.30	6.10	68.20	20.5	5	15.5
	7/22/2003	74.30	6.22	68.08	20.5	5	15.5
	10/3/2003	74.30	7.03	67.27	20.5	5	15.5
	2/28/2004	74.30	5.49	68.81	20.5	5	15.5
	4/17/2004	74.30	5.97	68.33	20.5	5	15.5
	7/9/2004	74.30	6.75	67.55	20.5	5	15.5
	10/18/2004	74.30	7.99	66.31	20.5	5	15.5
	1/21/2005	74.30	4.20	70.10	20.5	5	15.5
	4/17/2005	74.30	4.12	70.18	20.5	5	15.5
	7/11/2005	74.30	5.12	69.18	20.5	5	15.5
FF-MW-04	1/29/1999	74.28	4.60	69.68	19.5	5	14.5
	4/27/1999	74.28	4.30	69.98	19.5	5	14.5
	8/5/1999	74.28	7.15	67.13	19.5	5	14.5
	11/10/1999	74.28	9.31	64.97	19.5	5	14.5
	2/7/2000	74.28	11.57	62.71	19.5	5	14.5
	4/29/2000	74.28	6.68	67.60	19.5	5	14.5
	7/14/2000	74.28	7.16	67.12	19.5	5	14.5

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 12 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FF-MW-04 (con't)	11/1/2000	74.28	10.29	63.99	19.5	5	14.5
	2/16/2001	74.28	6.12	68.16	19.5	5	14.5
	4/24/2001	74.28	4.91	69.37	19.5	5	14.5
	7/12/2001	74.28	5.67	68.61	19.5	5	14.5
	11/1/2001	74.28	7.56	66.72	19.5	5	14.5
	1/12/2002	74.28	5.90	68.38	19.5	5	14.5
	4/20/2002	74.28	5.98	68.30	19.5	5	14.5
	6/17/2002	74.28	6.71	67.57	19.5	5	14.5
	7/19/2002	74.28	7.51	66.77	19.5	5	14.5
	11/2/2002	74.28	12.39	61.89	19.5	5	14.5
	1/14/2003	74.28	11.11	63.17	19.5	5	14.5
	4/14/2003	74.28	5.81	68.47	19.5	5	14.5
	7/22/2003	74.28	5.97	68.31	19.5	5	14.5
	10/3/2003	74.28	6.75	67.53	19.5	5	14.5
	2/28/2004	74.28	5.23	69.05	19.5	5	14.5
	4/17/2004	74.28	5.74	68.54	19.5	5	14.5
	7/9/2004	74.28	6.50	67.78	19.5	5	14.5
	10/18/2004	74.28	7.82	66.46	19.5	5	14.5
	1/21/2005	74.28	3.78	70.50	19.5	5	14.5
	4/17/2005	74.28	3.90	70.38	19.5	5	14.5
	7/11/2005	74.28	5.00	69.28	19.5	5	14.5
FF-MW-05	1/29/1999	76.22	6.72	69.50	19.5	5	15.5
	4/27/1999	76.22	6.47	69.75	19.5	5	15.5
	8/5/1999	76.22	9.59	66.63	19.5	5	15.5
	11/10/1999	76.22	11.87	64.36	19.5	5	15.5
	2/7/2000	76.22	13.84	62.38	19.5	5	15.5
	4/29/2000	76.22	8.39	67.83	19.5	5	15.5
	7/14/2000	76.22	9.34	66.88	19.5	5	15.5
	11/1/2000	76.22	12.84	63.38	19.5	5	15.5
	2/16/2001	76.22	8.03	68.19	19.5	5	15.5
	4/24/2001	76.22	7.24	68.98	19.5	5	15.5
	7/12/2001	76.22	7.78	68.44	19.5	5	15.5
	11/1/2001	76.22	9.92	66.30	19.5	5	15.5
	1/11/2002	76.22	7.91	68.31	19.5	5	15.5
	4/20/2002	76.22	8.39	67.83	19.5	5	15.5
	6/17/2002	76.22	8.95	67.27	19.5	5	15.5
	7/19/2002	76.22	9.83	66.39	19.5	5	15.5
	11/2/2002	76.22	15.26	60.96	19.5	5	15.5
	1/14/2003	76.22	11.64	64.58	19.5	5	15.5
	4/15/2003	76.22	7.84	68.38	19.5	5	15.5

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 13 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FF-MW-05 (con't)	7/22/2003	76.22	8.03	68.19	19.5	5	15.5
	10/3/2003	76.22	8.95	67.27	19.5	5	15.5
	2/29/2004	76.22	7.70	68.52	19.5	5	15.5
	4/17/2004	76.22	7.89	68.33	19.5	5	15.5
	7/9/2004	76.22	8.60	67.62	19.5	5	15.5
	10/17/2004	76.22	10.30	65.92	19.5	5	15.5
	1/22/2005	76.22	6.80	69.42	19.5	5	15.5
	4/17/2005	76.22	6.10	70.12	19.5	5	15.5
	7/9/2005	76.22	6.95	69.27	19.5	5	15.5
FF-MW-06	1/29/1999	75.50	5.74	69.76	20.0	5	15.0
	4/27/1999	75.50	5.50	70.00	20.0	5	15.0
	8/5/1999	75.50	8.75	66.75	20.0	5	15.0
	11/10/1999	75.50	11.09	64.42	20.0	5	15.0
	2/7/2000	75.50	12.89	62.61	20.0	5	15.0
	4/29/2000	75.50	7.46	68.04	20.0	5	15.0
	7/14/2000	75.50	7.40	68.10	20.0	5	15.0
	11/1/2000	75.50	10.92	64.58	20.0	5	15.0
	2/16/2001	75.50	7.04	68.46	20.0	5	15.0
	4/24/2001	75.50	6.29	69.21	20.0	5	15.0
	7/12/2001	75.50	6.86	68.64	20.0	5	15.0
	11/1/2001	75.50	8.89	66.61	20.0	5	15.0
	1/11/2002	75.50	6.85	68.65	20.0	5	15.0
	4/20/2002	75.50	7.34	68.16	20.0	5	15.0
	6/17/2002	75.50	7.81	67.69	20.0	5	15.0
	7/19/2002	75.50	8.92	66.58	20.0	5	15.0
	11/2/2002	75.50	14.58	60.92	20.0	5	15.0
	1/14/2003	75.50	11.51	63.99	20.0	5	15.0
	4/15/2003	75.50	6.95	68.55	20.0	5	15.0
	7/22/2003	75.50	7.17	68.33	20.0	5	15.0
	10/3/2003	75.50	7.96	67.54	20.0	5	15.0
	2/29/2004	75.50	6.72	68.78	20.0	5	15.0
	4/17/2004	75.50	6.97	68.53	20.0	5	15.0
	7/9/2004	75.50	7.71	67.79	20.0	5	15.0
	10/17/2004	75.50	9.38	66.12	20.0	5	15.0
	1/22/2005	75.50	5.69	69.81	20.0	5	15.0
	4/17/2005	75.50	5.20	70.30	20.0	5	15.0
	7/9/2005	75.50	6.09	69.41	20.0	5	15.0
FF-MW-07	1/30/1999	75.81	5.8	70.01	20.5	5	15.5
	4/27/1999	75.81	5.57	70.24	20.5	5	15.5
	8/5/1999	75.81	8.75	67.06	20.5	5	15.5

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 14 of 33)

Well Information		Monitoring Well Data					
Well Identification	Date Measured	Well head Elevation (ft)	Depth to Water (ft)	Relative Water Elevation (ft)	Total Well Depth (ft)	Depth to Screened Interval (ft)	Length of Screen (ft)
FF-MW-07 (con't)	11/10/1999	75.81	10.90	64.91	20.5	5	15.5
	2/7/2000	75.81	12.94	62.87	20.5	5	15.5
	4/29/2000	75.81	7.76	68.05	20.5	5	15.5
	7/14/2000	75.81	8.47	67.34	20.5	5	15.5
	11/1/2000	75.81	11.80	64.01	20.5	5	15.5
	2/16/2001	75.81	7.23	68.58	20.5	5	15.5
	4/24/2001	75.81	6.30	69.51	20.5	5	15.5
	7/12/2001	75.81	5.96	69.85	20.5	5	15.5
	11/1/2001	75.81	8.87	66.94	20.5	5	15.5
	1/11/2002	75.81	7.04	68.77	20.5	5	15.5
	4/20/2002	75.81	7.32	68.49	20.5	5	15.5
	6/17/2002	75.81	8.02	67.79	20.5	5	15.5
	7/19/2002	75.81	8.80	67.01	20.5	5	15.5
	11/2/2002	75.81	14.16	61.65	20.5	5	15.5
	1/14/2003	75.81	12.05	63.76	20.5	5	15.5
	4/15/2003	75.81	7.07	68.74	20.5	5	15.5
	7/22/2003	75.81	7.28	68.53	20.5	5	15.5
	10/3/2003	75.81	8.06	67.75	20.5	5	15.5
	2/29/2004	75.81	6.71	69.10	20.5	5	15.5
	4/17/2004	75.81	7.10	68.71	20.5	5	15.5
	7/9/2004	75.81	7.80	68.01	20.5	5	15.5
	10/17/2004	75.81	9.40	66.41	20.5	5	15.5
	1/22/2005	75.81	5.50	70.31	20.5	5	15.5
	4/17/2005	75.81	5.20	70.61	20.5	5	15.5
	7/9/2005	75.81	6.2	69.61	20.5	5	15.5

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 15 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
PW-2373	1/29/1999(a)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/1/1999(a)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/15/2003	ND (0.05)	0.025(n)	ND(0.048)	NA	ND(1)	0.25(n)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND (0.05)	0.027(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/6/2003	ND (0.05)	ND(0.097)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/27/2004	ND (0.05)	ND(0.096)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/15/2004	ND (0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND (0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
PW-2393	1/29/1999(a)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	5/1/1999(a)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NS	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	5/2/2000	ND(0.5)	ND(0.5)	ND(0.5)	NS	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000(b)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	11/1/2002	0.016(n)	ND(0.094)	0.051(r)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/15/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/15/2003	ND(0.05)	0.022(n)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	0.033(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/6/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/27/2004	ND (0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/15/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/15/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
FL-01	1/30/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	5/1/1999	ND(0.5)	ND(1)	NA	ND(5)	NA	NA	NA	NA	NA
	6/20/1999	ND(0.5)	NA	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/7/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/6/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	2/6/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 16 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FL-01 (con't)	7/16/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	11/5/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	2/17/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/28/2001	ND(0.05)	0.24(L,s)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.50)
	7/15/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	11/4/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	1/12/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/21/2002	ND(0.05)	0.05(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/21/2002	ND(0.05)	ND(0.094)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/3/2002	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/18/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/12/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	0.029(n)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/4/2003	ND(0.05)	0.032(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/28/2004	ND (0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/18/2004	ND(0.05)	ND(0.12)	ND(0.25)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/10/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/16/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.10)(k)	ND(0.10)(k)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FL-02	1/30/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	5/1/1999	ND(0.5)	ND(1)	NA	ND(5)	NA	NA	NA	NA	NA
	6/20/1999	ND(0.5)	NA	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/7/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/6/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/6/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/16/2000	NA	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/5/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 17 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FL-02 (con't)	2/17/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/28/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/15/2001	ND(0.05)	ND(0.1)(k)	ND(0.1)(k)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/4/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/12/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/21/2002	ND(0.05)	0.037(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/21/2002	ND(0.05)	ND(0.097)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/3/2002	ND(0.05)	0.032(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/18/2003	ND(0.05)	ND(0.094)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/12/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/4/2003	ND(0.05)	0.021(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/28/2004	ND (0.05)	ND(0.098)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/18/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/10/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/16/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FL-03	1/30/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	5/1/1999	ND(0.5)	ND(1)	NA	ND(5)	NA	NA	NA	NA	NA
	6/20/1999	ND(0.5)	NA	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/7/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/6/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	2/6/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	4/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	7/16/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/5/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	2/17/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	4/28/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 18 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FL-03 (con't)	7/15/2001	ND(0.05)	ND(0.050)	ND(0.050)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/4/2001	ND(0.050)	ND(0.050)	ND(0.050)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	1/12/2002	ND(0.050)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.019(n,p)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/21/2002	ND(0.05)	0.021(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/3/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/18/2003	ND(0.05)	ND(0.099)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/12/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	0.022(n)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/4/2003	ND(0.05)	ND(0.097)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/29/2004	ND (0.05)	ND(0.099)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/18/2004	ND(0.05)	ND(0.099)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/10/2004	ND(0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/16/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.10)(k)	ND(0.10)(k)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FL-04	1/30/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	5/1/1999	ND(0.5)	ND(1)	NA	ND(5)	NA	NA	NA	NA	NA
	6/20/1999	ND(0.5)	NA	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/7/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/6/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/6/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/16/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/5/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	2/17/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/28/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/15/2001	ND(0.05)	0.17(L)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/4/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 19 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FL-04 (con't)	1/12/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.016(n,p)	ND(0.47)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/21/2002	ND(0.05)	0.02(n)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/3/2002	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/18/2003	ND(0.05)	ND(0.1)	ND(0.051)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/12/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	0.029(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/4/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/29/2004	ND (0.05)	ND(0.1)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/18/2004	ND(0.05)	ND(0.098)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/10/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/16/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.10)(k)	ND(0.10)(k)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FL-05/	1/30/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
FL-05Dup	5/1/1999	ND(0.5)	ND(1)	NA	ND(5)	NA	NA	NA	NA	NA
	6/20/1999	ND(0.5)	NA	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/7/1999	ND(0.05)	1.8	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/26/1999(e)	NA	ND (0.05)	ND (0.05)	ND(0.5)	ND(0.5)(g)	ND(0.5)(g)	ND(0.5)(g)	ND(1.0)(g)	ND(0.5)(g)
	8/26/1999(f)	ND(0.5)	0.66	ND(1.0)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	5.3
	8/26/1999(f)	NA	NA	NA	NA	NA	NA	NA	NA	ND(0.5) (g)
	9/18/1999(e)	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5) (g)	ND(0.5) (g)	ND(0.5) (g)	ND(1.0)(g)	ND(0.5) (g)
	9/18/1999(f)	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5) (g)	ND(0.5) (g)	ND(0.5) (g)	ND(1.0)(g)	ND(0.5) (g)
	11/6/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/6/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	0.55	ND(0.5)
	4/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/16/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/5/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	2/17/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 20 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FL-05 (con't)	4/28/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/15/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/4/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/12/2002	ND(0.05)/ 0.0063(n)	NA/NA	ND(0.14)/ ND(0.14)	NA/NA	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(2)/ ND(2)	ND(1)/ ND(1)
	4/21/2002	ND(0.05)	0.013(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/21/2002	0.072	0.26	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/3/2002	ND(0.05)	0.032(n)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/18/2003	ND(0.05)	ND(0.094)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/12/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	0.036(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/4/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/28/2004	ND (0.05)	ND(0.1)	ND(0.21)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	ND(0.1)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/10/2004	ND(0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/16/2004	ND(0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FL-06/ FL-06Dup	1/30/1999	ND(0.5)/ ND(0.05)	ND(1)/ ND(1)	NA/NA	NA/NA	ND(0.3)/ ND(0.3)	ND(0.3)/ ND(0.3)	ND(0.3)/ ND(0.3)	ND(0.6)/ ND(0.6)	ND(5)/ ND(5)
	5/1/1999	ND(0.5)	ND(1)	NA	ND(5)	NA	NA	NA	NA	NA
	6/20/1999	ND(0.5)	NA	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/7/1999	ND(0.5)	1.3	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/26/1999(e)	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)(g)	ND(0.5)(g)	ND(0.5)(g)	ND(1.0)(g)	ND(0.5)(g)
	8/26/1999(f)	ND(0.5)	0.26	ND(1.0)	NA	ND(0.5)	ND(0.5)	ND(0.5)	0.5	35
	8/26/1999(f)	NA	NA	NA	NA	NA	NA	NA	NA	ND(0.5)(g)
	9/18/1999(e)	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)(g)	ND(0.5)(g)	ND(0.5)(g)	ND(1.0)(g)	ND(0.5)(g)
	9/18/1999(f)	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)(g)	ND(0.5)(g)	ND(0.5)(g)	ND(1.0)(g)	ND(0.5)(g)
	11/6/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 21 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FL-O6 (con't)	2/6/2000	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ND(0.5)	NA/NA	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(1.0)/ 0.61	ND(0.5)/ ND(0.5)
	4/30/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/16/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/5/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	2/17/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/28/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/15/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/4/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/12/2002	ND(0.05)	NA	ND(0.014)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.011(n.p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/21/2002	0.024(n)	0.058(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/3/2002	ND(0.05)	0.027(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/18/2003	ND(0.05)	ND(0.094)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/12/2003	ND(0.05)	ND(0.097)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	0.037(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/4/2003	ND(0.05)	ND(0.099)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/29/2004	ND (0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/18/2004	ND(0.05)	ND(0.1)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/10/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/16/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FL-07/	1/30/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
FL-07Dup	4/28/1999	ND(0.5)	ND(1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	NA
	8/7/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/10/1999	NS	NS	NS	NS	NS	NS	NS	NS	NS
	2/6/2000	ND(0.5)	ND (0.05)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	0.63	ND(0.5)
	4/30/2000	ND(0.5)	ND (0.05)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 22 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FL-07 (con't)	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	2/16/2001	ND(0.05)	ND (0.050)	ND(0.050)	ND(0.5)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	4/24/2001	ND(0.05)	ND (0.050)	ND(0.050)	ND (0.5)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	7/12/2001	ND(0.05)	0.31(L)	ND(0.050)	ND (0.5)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)	ND(0.50)
	11/4/2001	ND(0.05)	ND(0.1)(k)	ND(0.1)(k)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	1/12/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	4/20/2002	ND(0.05)	0.03(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	7/21/2002	ND(0.05)	0.051(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(1)	ND(1)
	11/2/2002(c)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/17/2003	ND(0.05)/ ND(0.05)	ND(0.094)/ ND(0.094)	ND(0.047)/ ND(0.047)	NA/NA	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(2)/ ND(2)	ND(1)/ ND(1)
	4/12/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/23/2003	ND(0.05)	0.052(n)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/4/2003	ND(0.05)/ ND(0.05)	ND(0.096)/ ND(0.094)	ND(0.048)/ ND(0.047)	NA/NA	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(2)/ ND(2)	ND(1)/ ND(1)
	2/28/2004	ND (0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.23(n)
	4/17/2004	ND(0.05)	ND(0.097)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/16/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
MW-06/	1/29/1999	2.13	1.63	NA	NA	9	4.5	21.9	72	ND(5)
MW-06Dup	4/27/1999	2.19(d)	3.62	NA	NA	7.3	1.6	17.2	58.9	ND(0.5)
	8/5/1999	2.16	5.4	NA	NA	7.7	ND(5.0)	21	70	ND(5.0)
	11/10/1999	2.7	ND(0.5)	27.0	NA	7.8	ND(2.5)	24	68	ND(2.5)
	2/7/2000	3.7	17	ND(0.5)	NA	8.5	ND(1.0)	30	67	ND(1.0)
	4/29/2000	2.5	5.7	ND(0.5)	NA	5.7	ND(0.5)	12	27.8	ND(0.5)
	7/14/2000	NA/NA	ND(0.05)/ ND(0.05)	1.8(h)/ 2.5(h)	ND(0.5)/ ND(0.5)	3.8/ 3.1	ND(0.5)/ ND(0.5)	3.8/ 8.3	17.5/ 14.1	ND(0.5)/ ND(0.5)

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Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-06	11/1/2000	1.8	ND(0.05)	2.1(h)	NA	4.4	ND(0.5)	16	8.4	ND(0.5)
(con't)	2/16/2001	1.1/ 1.1	ND(0.05)/ ND(0.05)	1.4(h,j)/ 1.6(h,j)	ND(0.5)/ ND(0.5)	1.9/ 2.0	ND(0.5)/ ND(0.5)	8.0/ 8.0	2.3/ 2.3	ND(0.5)/ ND(0.5)
	4/24/2001	0.94/ 0.89	ND(0.05)/ ND(0.05)	1.4(h)/ 1.2(h)	ND(0.5)/ ND(0.5)	1.7/ 1.5	ND(0.5)/ ND(0.5)	6.1/5.2	2.4/ 2.1	ND(0.5)/ ND(0.5)
	7/12/2001	0.57/ 0.61	ND(0.05)/ ND(0.05)	1.4(h)/ 2.6(h)	ND(0.5)/ ND(0.5)	0.85/ 0.87	ND(0.5)/ ND(0.5)	3.1/3.1	2.0/ 1.9	ND(0.5)/ ND(0.5)
	11/1/2001	0.60/ 0.56	ND(0.05)/ ND(0.05)	1.2(h)/ 1.1(h)	NA/NA	0.81/ 0.84	ND(0.5)/ ND(0.5)	1.1/1.1	1.8/ 1.7	ND(0.5)/ ND(0.5)
	1/11/2002	0.054	NA	0.86	NA	0.58(n)	ND(1)	ND(1)	1.5	ND(1)
	4/20/2002	0.06(o)/ 0.05(n)	ND(2.8)/ ND(2.8)	0.77/ 0.8	NA/NA	0.33(n)/ 0.33(n)	ND(1)/ ND(1)	ND(1)/ ND(1)	0.48/ 0.42(n)	ND(1)/ ND(1)
	6/17/2002	0.14	NA	NA	NA	0.35(n)	ND(1)	ND(1)	0.45(n)	ND(1)
	7/19/2002	0.069/ 0.058	0.95/ 0.94	ND(0.049)/ ND(0.05)	NA/NA	0.21(n)/ 0.24(n)	ND(1)/ ND(1)	ND(1)/ ND(1)	0.26(n)/ 0.26(n)	ND(1)/ ND(1)
	11/2/2002	0.096/ 0.11	5.4(q)/ 35(q)	ND(0.096)/ ND(0.049)	NA/NA	0.63(n)/ 0.56(n)	ND(1)/ ND(1)	0.3(n)/ 0.37(n)	ND(2)/ 0.3(n)	ND(1)/ ND(1)
	1/14/2003	0.13(t)	13	ND(0.024)	NA	0.28(n)	ND (1)	0.32(n)	0.85(n)	ND (1)
	4/15/2003	0.25/ 0.3	31/ 32	ND(0.048)/ ND(0.047)	NA	ND(1)/ ND(1)	ND(1)/ ND(1)	0.47(n)/ 0.46(n)	0.32(n)/ 0.62(n)	ND(1)/ ND(1)
	7/22/2003	0.16/ 0.16	16/ 16	0.78/0.84	NA	ND(1)/ ND(1)	0.31(n)/ 0.27(n)	ND(1)/ ND(1)	ND(2)/ ND(2)	ND(1)/ ND(1)
	10/3/2003	0.086	12	ND(0.97)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/29/2004	0.067/0.087	5.2/4.5	ND(0.19)/ ND(0.2)	NA/NA	ND(1)/ND(1)	ND(1)/ND(1)	0.21(n)/ND(1)	ND(2)/ ND(2)	ND(1)/ND(1)
	4/17/2004	0.039 (n)/ 0.03 (n)	4/3.9	ND(0.19)/ ND(0.19)	NA	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1.25)/ ND(1.23)	ND(1)/ ND(1)
	7/9/2004	0.042 (n)/0.044 (n)	4.4/4.3	ND(0.19)/ ND(0.19)	NA/NA	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(2)/ 0.29 (n)	ND(1)/ ND(1)
	10/17/2004	0.034 (n)/0.032 (n)	3.4/3.5	ND(0.19)/ ND(0.19)		ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(2)/ ND(2)	ND(1)/ ND(1)
	1/22/2005	NA	ND(0.05)/ ND(0.05)	1.2 (h)/ .2(h)	NA/NA	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(1)/ ND(1)	ND(0.5)/ ND(0.5)
	4/16/2005	0.29/0.27	ND(0.25)/ ND(0.25)	0.84(h)/0.90(h)	NA/NA	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(1)/ ND(1)	ND(0.5)/ ND(0.5)
	7/9/2005	0.26/NA	ND(0.05)/ NA	0.96(h)/NA	NA/NA	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(1)/ ND(1)	ND(0.5)/ ND(0.5)
MW-07	1/29/1999	ND (0.5)	ND (1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	4/27/1999	ND (0.5)	ND (1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 24 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-07	8/5/1999	ND (0.05)	ND (0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	0.85
(con't)	11/10/1999	ND (0.5)	ND (0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/7/2000(c)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	4/29/2000	ND (0.5)	ND (0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/16/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	2.5
	4/24/2001	0.068	ND(0.1)(k)	ND(0.1)(k)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	1.5
	7/12/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	0.76
	11/4/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/11/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.28(n)
	4/20/2002	ND(0.05)	ND (0.28)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/17/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/19/2002	ND(0.05)	0.077(n)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002(c)	NS	NS	NS	NA	NS	NS	NS	NS	NS
	1/17/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/15/2003	ND(0.05)	0.041(n)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.098(n)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	0.039(n)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/29/2004	ND(0.05)	ND(0.098)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	ND(0.096)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/17/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
MW-08	1/29/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	4/27/1999	ND(0.5)	ND(1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/5/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	0.99	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 25 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-08	2/7/2000(c)	NS	NS	NS	NS	NS	NS	NS	NS	NS
(con't)	4/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/16/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	0.55
	4/24/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	0.78
	7/12/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/11/2002	ND(0.05)	NA	ND (0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.024(n,p)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/17/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/19/2002	ND(0.05)	0.091(n)	ND(.063)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002(c)	NS	NS	NS	NS	NS	NS	NS	NS	NS
	1/14/2003	ND(0.05)	ND (0.1)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/15/2003	ND(0.05)	0.034(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.099	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	0.041(n)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/29/2004	ND(0.05)	ND(0.13)	ND(0.26)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	ND(0.098)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/17/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2004	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
MW-12R/	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
MW-12R	2/7/2000	0.62	5.2	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
Dup	4/29/2000	1.4(d)/1.5(d)	6.3/6.5	ND(0.5)/ ND(0.5)	NA/NA	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(1.0)/ ND(1.0)	ND(0.5)/ ND(0.5)
	7/14/2000	NA	ND(0.05)	0.56 (h)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)	0.054	0.31 (h)	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND(1.0)	0.5

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 26 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
MW-12R	2/16/2001	ND(0.25)(m)	0.48	ND(0.05)	ND(0.5)(m)	ND(1.0)(m)	ND(1.0)(m)	ND(1.0)(m)	ND(2.0)(m)	ND(1.0)(m)
(con't)	4/24/2001	ND(0.1)(m)	0.17	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/12/2001	ND(0.05)	0.22	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2001	ND(0.05)	0.099	0.33 (h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	0.55
	1/12/2002	ND(0.05)	NA	ND(0.15)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.69	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/18/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/19/2002	ND(0.05)	0.85	ND(0.056)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002	ND(0.05)	4 (q)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/14/2003	ND(0.05)	2.5(u)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/14/2003	ND(0.05)	0.22(u)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.38	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	0.22	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/28/2004	ND(0.05)	ND(0.1)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	0.37	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	0.16	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/18/2004	ND(0.05)	0.18	ND(0.19)		ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/21/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/17/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/11/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FF-MW-01	1/29/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	4/27/1999	ND (0.5)	ND (1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/5/1999	ND (0.05)	0.47	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	0.17(h)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	0.058	ND(0.05)	0.24(h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/16/2001	ND(0.05)	0.10(j)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/24/2001	ND(0.05)	ND(0.05)	0.14[(i)]	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 27 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FF-MW-01	7/12/2001	ND(0.05)	0.18(j)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
(con't)	11/1/2001	ND(0.05)	ND(0.05)	0.077(h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/12/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.087(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/18/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/19/2002	ND(0.05)	0.35	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002	ND(0.05)	0.15(p)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/14/2003	ND(0.05)	0.23	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/14/2003	ND(0.05)	0.18	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.61	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	0.084(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/27/2004	ND(0.05)	0.25	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	0.097 (n)	ND(0.02)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/18/2004	ND(0.05)	ND(0.094)	ND(0.19)		ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/21/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/17/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FF-MW-02	1/29/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	4/27/1999	ND(0.5)	ND(1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/5/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	0.5	ND(0.5)	1.1	ND(0.5)
	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/16/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/24/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/12/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 28 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FF-MW-02	1/12/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
(con't)	4/20/2002	ND(0.05)	0.06(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/18/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/19/2002	ND(0.05)	0.061(n)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002	ND(0.05)	0.029(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/14/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/14/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.058(n)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	0.041(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/27/2004	ND(0.05)	ND(0.11)	ND(0.22)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	ND(0.096)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/18/2004	ND(0.05)	ND(0.094)	ND(0.19)		ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/21/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/17/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/11/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FF-MW-03	1/29/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	4/27/1999	ND(0.5)	ND(1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/5/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/16/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/24/2001	ND(0.05)	0.18(L,s)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/12/2001	ND(0.05)	0.12(L)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/4/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/12/2002	ND(0.05)	NA	ND(0.15)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.026(n,p)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 29 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FF-MW-03	6/18/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
(con't)	7/19/2002	ND(0.05)	0.055(n)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002	ND(0.05)	ND(0.097)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/14/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/14/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.049(n)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	0.035(n)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/28/2004	ND(0.05)	ND(0.1)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/18/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/21/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/17/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/22/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FF-MW-04/	1/29/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
FF-MW-04 Dup	4/27/1999	ND(0.5)/ ND(0.5)	ND(1)/ ND(1)	NA/NA	NA/NA	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)
	8/5/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/16/2001	ND(0.05)	ND(0.1)(k)	ND(0.1)(k)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/24/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/12/2001	ND(0.050)	0.23(L)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2001	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/12/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.039(n,p)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/18/2002	ND(0.05)/ ND(0.05)	NA/NA	NA/NA	NA/NA	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(1)/ ND(1)	ND(2)/ ND(2)	ND(1)/ ND(1)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 30 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FF-MW-04	7/19/2002	ND(0.05)	0.054(n)	ND(0.052)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
(con't)	11/2/2002	ND(0.05)	0.033(n)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/14/2003	ND(0.05)	ND(0.094)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/14/2003	ND(0.05)	ND(0.095)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.035(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	0.033(n)	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/28/2004	ND(0.05)	ND(0.096)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	ND(0.1)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/18/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/21/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/11/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FF-MW-05	1/29/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	4/27/1999	ND(0.5)	ND(1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/5/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	7
	4/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	2.9
	7/14/2000	NA	ND(0.05)	0.14(h)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	0.84
	11/1/2000	0.27	ND(0.05)	0.25(h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	7.2
	2/16/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	0.75
	4/24/2001	0.062	ND(0.05)	0.14	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/12/2001	0.06	ND(0.05)	0.16(h)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2001	0.24	ND(0.05)	0.36(h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	0.9
	1/11/2002	ND(0.05)	NA	0.09(n)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.68(n)
	4/20/2002	ND(0.05)	0.085(n,p)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.74(n)
	6/17/2002	0.013(n)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.84(n)
	7/19/2002	ND(0.05)	0.15	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.74(n)
	11/2/2002	0.019(n)	1.8(p)	ND(0.048)	NA	0.77(n)	ND(1)	ND(1)	ND(2)	2.5
	1/14/2003	ND(0.05)	0.25	ND(0.048)	NA	0.29(n)	ND(1)	ND(1)	ND(2)	3.7

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Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FF-MW-05	4/15/2003	ND(0.05)	0.08(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.65(n)
(con't)	7/22/2003	ND(0.05)	0.18	ND(0.049)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.3(n)
	10/3/2003	ND(0.05)	0.11	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	2/29/2004	ND(0.05)	0.099(n)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.36(n)
	4/17/2004	ND(0.05)	0.04(n)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.51 (n)
	7/9/2004	ND(0.05)	0.064 (n)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.39 (n)
	10/17/2004	ND(0.05)	0.1 (n)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	0.4 (n)
	1/22/2005	NA	ND(0.05)	0.23 (h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FF-MW-06	1/29/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
	4/27/1999	ND(0.5)	ND(1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	8/5/1999	0.198	0.32	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	0.5	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	0.6	ND(0.5)
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/29/2000	0.91(d)	1.1	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	0.38(h)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	0.068	ND(0.05)	0.24(h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/16/2001	0.33	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/24/2001	ND(0.05)	ND(0.05)	0.47	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/12/2001	ND(0.05)	ND(0.5)	0.27(h)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2001	0.054	ND(0.5)	0.42(h)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/11/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.027(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/17/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/19/2002	ND(0.05)	0.038(n)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002	0.045(n)	0.83(q)	ND(0.051)	NA	ND(1)	ND(1)	0.26(n)	0.67(n)	ND(1)
	1/14/2003	0.021(n)	0.5	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/15/2003	ND(0.05)	0.1	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.059(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 32 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FF-MW-06	10/3/2003	ND(0.05)	0.045(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
(con't)	2/29/2004	ND(0.05)	ND(0.099)	ND(0.2)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/17/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/17/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
FF-MW-07/	1/30/1999	ND(0.5)	ND(1)	NA	NA	ND(0.3)	ND(0.3)	ND(0.3)	ND(0.6)	ND(5)
FF-MW07	4/27/1999	ND(0.5)	ND(1)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
Dup	8/5/1999	ND(0.05)	ND(0.05)	NA	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)
	11/10/1999	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	2/7/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/29/2000	ND(0.5)	ND(0.5)	ND(0.5)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/14/2000	NA	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2000	ND(0.05)/ ND(0.05)	ND(0.05)/ ND(0.05)	ND(0.05)/ ND(0.05)	NA/NA	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(0.5)/ ND(0.5)	ND(1.0)/ ND(1.0)	ND(0.5)/ ND(0.5)
	2/16/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	4/24/2001	ND(0.05)	ND(0.05)	ND(0.05)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	7/12/2001	ND(0.05)	ND(0.05)	0.13(h)	ND(0.5)	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	11/1/2001	ND(0.05)	ND (0.1) (k)	ND(0.1)(k)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1.0)	ND(0.5)
	1/11/2002	ND(0.05)	NA	ND(0.14)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/20/2002	ND(0.05)	0.018(n,p)	ND(0.047)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	6/17/2002	ND(0.05)	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/19/2002	0.018(n)	0.062(n)	ND(0.05)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	11/2/2002	ND(0.05)	0.027(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	0.3(n)	ND(1)
	1/14/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	4/15/2003	ND(0.05)	0.021(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/22/2003	ND(0.05)	0.023(n)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/3/2003	ND(0.05)	ND(0.096)	ND(0.048)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)

Table 1. Quarterly Groundwater Well Data Summary MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 33 of 33)

Well ID	Date Sampled	TPH-Gasoline (mg/L)	TPH-Diesel (mg/L)	TPH-JP5 (mg/L)	TPH-Motor Oil (mg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	MTBE (µg/L)
FF-MW-07	2/29/2004	ND(0.05)	ND(0.095)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
(con't)	4/17/2004	ND(0.05)	ND(0.097)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	7/9/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	10/17/2004	ND(0.05)	ND(0.094)	ND(0.19)	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
	1/22/2005	NA	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	4/16/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)
	7/9/2005	ND(0.05)	ND(0.05)	ND(0.05)	NA	ND(0.5)	ND(0.5)	ND(0.5)	ND(1)	ND(0.5)

(a) Well was off line.
(b) Pump removed from well.
(c) Dry Well.
(d) Pattern not indicative of gas or diesel.
(e) Sample analyzed by Alpha Analytical, Inc.
(f) Sample analyzed by Calscience Environmental Laboratories, Inc.
(g) MTBE or BTEX analyzed by EPA Method 8260B.
(h) Concentrations reported in the range of jet fuel may include other products such as kerosene, mineral spirits, etc.
(i) Concentration may include some undifferentiated heavier-end hydrocarbons.
(j) Concentration may include some undifferentiated lighter-end hydrocarbons.
(k) Reporting Limits were increased due to matrix interference.
(l) Reported concentration includes additional compounds uncharacteristic of common fuels and lubricants.
(m) Reporting limits were increased due to sample foaming.
(n) Value between reporting limit and method detection limit (MDL).
(o) Presence of heavier hydrocarbons in the chromatogram; however, only C6-C10 was reported and quantitated using GRO(C6-C10) calibration factor.
(p) Presence of heavier hydrocarbon fuel pattern, quantitated against Diesel (C10-C24) calibration factor.
(q) Presence of diesel-like fuel pattern, quantitated against Diesel (C10-C24) calibration factor.
(r) Presence of a lighter HC pattern, quantitated against JP5 calibration factor.
(s) Presence of diesel range hydrocarbons and unknown hydrocarbons were confirmed by a separate extraction and analysis.
(t) Presence of heavier hydrocarbon fuel pattern.
(u) Presence of a Motor Oil like fuel pattern, quantitated against Diesel (C10-C24) calibration factor.
DUP = Duplicate sample.
gpm = gallons per minute.
NA = Not analyzed.
ND = Not detected above reporting limit shown in parentheses.
NM = Not Measured.
NS = Not sampled.
R = replacement (MW-12R).
TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M.
BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8020A prior to 4/99, by EPA Method 8021B from 4/99 to 1/00, and by EPA Method 8260B as of 2/00.
MTBE = Methyl-tert-butyl ether analyzed by EPA Method 8021B from 4/99 to 1/00, and by EPA Method 8260B as of 2/00.
***** Well was off line.

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 1 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
PW-2393	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	5/2/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	No Sample Taken - pump has been removed from well																
	11/1/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/15/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (0.19)	ND (0.19)	ND (0.19)
	2/27/2004	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (0.19)	ND (0.19)	ND (0.19)
PW-2373	2/27/2004	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (0.19)	ND (0.19)	ND (0.19)
FF-MW-01	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 2 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FF-MW-01	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	6/18/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND(2)	ND(4)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.2)	NA	ND(2)	ND(0.2)	ND(0.2)
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/27/2004	ND (2.4)	ND (4.7)	ND (0.24)	ND (0.24)	ND (0.24)	ND (0.47)	ND (0.47)	ND (0.24)	ND (0.24)	ND (0.47)	ND (0.47)	ND (0.47)	ND (0.24)	NA	ND (0.24)	ND (0.24)	ND (0.24)
	1/21/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FF-MW-02	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 3 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FF-MW-02	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
(con't)	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	6/18/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND(1.9)	ND(3.8)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.38)	ND(0.38)	ND(0.19)	ND(0.19)	ND(0.38)	ND(0.38)	ND(0.38)	ND(0.19)	NA	ND(1.9)	ND(0.19)	ND(0.19)
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 4 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
	2/27/2004	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	1/21/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FF-MW-03	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 5 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FF-MW-03	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
(con't)	6/18/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND(1.9)	ND(3.9)	ND(0.19)	ND(0.19)	ND(0.19)	ND(0.39)	ND(0.39)	ND(0.19)	ND(0.19)	ND(0.39)	ND(0.39)	ND(0.39)	ND(0.19)	NA	ND(1.9)	ND(0.19)	ND(0.19)
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/28/2004	ND (2.0)	ND (3.9)	ND (0.20)	ND (0.20)	ND (0.20)	ND (0.39)	ND (0.39)	ND (0.20)	ND (0.20)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.20)	NA	ND (2.0)	ND (0.20)	ND (0.20)
	1/21/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FF-MW-04/	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
FF-MW-04Dup	4/27/1999	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (0.2)/ ND (0.2)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	NA/ NA	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
p	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 6 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FF-MW-04	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	6/18/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND(2)	ND(4)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.4)	ND(0.2)	ND(0.2)	ND(0.4)	ND(0.4)	ND(0.4)	ND(0.2)	NA	ND(2)	ND(0.2)	ND(0.2)
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/28/2004	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	1/21/2005	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	NA/ NA	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)
FF-MW-05	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 7 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FF-MW-05	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
(con't)	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/11/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	6/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 8 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
	2/29/2004	ND (2)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FF-MW-06	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/11/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 9 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FF-MW-06	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
(con't)	6/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND(2)	ND(3.9)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.39)	ND(0.39)	ND(0.2)	ND(0.2)	ND(0.39)	ND(0.39)	ND(0.39)	ND(0.2)	NA	ND(2)	ND(0.2)	ND(0.2)
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	1.9[c]	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/29/2004	ND (2)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FF-MW-07/	1/30/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
FF-MW07Dup	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)	NA / NA	ND (10) / ND (10)	ND (10) / ND (10)	ND (10) / ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 10 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FF-MW-07	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/11/2002	ND (2)	ND (4)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	6/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND(2)	ND(3.9)	ND(0.2)	ND(0.2)	ND(0.2)	ND(0.39)	ND(0.39)	ND(0.2)	ND(0.2)	ND(0.39)	ND(0.39)	ND(0.39)	ND(0.2)	NA	ND(2)	ND(0.2)	ND(0.2)
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/29/2004	ND (2)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-01	1/30/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	5/1/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/7/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 11 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FL-01	11/6/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
(con't)	2/6/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/30/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/16/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/5/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/17/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/28/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/15/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/4/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/21/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	7/21/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	11/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/18/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/28/2004	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 12 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-02	1/30/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	5/1/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/7/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/6/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/6/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/30/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/16/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/5/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/17/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/28/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/15/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/4/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/21/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 13 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FL-02	7/21/2002	ND (2)	ND (4)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
(con't)	11/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/18/2003	ND (1.9)	ND (3.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/28/2004	ND (1.9)	ND (3.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-03	1/30/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	5/1/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/7/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/6/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/6/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/30/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/16/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/5/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/17/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/28/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 14 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FL-03	7/15/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	11/4/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	7/21/2002	ND (1.9)	ND (3.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	11/3/2002	No Sample Taken - Dry Well																
	1/18/2003	ND (2)	ND (4)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	2/29/2004	ND (2.3)	ND (4.6)	ND (0.23)	ND (0.23)	ND (0.23)	ND (0.46)	ND (0.46)	ND (0.23)	ND (0.23)	ND (0.46)	ND (0.46)	ND (0.46)	ND (0.23)	NA	ND (2.3)	ND (0.23)	ND (0.23)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-04	1/30/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	5/1/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/7/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/6/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/6/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/30/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 15 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FL-04	7/16/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	11/5/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/17/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/28/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/15/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/4/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	7/21/2002	ND (2)	ND (3.9)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.39)	ND (0.39)	ND (0.2)	ND (0.2)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	11/3/2002	No Sample Taken - Dry Well																
	1/18/2003	ND (2)	ND (4.1)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.41)	ND (0.41)	ND (0.2)	ND (0.2)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	2/29/2004	ND (2)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-05 /	1/30/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
FL-05Dup	5/1/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 16 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FL-05	8/7/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
(con't)	8/26/1999 [(a)]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (2)	NA	NA
	8/26/1999 [(b)]	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/6/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/6/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/30/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/16/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/5/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/17/2001	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/28/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/15/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/4/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9) /(ND (1.9)	ND (3.8) /ND (3.8)	ND (1.9)/ ND (1.9)	ND (1.9)/ (ND (1.9)	ND (1.9)/ (ND (1.9)	ND (3.8)/ ND (3.8)	ND (3.8)/ ND (3.8)	ND (1.9)/ (ND (1.9)	ND (1.9)/ (ND (1.9)	ND (3.8)/ ND (3.8)	ND (3.8)/ ND (3.8)	ND (3.8)/ ND (3.8)	ND (1.9)/ (ND (1.9)	NA/ NA	ND (1.9)/ (ND (1.9)	ND (1.9)/ (ND (1.9)	ND (1.9)/ (ND (1.9)
	4/21/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	7/21/2002	ND (1.9)	ND (3.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 17 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
	11/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/18/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND(0.19)
	2/28/2004	ND (2.0)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2.0)	ND (0.2)	ND(0.2)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-06/FL-06Dup	1/30/1999	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1)/ ND (1)
	5/1/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/7/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/26/1999[a]	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	ND (2)	NA	NA
	8/26/1999[b]	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/6/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/6/2000	ND (1)/ ND (1)	ND (1)/ ND (1)	ND (1) /ND (1)	ND (1) /ND (1)	ND (0.2)/ ND (0.2)	ND (1) /ND (1)	ND (1) /ND (1)	ND (1) /ND (1)	ND (1) /ND (1)	ND (1) /ND (1)	ND (1) /ND (1)	ND (1) /ND (1)	ND (1) /ND (1)	NA/ NA	ND (1)/ ND (1)	ND (1) /ND (1)	ND (1) /ND (1)
	4/30/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/16/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/5/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/17/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 18 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
	4/28/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-06/FL-06Dup	7/15/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	11/4/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (2)	ND (4)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	7/21/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	11/3/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/18/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/29/2004	ND (2)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
FL-07/	1/30/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
FL-07Dup	4/28/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/7/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	2/6/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/30/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 19 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
FL-07	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/4/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	7/21/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	11/2/2002	No Sample Taken - Dry Well																
	1/17/2003	ND (1.9)/ ND (1.9)	ND (3.8)/ ND (3.8)	ND (0.19)/ ND (0.19)	ND (0.19)/ ND (0.19)	ND (0.19)/ ND (0.19)	ND (0.38)/ ND (0.38)	ND (0.38)/ ND (0.38)	ND (0.19)/ ND (0.19)	ND (0.19)/ ND (0.19)	ND (0.38)/ ND (0.38)	ND (0.38)/ ND (0.38)	ND (0.38)/ ND (0.38)	ND (0.19)/ ND (0.19)	NA / NA	ND (1.9)/ ND (1.9)	ND (0.19)/ ND (0.19)	ND (0.19)/ ND (0.19)
	2/28/2004	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
MW-12R	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 20 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
MW-12R	1/12/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
(con't)	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	6/18/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND (2)	ND (4.1)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.41)	ND (0.41)	ND (0.2)	ND (0.2)	ND (0.41)	ND (0.41)	ND (0.41)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	11/2/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/28/2004	ND (2.0)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2.0)	ND (0.2)	ND(0.2)
	1/21/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
MW-06 /	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1.5	ND (1)	NA	47	ND (1)	ND (1)
MW-06Dup	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	38	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1.4	ND (1)	NA	39	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1.0)	ND (1)	NA	5.4	ND (1)	ND (1)
	2/7/2000	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	1.7	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	1.2	ND (1)	NA	51	1.7	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	1.6	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	3.0	ND (1)	NA	4.4	ND (1)	ND (1)
	7/14/2000	ND (20)/ ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	ND (20)/ (ND (10)	NA/ NA	25/ 25	ND (20)/ (ND (10)	ND (20)/ (ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 21 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
MW-06	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	16	ND (10)	ND (10)
(con't)	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	15	ND (10)	ND (10)
	4/24/2001	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	NA/ NA	ND (10) / 12	ND (10)/ ND (10)	ND (10)/ ND (10)
	7/12/2001	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	NA/ NA	13/ 10	ND (10)/ ND (10)	ND (10)/ ND (10)
	11/1/2001	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10) / ND (10)	NA / NA	12/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)
	1/11/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	0.081(c)	ND (0.19)
	4/20/2002	ND (1.9)/ ND (1.9)	ND (3.8) /ND (3.8)	ND (1.9)/ ND (1.9)	ND (1.9)/ ND (1.9)	ND (1.9)/ ND (1.9)	ND (3.8)/ ND (3.8)	ND (3.8)/ ND (3.8)	ND (1.9)/ ND (1.9)	ND (1.9)/ ND (1.9)	ND (3.8)/ ND (3.8)	ND (3.8)/ ND (3.8)	ND (3.8)/ ND (3.8)	ND (1.9)/ ND (1.9)	NA/ NA	ND (1.9)/ ND (1.9)	ND (1.9)/ ND (1.9)	ND (1.9)/ ND (1.9)
	6/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	7/ 7.4	3.8 (c) / 4.6	ND (0.19)/ 0.28	ND (0.19)/ ND(1.9)	ND (0.19)/ 0.092(c)	ND (0.39)/ ND (0.38)	ND (0.39)/ ND (0.38)	ND (0.19)/ ND (1.9)	ND (0.19)/ ND (1.9)	ND (0.39)/ ND (0.38)	ND (0.39)/ 0.58	ND (0.39)/ ND (0.38)	ND (0.19)/ ND (0.19)	NA / NA	ND (1.9)/ ND (1.9)	ND (0.19)/ 0.084 (c)	ND (1.9)/ ND (1.9)
	11/2/2002	NA/ NA	NA/ NA	NA/N A	NA/N A	NA/N A	NA/N A	NA/N A	NA/N A	NA/N A	NA/N A	NA/N A	NA/N A	NA/N A	NA/ NA	NA/ NA	NA/N A	NA/N A
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 22 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
	2/28/2004	13 / 11	ND (4.1)/ ND (4.0)	ND (0.2)/ ND (0.2)	ND (0.2)/ ND (0.2	ND (0.2)/ ND (0.2)	ND (0.41)/ ND (0.4)	ND (0.4)/ 0.49	ND (0.2)/ ND (0.2)	ND (0.2)/ ND (0.2)	ND (0.41)/ ND (0.4)	0.19 (c)/ ND (0.4)	ND (0.41)/ ND (0.4)	ND (0.2)/ ND (0.2)	NA/ NA	ND (2.0)/ 17	ND (0.2)/ ND (0.2)	ND (0.2)/ 5
	1/22/2005	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)	NA/ NA	ND (10)/ ND (10)	ND (10)/ ND (10)	ND (10)/ ND (10)
MW-07	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/11/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 23 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
MW-07	6/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
(con't)	7/19/2002	ND (1.9)	ND (0.38)	ND(1.9)	ND(1.9)	ND(1.9)	ND(0.38)	ND(0.38)	ND(1.9)	ND(1.9)	ND(0.38)	ND(0.38)	ND(0.38)	ND(1.9)	NA	ND (1.9)	ND(1.9)	ND(1.9)
	11/2/2002	No Sample Taken - Dry Well																
	1/17/2003	ND (1.9)	ND (3.8)	ND (.19)	ND (.19)	ND (.19)	ND (0.38)	ND (0.38)	ND (.19)	ND (.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (.19)	NA	ND (1.9)	ND (.19)	ND (.19)
	2/29/2004	ND (1.9)	ND (3.9)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.19)	ND (0.19)	ND (0.39)	ND (0.39)	ND (0.39)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
MW-08	1/29/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/27/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	8/5/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	11/10/1999	ND (1)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	4/29/2000	ND (10)	ND (1)	ND (1)	ND (1)	ND (0.2)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	ND (1)	NA	ND (1)	ND (1)	ND (1)
	7/14/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	11/7/2000	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	2/16/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	4/24/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)

Table 2. Quarterly Groundwater Analytical Results for Polynuclear Aromatic Hydrocarbons, MCAS/Former Fuel Farm, MCB Camp Pendleton, California (Page 24 of 24)

Sample Identification	Sample Date	Acenaphthene	Acenaphthylene	Anthracene	Benzo[a]anthracene	Benzo[a]pyrene	Benzo[b]fluoranthene	Benzo[g,h,i]perylene	Benzo[k]fluoranthene	Chrysene	Dibenzo[a,h]anthracene	Fluoranthene	Fluorene	Indeno[1,2,3-cd]pyrene	2-Methylnaphthalene	Naphthalene	Phenanthrene	Pyrene
		Concentrations in mg/L																
MW-08	7/12/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
(con't)	11/1/2001	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)
	1/11/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	4/20/2002	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	6/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	7/19/2002	ND (2)	ND (4)	ND (0.2)	ND(0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2)	ND (0.2)	ND (0.2)
	11/2/2002	No Sample Taken - Dry Well																
	1/14/2003	ND (1.9)	ND (3.8)	ND (0.19)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.19)	ND (0.19)	ND (0.38)	ND (0.38)	ND (0.38)	ND (0.19)	NA	ND (1.9)	ND (0.19)	ND (0.19)
	2/28/2004	ND (2.0)	ND (4.0)	ND (0.2)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.2)	ND (0.2)	ND (0.4)	ND (0.4)	ND (0.4)	ND (0.2)	NA	ND (2.0)	ND (0.2)	ND (0.2)
	1/22/2005	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	ND (10)	NA	ND (10)	ND (10)	ND (10)

(a) Analyzed by Alpha Analytical, Inc. using EPA Method 8260B.
(b) Analyzed by Calscience Environmental Laboratories, Inc.
(c) Value between reporting limit and method detection limit.
NA = Not analyzed.
ND = Not detected above reporting limit in parentheses.
PNAs = Polynuclear aromatic hydrocarbons analyzed by EPA Method 8270B prior to 12/98; by EPA Method 8310 as of 12/98; and EPA Method 8270C as of 7/00.

Table 3. Quarterly Groundwater Analytical Blank Summary Results, MCAS/ Former Fuel Farm, MCB Camp Pendleton, California (Page 1 of 7)

Sample ID	Date Sampled	TPH mg/L [a]			BTEX µg/L [b]				MTBE µg/L [c]
		Gasoline	Diesel	JP-5	B	T	E	X	
TRIP BLANKS									
MCAS-TB[1]	4/27/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-TB[2]	4/27/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-TB	11/6/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
TB	2/6/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB01	4/29/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB02	4/30/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB01	5/11/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB02	9/14/2000	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB01	2/16/2001	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB01	4/24/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB01	7/12/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB02	7/12/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-TB01	1/11/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB02	1/11/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB03	1/11/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB04	1/12/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB05	1/12/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB06	1/12/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB07	1/12/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB1	11/2/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB1	1/14/2003	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB1	4/12/2003	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB2	4/14/2003	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB3	4/15/2003	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB1	7/22/2003	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB1	10/3/2003	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB2	10/4/2003	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB1	2/27/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)

Table 3. Quarterly Groundwater Analytical Blank Summary Results, MCAS/ Former Fuel Farm, MCB Camp Pendleton, California (Page 2 of 7)

Sample ID	Date Sampled	TPH mg/L [a]			BTEX µg/L [b]				MTBE µg/L [c]
		Gasoline	Diesel	JP-5	B	T	E	X	
TRIP BLANKS (Continued)									
MCAS-TB2	2/29/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB1	4/17/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB2	4/18/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB1	7/9/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB2	10/17/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB3	10/18/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB3	10/18/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-TB3	10/18/2004	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCTB1	1/21/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCTB2	1/22/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCTB1	4/16/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCTB2	4/16/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCTB1	7/9/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCTB2	7/9/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
EQUIPMENT BLANKS									
12999-Bailer Rinsate	1/29/1999	ND (0.5)	NA	NA	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.6)	ND (5)
13099-Bailer Rinsate	1/30/1999	ND (0.5)	NA	NA	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.6)	ND (5)
FF-MW03-BR	4/27/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-TW-ER	4/27/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
FL-07-BR	4/28/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
MCAS-FL-02-BR	5/1/1999	ND (0.5)	NA	NA	NA	NA	NA	NA	NA
FL-01-BR	6/20/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
EQ Blank-1	8/5/1999	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
EQ Blank-2	8/7/1999	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-ER01[d]	8/26/1999	NA	ND (0.05)	ND (0.05)	ND (0.5)[f]	0.56	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]
MCAS-ER02[d]	8/26/1999	NA	ND (0.05)	ND (0.05)	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]

Table 3. Quarterly Groundwater Analytical Blank Summary Results, MCAS/ Former Fuel Farm, MCB Camp Pendleton, California (Page 3 of 7)

Sample ID	Date Sampled	TPH mg/L [a]			BTEX µg/L [b]				MTBE µg/L [c]
		Gasoline	Diesel	JP-5	B	T	E	X	
EQUIPMENT BLANKS (Continued)									
MCAS-ER01[e]	8/26/1999	NA	0.084	ND (1.0)	ND (0.5)	0.61	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-ER02[e]	8/26/1999	NA	ND (0.05)	ND (1.0)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-ER01[d]	9/18/1999	NA	ND (0.05)	ND (0.05)	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]
MCAS-ER0[e]	9/18/1999	NA	ND (0.5)	ND (0.5)	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]	ND (0.5)[f]
MCAS-ER01	11/10/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-ER02	11/6/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
ER01	2/6/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-ER01	4/29/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER02	4/30/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER01	7/14/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER02	7/16/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER02	11/1/2000	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER01	11/5/2000	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-ER01	2/16/2001	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER02	2/17/2001	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER01	7/12/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER01	4/24/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER02	4/28/2001	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER01	11/4/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-ER03	11/4/2001	NA	ND (0.05)	ND 0.05	NA	NA	NA	NA	NA
MCAS-ER01	1/11/2002	ND (0.05)	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	0.66[m]
MCAS-ER02	1/12/2002	ND (0.05)	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	0.48[m]
MCAS-ER01	4/20/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-ER02	4/21/2002	ND(0.05)	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-ER01	6/18/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-QCEB	7/19/2002	NA	0.043[m]	ND(0.05)	NA	NA	NA	NA	NA

Table 3. Quarterly Groundwater Analytical Blank Summary Results, MCAS/ Former Fuel Farm, MCB Camp Pendleton, California (Page 4 of 7)

Sample ID	Date Sampled	TPH mg/L [a]			BTEX µg/L [b]				MTBE µg/L [c]
		Gasoline	Diesel	JP-5	B	T	E	X	
EQUIPMENT BLANKS (Continued)									
MCAS-QCEB1	7/21/2002	NA	0.041[m]	ND(0.047)	NA	NA	NA	NA	NA
MCAS-QCEB1	11/2/2002	NA	0.024[m]	ND(0.047)	NA	NA	NA	NA	NA
MCAS-QCEB2	11/3/2002	NA	ND(0.094)	ND(0.047)	NA	NA	NA	NA	NA
MCAS-QCEB1	1/14/2003	NA	ND (0.094)	ND (0.047)	NA	NA	NA	NA	NA
MCAS-QCEB2	1/18/2003	NA	ND (0.096)	ND (0.048)	NA	NA	NA	NA	NA
MCAS-QCEB1	4/12/2003	NA	0.027[m]	ND (0.048)	NA	NA	NA	NA	NA
MCAS-QCEB2	4/14/2003	NA	0.034[m]	ND (0.05)	NA	NA	NA	NA	NA
MCAS-QCEB1	7/22/2003	NA	0.039[m]	ND (0.049)	NA	NA	NA	NA	NA
MCAS-QCEB1	10/3/2003	NA	0.022[m]	ND (0.048)	NA	NA	NA	NA	NA
MCAS-QCEB2	10/4/2003	NA	ND (0.095)	ND (0.048)	NA	NA	NA	NA	NA
MCAS-QCEB1	2/28/2004	NA	ND(0.1)	ND(0.2)	NA	NA	NA	NA	NA
MCAS-QCEB2	2/29/2004	NA	ND(0.13)	ND(0.23)	NA	NA	NA	NA	NA
MCAS-QCEB1	4/17/2004	NA	ND(0.1)	ND(0.2)	NA	NA	NA	NA	NA
MCAS-QCEB2	4/18/2004	NA	ND(0.13)	ND(0.23)	NA	NA	NA	NA	NA
MCAS-QCEB1	7/9/2004	NA	ND(0.094)	ND(0.19)	NA	NA	NA	NA	NA
MCAS-QCEB2	7/10/2004	NA	ND(0.094)	ND(0.19)	NA	NA	NA	NA	NA
MCAS-QCEB1	10/16/2004	NA	ND(0.094)	ND(0.19)	NA	NA	NA	NA	NA
MCAS-QCEB2	10/17/2004	NA	ND(0.094)	ND(0.19)	NA	NA	NA	NA	NA
MCAS-QCEB3	10/18/2004	NA	ND(0.094)	ND(0.19)	NA	NA	NA	NA	NA
MCAS-QCEB1	1/21/2005	NA	ND(0.05)	ND(0.05)	NA	NA	NA	NA	NA
MCAS-QCEB2	1/22/2005	NA	ND(0.10)	ND(0.10)	NA	NA	NA	NA	NA
MCAS-QCEB1	4/16/2005	NA	ND(0.05)	ND(0.05)	NA	NA	NA	NA	NA
MCAS-QCEB2	4/17/2005	NA	ND(0.05)	ND(0.05)	NA	NA	NA	NA	NA

Table 3. Quarterly Groundwater Analytical Blank Summary Results, MCAS/ Former Fuel Farm, MCB Camp Pendleton, California (Page 5 of 7)

Sample ID	Date Sampled	TPH mg/L [a]			BTEX µg/L [b]				MTBE µg/L [c]
		Gasoline	Diesel	JP-5	B	T	E	X	
EQUIPMENT BLANKS (Continued)									
MCAS-QCEB1	7/9/2005	NA	ND(0.05)	ND(0.05)	NA	NA	NA	NA	NA
MCAS-QCEB2	7/11/2005	NA	ND(0.05)	ND(0.05)	NA	NA	NA	NA	NA
FIELD BLANKS									
12999-Field Blank	1/29/1999	ND (0.5)	NA	NA	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.6)	ND (5)
13099-Field Blank	1/30/1999	ND (0.5)	NA	NA	ND (0.3)	ND (0.3)	ND (0.3)	ND (0.6)	ND (5)
FF-MW03-FB	4/27/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
FL-07-FB	4/28/1999	ND (0.5)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	NA
MCAS-FL-02-FB	5/1/1999	ND (0.5)	NA	NA	NA	NA	NA	NA	NA
Field Blank-1	8/5/1999	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
Field Blank-2	8/7/1999	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-FB[e]	8/26/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-FB01[d]	8/26/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-FB01[d]	9/18/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-FB[e]	9/18/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-FB-01	11/10/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-FB-02	11/6/1999	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)	ND (0.5)
MCAS-FB01	2/6/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB01	4/29/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB02	4/30/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB01	7/14/2000	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB02	11/1/2000	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB01	2/16/2001	ND (0.05)	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB01	4/24/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB01	7/12/2001	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1.0)	ND (0.5)
MCAS-FB01	1/11/2002	ND (0.05)	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-FB02	1/12/2002	ND(0.0066)[m]	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-FB01	4/20/2002	NA	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)

Table 3. Quarterly Groundwater Analytical Blank Summary Results, MCAS/ Former Fuel Farm, MCB Camp Pendleton, California (Page 6 of 7)

Sample ID	Date Sampled	TPH mg/L [(a)]			BTEX µg/L [(b)]				MTBE µg/L [(c)]
		Gasoline	Diesel	JP-5	B	T	E	X	
FIELD BLANKS (Continued)									
MCAS-FB02	4/21/2002	ND(0.05)	NA	NA	ND (1)	ND (1)	ND (1)	ND (2)	ND (1)
MCAS-FB01	6/17/2002	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
MCAS-FB02	6/18/2002	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
MCAS-QCFB1	11/2/2002	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND(2)	ND(1)
MCAS-QCFB1	1/14/2003	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-QCFB1	4/12/2003	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-QCFB2	4/14/2003	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-QCFB3	4/15/2003	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-QCFB1	7/22/2003	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-QCFB1	10/3/2003	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-QCFB2	10/4/2003	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB01	2/29/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB02	2/29/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB01	4/17/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB02	4/18/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB01	7/9/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB02	7/10/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB01	10/16/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB02	10/17/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-FB03	10/18/2004	NA	NA	NA	ND(1)	ND(1)	ND(1)	ND (2)	ND(1)
MCAS-QCFB01	1/21/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCFB02	1/22/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCFB01	4/16/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCFB02	4/17/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)

Table 3. Quarterly Groundwater Analytical Blank Summary Results, MCAS/ Former Fuel Farm, MCB Camp Pendleton, California (Page 7 of 7)

Sample ID	Date Sampled	TPH mg/L [(a)]			BTEX µg/L [(b)]				MTBE µg/L [(c)]
		Gasoline	Diesel	JP-5	B	T	E	X	
FIELD BLANKS (Continued)									
MCAS-QCFB01	7/9/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)
MCAS-QCFB02	7/11/2005	NA	NA	NA	ND (0.5)	ND (0.5)	ND (0.5)	ND (1)	ND (0.5)

***** Pattern not indicative of gas or diesel.
(a) TPH = Total petroleum hydrocarbons analyzed by EPA Method 8015M.
(b) BTEX = Benzene, toluene, ethylbenzene, and total xylenes analyzed by EPA Method 8020A prior to 4/99, by EPA Method 8021B as of 4/99, and by EPA Method 8260B as of 2/00.
(c) MTBE = Methyl-*tert*-butyl ether analyzed by EPA Method 8020 prior to 12/98, by EPA Method 8020A as of 12/98, by EPA Method 8021B as of 4/99, and by EPA Method 8260B as of 2/00.
(d) Analyzed by Alpha Analytical, Inc.
(e) Analyzed by Calscience Environmental Laboratories, Inc.
(f) MTBE and BTEX analyzed by EPA Method 8260B.
(g) Concentrations reported in the range of jet fuel may include other products such as kerosene, mineral spirits, etc.
(m) Value between R.L. and MDL.
(1) Laboratory ID 99-04-0830
(2) Laboratory ID 99-04-0831
NA = Not analyzed.
ND = Not detected above reporting limit shown in parentheses.

APPENDIX A

Field Data Collection Log Sheets

1st Quarter

Field Data Collection Log Sheets

Subsurface Investigation
Well Sampling Forms

Site Number: MCAS

Monitoring Well ID's: FL-01, FL-02, FL-03, FL-04, FL-05, FL-06, FL-07, MW-06, MW-07, MW-08, MW-12R, FF-MW-01, FF-MW-02, FF-MW-03, FF-MW-04, FF-MW-05, FF-MW-06, FF-MW-07

Well Purge Log

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Well Development / Purge Log

Location: MCAS	Well No.: FL-01	Date: 22 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 4	OVA 128	☒
HORIBA ORP 174908	☐	WATER LEVEL	☐

Personnel: M. WOOLFE, G. HEADINGTON

EXPOSURE MONITORING
Background: 0.3 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'			
Static Water Level: 4.65'	Depth to Product:	Pump Type: Peristaltic ☐	Submersible ☐
Water Column:	Product Layer:	Liquid Ring ☐	Bladder Pump ☒
Well Casing Diameter: 2"		Pump Rate: 226 cc/min	
Borehole Diameter:	Multiplier:	Purge Start Time: 0916 HRS	
Low Flow Method ☒		Purge Stop Time: 0940 HRS	
Minimal Purge Sampling ☐		Total volume Purged: 4.2 Liters Gal plus volume collected = 5.44 Liters	

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
0921	4.80'		7.58	1.85	0.0	0.39	20.3	0.08	297	
0925	4.80'		7.66	1.85	0.0	0.22	20.7	0.08	271	
0928	4.80'		7.67	1.85	0.0	0.17	20.9	0.08	263	temp rising because of
0931	4.80'		7.69	1.85	0.0	0.14	21.0	0.08	251	sunny hitting flow cell
										80% Recharge Level:
										Sample Collected: 0935 HRS

Field Team Leader Signature [signature]

MCAS-QCFB2 — 0850 HRS
MCAS-QCEB2 — 0905 HRS

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Well Development / Purge Log

Location: MCAS	Well No.:FL-02	Date: 22 Jan 05	Project No.: G4861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 161028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☒
HORIBA ORP 174908	☒	WATER LEVEL	☐

Personnel: M. WOOLFE, G. HEADINGTON

EXPOSURE MONITORING
Background: 0.3 PPM
Reading: 0.6 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 4.52 Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 2"

Borehole Diameter: Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Criteria used to stop purging / development: Dry Well ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 371 cc/min

Purge Start Time: 0959 HRS

Purge Stop Time: 1018 HRS

Total volume Purged: 5.8 Liter ~~Gal~~ GH plus volume collected = 7.04 Liters

Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1003	4.55'		6.98	1.29	0.0	1.34	20.5	0.05	~~0.05~~ 254 GH	
1006	4.55'		7.07	1.30	0.0	0.38	20.7	0.05	254	
1009	4.55'		7.09	1.30	0.0	0.41	20.8	0.05	254	
1012	4.55'		7.08	1.30	0.0	0.35	21.0	0.05	252	
										80% Recharge Level:
										Sample Collected: 1015 HRS

Field Team Leader Signature Greg Headington

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Well Development / Purge Log

Location: MCAS	Well No.: FL-03	Date: 22 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☒
HORIBA ORP 174908	☒	WATER LEVEL	☐

Personnel:
M. Woolfe
G. Headington

EXPOSURE MONITORING
Background: 0.3 PPM
Reading: 0.5 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 6.75' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 2"

Pump Rate: 138 cc/min

Borehole Diameter: Multiplier:

Purge Start Time: 1036 HRS

Low Flow Method ☒

Purge Stop Time: 1104 HRS

Minimal Purge Sampling ☐

Total volume Purged: 2.9 Liter Gal plus volume collected = 4.14 Liter

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1043	6.75'		6.65	1.38	0.0	0.83	19.7	0.06	252	
1048	6.75'		6.68	1.38	0.0	0.84	19.8	0.06	250	
1051	6.75'		6.68	1.38	0.0	0.79	19.8	0.06	248	
										80% Recharge Level:
										Sample Collected: 1055 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.: FL-04	Date: 22JAN05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☑	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☑ S	OVA 128	☑
HORIBA ORP 174908	☑	WATER LEVEL	☐

Personnel: M. Woolfe, G. Headington

EXPOSURE MONITORING
Background: 0.2 PPM
Reading: 0.4 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 6.69' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 2"

Pump Rate: 439 cc/min

Borehole Diameter: Multiplier:

Purge Start Time: 1131 HRS

Low Flow Method ☒

Purge Stop Time: 1150 HRS

Minimal Purge Sampling ☐

Total volume Purged: 7.1 Liter Gal gws volume collected = 8.34 Liter

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1134	6.70'		7.11	1.42	0.0	1.17	21.2	0.06	224	
1137	6.70'		7.07	1.42	0.0	0.75	21.1	0.06	224	
1140	6.70'		7.07	1.42	0.0	0.63	21.0	0.06	222	
1143	6.70'		7.08	1.42	0.0	0.56	20.9	0.06	220	
										80% Recharge Level:
										Sample Collected: 1145 HRS

Field Team Leader Signature _____

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Well Development / Purge Log

Location: MCAS	Well No.: FL-05	Date: 22 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ Z	OVA 128	☒
~~HORIBA~~ OAKTON ORP 96588	☒	WATER LEVEL	☐

Personnel: Woolfe, Headington G.

EXPOSURE MONITORING
Background: 0.2 PPM
Reading: 0.4 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 150.00'

Static Water Level: 4.95' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 150 cc/min 215 cc/min

Borehole Diameter: Multiplier:

Purge Start Time: 0857 HRS

Low Flow Method ☒

Purge Stop Time: 0937 HRS

Minimal Purge Sampling ☐

Total volume Purged: 4.3 L ~~Gal.~~ Includes Sample vol.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
0908	4.95	—	7.07	1.13	0	0.40	19.3	0.05	-149.8	
0912	4.95	—	7.11	1.14	0	0.00	19.4	0.05	-174.6	
0916	4.95	—	7.13	1.14	0	0.00	19.7	0.05	-186.7	
0920	4.95	—	7.13	1.14	0	0.00	19.3	0.05	-187.5	
0924	4.95	—	7.12	1.14	0	0.00	19.8	0.05	-186.5	
										80% Recharge Level:
										Sample Collected: 0927 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.: FL-06	Date: 22 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 2	OVA 128	☒
~~HORIBA~~ OAKTON ORP 96588	☒	WATER LEVEL	☐

Personnel: Woolfe, Hemmington

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 150.00'

Static Water Level: 8.25' Depth to Product: —

Water Column: Product Layer: —

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 150 cc/min 307 cc/min

Borehole Diameter: Multiplier:

Purge Start Time: 1035 HRS

Low Flow Method ☒

Purge Stop Time: 1102 HRS

Minimal Purge Sampling ☐

Total volume Purged: 8.3 L. ~~Gal~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1036	8.25'	—	7.46	.947	0	0.61	20.1	0.04	-274	
1040	8.25	—	7.37	.991	0	0.00	20.1	0.04	-282	
1044	8.25	—	7.35	1.05	0	0.00	20.2	0.04	-264	
1048	8.25	—	7.35	1.05	0	0.00	20.2	0.04	-264	
1052	8.25	—	7.35	1.05	0	0.00	20.3	0.04	-264	
										80% Recharge Level:
										Sample Collected: 1055 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.:FL-07	Date: 22 Jan 05	Project No.: B4861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒	OVA 128	☒
~~HORIBA~~ OAKTON ORP 96588	☒	WATER LEVEL	☐

Personnel: Woolfe, Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.40'

Static Water Level: 11.69' Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 2"

Borehole Diameter: Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 308 cc/min

Purge Start Time: 1546 HRS

Purge Stop Time: 1603 HRS

Total volume Purged: 4.0 Liter Gal. plus volume collected = 5.24 liters

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1548	11.70'		6.79	1.42	0.0	1.00	20.0	0.06	29.7	
1550	11.70'		6.74	1.42	0.0	0.43	19.8	0.06	29.9	
1553	11.70'		6.72	1.42	0.0	0.44	19.7	0.06	26.7	
1556	11.70'		6.71	1.42	0.0	0.38	19.7	0.06	24.9	
1600	Sample									
										80% Recharge Level:
										Sample Collected: 1600 HRS

Field Team Leader Signature Dwy Hunt

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Well Development / Purge Log

Location: MCAS	Well No.: MW-06	Date: 22 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☒
HORIBA ORP 174908	☒	WATER LEVEL	☐

Personnel: M. Woolfe, G. Headington

EXPOSURE MONITORING
Background: 0.5 PPM
Reading: 0.9 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 18.00'

Static Water Level: 5.43' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bladder Pump ☒ dedicated

Well Casing Diameter: 2"

Pump Rate: 195 cc/min

Borehole Diameter: Multiplier:

Purge Start Time: 1438 HRS

Low Flow Method ☒

Purge Stop Time: 1510 HRS

Minimal Purge Sampling ☐

Total volume Purged: 5 Liter Gal. plus volume collected = 6.24 Liter

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc) 5.52'	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1442	~~5.47'~~	—	7.12	2.37	0.0	0.30	20.0	0.11	-121.6	
1445	5.53'	—	7.16	2.35	1.0	0.08	19.9	0.11	-119.5	
1448	5.56'	—	7.18	2.35	1.0	0.06	20.0	0.11	-121.9	
1451	5.57'	—	7.18	2.36	1.0	0.05	19.9	0.11	-121.3	
										80% Recharge Level:
										Sample Collected: 1455 HRS

Field Team Leader Signature: Guy Headington

MCAS-MW06D – collected 1455 HRS

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Well Development / Purge Log

Location: MCAS	Well No.:MW-07	Date: 22JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ S	OVA 128	☒
HORIBA ORP 174908	☒	WATER LEVEL	☐

Personnel: M. Woolfe, G. Heddington

EXPOSURE MONITORING
Background: 0.7 PPM
Reading: 0.5 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 13.50'	
Static Water Level: 6.50'	Depth to Product:
Water Column:	Product Layer:
Well Casing Diameter: 2"	
Borehole Diameter:	Multiplier:
Low Flow Method ☒	
Minimal Purge Sampling ☐	

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 265 cc/min
Purge Start Time: 1218 HRS
Purge Stop Time: 1237 HRS
Total volume Purged: 3.8 Liter Gal. plus volume collected = 5.04 Liters

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☐

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1221	6.59'		7.42	2.88	0.0	0.31	20.8	0.14	240	
1224	6.62'		7.43	2.87	0.0	0.15	20.6	0.14	230	
1228	6.64'		7.44	2.86	0.0	0.13	20.6	0.14	227	
										80% Recharge Level:
										Sample Collected: 1230 HRS

Field Team Leader Signature: Doug Heddington

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Well Development / Purge Log

Location: MCAS	Well No.:MW-08	Date: 22JAN05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE OAKTON	☒ Z	OVA 128	☒
~~HORIBA~~ ORP 96588	☐	WATER LEVEL	☐

Personnel: Woolfe, Headington, Go

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 14.50'

Static Water Level: 7.02 | Depth to Product:

Water Column: | Product Layer:

Pump Type: Peristaltic ☐ Liquid Ring ☐ Submersible ☐ Bladder Pump ☒

Well Casing Diameter: 2"

Pump Rate: 100 cc/min / 286 cc/min

Borehole Diameter: | Multiplier:

Purge Start Time: 1218 HRS

Low Flow Method ☒

Purge Stop Time: 1240 HRS

Minimal Purge Sampling ☒

Total volume Purged: 6.3L ~~Gal~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☐

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1223	7.25	—	6.88	2.47	0	2.27	20.8	0.11	-30.2	water level in well Dropped
1227	7.35	—	6.93	2.47	0	0.37	20.8	0.11	-48.4	Below .3Ths of a FT
1231	7.40	—	6.93	2.47	0	0.06	20.8	0.11	-53.3	Sample Collected
										80% Recharge Level:
										Sample Collected: 1235 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.: MW-012R	Date: 21 JAN 05	Project No.: G4861	Page 1 of 1

Equipment:

HORIBA U 10	☑	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☑ S	OVA 128	☑
HORIBA ORP 96588	☑	WATER LEVEL	☐

Personnel: M. WOOLFE, G. Headington

EXPOSURE MONITORING
Background: 0.2 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☑
Fair ☐
Poor ☐

Total Well Depth: 13.35'

Static Water Level: 2.89' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 426 cc/min

Borehole Diameter: Multiplier:

Purge Start Time: 1533 HRS

Low Flow Method ☒

Purge Stop Time: 1550 HRS

Minimal Purge Sampling ☐

Total volume Purged: 6 Liters plus Gal. volume collected = 7.24 LITERS

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
										Flooded around well / water running into vault from under SLAB.
1535	2.93'		7.75	0.352	0.0	0.26	15.3	0.01	214	
1538	3.02'		7.65	0.333	0.0	0.11	15.2	0.01	210	
1542	3.07'		7.70	0.316	0.0	0.07	15.1	0.01	206	
										80% Recharge Level:
										Sample Collected: 1545 HRS

Field Team Leader Signature _____

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Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-01	Date: 21 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐ X OAKTON ORP
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 2	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Woolfe, Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.92'

Static Water Level: 5.52 | Depth to Product:

Water Column: | Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 250 cc/min / 314 cc/min

Borehole Diameter: | Multiplier:

Purge Start Time: 1312 HRS

Low Flow Method ☒

Purge Stop Time: 1342 HRS

Minimal Purge Sampling ☐

Total volume Purged: 9.4 L ~~Gal.~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1319	5.72	—	7.23	1.66	0	0.77	20.3	0.07	257	
1323	5.72	—	7.29	1.66	0	0.59	20.2	0.07	255	
1327	5.73	—	7.32	1.66	0	0.59	20.1	0.07	253	
1331	5.74	—	7.34	1.66	0	0.51	20.0	0.07	251	
										80% Recharge Level:
										Sample Collected: 1335 HRS

Field Team Leader Signature: Guy Headington

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Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-02	Date: 21 Jan 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐ Oakton orp X
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ S	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Total Well Depth: 19.75'

Personnel: Woolfe, Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Static Water Level: 4.50 | Depth to Product: —
Water Column: | Product Layer: —
Well Casing Diameter: 4"
Borehole Diameter: | Multiplier:
Low Flow Method ☒
Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒
Pump Rate: 250 cc/min / 452 cc/min
Purge Start Time: 1424 HRS
Purge Stop Time: 1449 HRS
Total volume Purged: 11.3 L ~~Gal.~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1426	4.50	—	7.82	3.49	0	0.41	19.4	0.17	229	
1430	4.50	—	7.80	3.50	0	0.27	19.3	0.17	227	
1434	4.53	—	7.81	3.50	0	0.23	19.3	0.17	225	
1438	4.55	—	7.82	3.50	0	0.22	19.3	0.17	225	
										80% Recharge Level:
										Sample Collected: 1443 HRS

Field Team Leader Signature: Guy Headington

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Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-03	Date: 21 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10 ☒ — HORIBA U22 ☐
S/N: 901065 — S/N:
FID/PHOTO VAC ☐ — ORION 290A ☐
INTERFACE PROBE ☒ 6 — OVA 128 ☑
~~HORIBA~~ OAKTON ORP 174908 ☒ — WATER LEVEL ☐

Personnel: M. WOOLFE, G. HEADINGTON

EXPOSURE MONITORING
Background: 0.2 PPM
Reading: 0.4 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.78'
Static Water Level: 4.20' — Depth to Product:
Water Column: — Product Layer:
Well Casing Diameter: 4" — Borehole Diameter: — Multiplier:
Low Flow Method ☒
Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ — Submersible ☐ — Liquid Ring ☐ — Bladder Pump ☒
Pump Rate: 125 cc/min
Purge Start Time: 1437 HRS
Purge Stop Time: 1507 HRS
Total volume Purged: 2.5 LITERS Gal plus volume collected = 3.74 LITERS
Criteria used to stop purging / development: Dry Well ☐ — Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1441	4.39'		6.85	6.38	0.0	0.23	21.2	0.34	125.7	
1446	4.35'		6.87	6.44	0.0	0.00	21.0	0.34	95.5	90cc/min
1449	4.36'		6.87	6.44	0.0	0.01	21.0	0.34	87.1	
1452	4.37'		6.88	6.44	0.0	0.01	21.0	0.34	75.6	
										80% Recharge Level:
										Sample Collected: 1454 HRS

Field Team Leader Signature: [signature]

MCAS-QCFB1 – 1309 HRS
MCAS-QCEB1 – 1312 HRS

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Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-04	Date: 21 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☑
~~HORIBA~~ OAKTON ORP 174908	☒	WATER LEVEL	☐

Personnel: M. WOOLFE, G. HEADINGTON

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.86'

Static Water Level: 3.78' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 142 cc/min

Borehole Diameter: Multiplier:

Purge Start Time: 1333 HRS

Low Flow Method ☒

Purge Stop Time: 1410 HRS

Minimal Purge Sampling ☐

Total volume Purged: 4 Liters Gal. plus volume collected = 5.24 liters

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1337	4.02'		7.04	4.65	0.0	0.44	20.2	0.24	168.5	
1340	4.02'		7.05	4.66	0.0	0.28	20.1	0.24	168.1	
1344	4.02'		7.06	4.66	0.0	0.32	20.1	0.24	164.5	
										80% Recharge Level:
										Sample Collected: 1346 HRS

Field Team Leader Signature

Collected FF04D – 1346 HRS
MCAS-FF04MS
MCAS-FF04MSD > PNA (1346 HRS

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Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-05	Date: 22 JAN 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒	OVA 128	☒
~~HORIBA~~ OAKTON ORP 96588	☒	WATER LEVEL	☐

Personnel: Woolfe, Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.42'

Static Water Level: 6.80' Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 100 cc/min / 228 cc/min

Purge Start Time: 1348 HRS

Purge Stop Time: 1420 HRS

Total volume Purged: 7.3 L ~~Gal~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1350	6.90	—	6.81	2.75	0	1.31	21.1	0.13	-67.8	
DPW 6.95 → 1354	6.85	—	6.80	2.78	0	0.76	21.1	0.13	-79.0	
1358	7.00	—	6.78	2.79	0	0.05	21.1	0.13	-92.0	
1402	7.00	—	6.77	2.79	0	0.24	21.1	0.13	-100.1	
1406	7.00	—	6.77	2.79	0	0.17	21.1	0.13	-103.0	
1410	7.00	—	6.77	2.79	0	0.12	21.1	0.13	-105.6	
										80% Recharge Level:
										Sample Collected: 1415 HRS

Field Team Leader Signature Dwy Headington

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MCB Camp Pendleton
Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-06	Date: 22 JAN 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ S	OVA 128	☒
~~HORIBA~~ OAKTON ORP 174908	☒	WATER LEVEL	☐

Personnel: M. Woolfe, G. Headington

EXPOSURE MONITORING		WELL CONDITION	
Background: 0.2	PPM	Good	☒
Reading: 0.2	PPM	Fair	☐
		Poor	☐

Total Well Depth: 19.10'			
Static Water Level: 5.69'	Depth to Product:	Pump Type: Peristaltic ☐	Submersible ☐
Water Column:	Product Layer:	Liquid Ring ☐	Bladder Pump ☒
Well Casing Diameter: 4"		Pump Rate: 281 cc/min	
Borehole Diameter:	Multiplier:	Purge Start Time: 1353 HRS	
Low Flow Method ☒		Purge Stop Time: 1412 HRS	
Minimal Purge Sampling ☐		Total volume Purged: 4.1 Liter Gal. plus volume collected = 5.34 liters	
Criteria used to stop purging / development: Dry Well ☐		Parameter Stabilization ☒	

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1358	5.79'		7.53	2.73	0.0	0.24	20.7	0.13	222	
1401	5.79'		7.55	2.74	0.0	0.20	20.6	0.13	218	
1404	5.79'		7.57	2.74	0.0	0.17	20.5	0.13	218	
										80% Recharge Level:
										Sample Collected: 1405 HRS

Field Team Leader Signature: Dwy Headington

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Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-07	Date: 22 Jan 05	Project No.: 64861	Page 1 of 1

Equipment:

HORIBA U 10 ☒ S/N: 901065
HORIBA U22 ☐ S/N:
FID/PHOTO VAC ☐
ORION 290A ☐
INTERFACE PROBE ☒ 4
OVA 128 ☒
~~HORIBA~~ OAKTON ORP 96588 ☐
WATER LEVEL ☐

Personnel: Woolfe, Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.93'

Static Water Level: 5.50
Depth to Product:
Water Column:
Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 100 cc/min // 246 cc/min

Borehole Diameter:
Multiplier:

Purge Start Time: 1444 HRS

Low Flow Method ☒

Purge Stop Time: 1510 HRS

Minimal Purge Sampling ☐

Total volume Purged: 6.4 L ~~Gal.~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1447	5.51	—	6.86	2.09	0	0.60	21.0	0.10	11.4	
1451	5.55	—	6.85	2.09	0	0.00	21.0	0.10	5.0	
1455	5.55	—	6.85	2.09	0	0.00	21.1	0.10	4.8	
1459	5.55	—	6.85	2.10	0	0.00	21.1	0.10	5.1	
										80% Recharge Level:
										Sample Collected: 1505 HRS

Field Team Leader Signature [signature]

2nd Quarter

Field Data Collection Log Sheets

Subsurface Investigation
Well Sampling Forms

Site Number: MCAS

Monitoring Well ID's: FL-01, FL-02, FL-03, FL-04, FL-05
FL-06, FL-07, MW-06, MW-07, MW-08, MW-12R
FF-MW-01, FF-MW-02, FF-MW-03, FF-MW-04, FF-MW-05
FF-MW-06, FF-MW-07

Well Purge Log

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Well Development / Purge Log

Location: MCAS	Well No.:FL-01	Date: 16APR05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 ☒ — S/N: 901065
- HORIBA U22 ☐ — S/N:
- Oakton ORP ☒ #174908
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ☒ 8
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Total Well Depth: 15.50'

Personnel: Mike Woolfe, Greg Healy

EXPOSURE MONITORING
Background: 0.2 PPM
Reading: 0.5 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Static Water Level: 4.05'
Depth to Product:
Water Column: 11.45
Product Layer:
Well Casing Diameter: 2" — 1 vol = 14.9 GAL / 1.5 vol = 22.3 g
Borehole Diameter:
Multiplier: X1.3
Low Flow Method ☐
HIGH FLOW ☒
Minimal Purge Sampling ☐

Pump Type: Peristaltic ☒ / Bailer
Submersible ☐
Liquid Ring ☐
Bladder Pump ☐
Pump Rate: 1 GPM
Purge Start Time: ~~1025~~ 1024 HRS 1025 HRS
Purge Stop Time: 1047 HRS
Total volume Purged: 23 Gal. ~~missed total volume~~ DH
Criteria used to stop purging / development: Dry Well ☐
Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1035	6.80'	12.4	7.68	1.78	0.0	0.0	21.3	0.08	176.7	
1039	6.80'	15.0	7.67	1.75	0.0	0.0	21.3	0.08	167.4	
1046	6.84'	23.0	7.67	1.72	0.0	0.0	21.3	0.08	151.3	
1050	4.28'									
										80% Recharge Level:
										Sample Collected: 1052 HRS

Field Team Leader Signature: Greg Healy

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Well Development / Purge Log

Location: MCAS	Well No.:FL-02	Date: 16APR05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	BACKUP ORP ☒ #174908
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 7	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: MIKE WOOLFE, GREG HEADINGTON

EXPOSURE MONITORING		WELL CONDITION	
Background: 0.1	PPM	Good	☒
Reading: 0.1	PPM	Fair	☐
		Poor	☐

Total Well Depth: 15.50'			
Static Water Level: 3.86'	Depth to Product:	Pump Type: Peristaltic ☒ BAILER	Submersible ☐
Water Column: 11.64'	Product Layer:	Liquid Ring ☐	Bladder Pump ☐
Well Casing Diameter: 2"	1 vol = 15.1 GAL / 1½ vol = 22.7 GAL	Pump Rate: 0.82 GPM	
Borehole Diameter:	Multiplier: 1.3	Purge Start Time: 1117 HRS	
Low Flow Method ☐		Purge Stop Time: 1145 HRS	
Minimal Purge Sampling ☐	HIGH FLOW ☒	Total volume Purged: 23.0 Gal.	
Criteria used to stop purging / development: Dry Well ☐		Parameter Stabilization ☒	

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1137	4.24'	15.2	7.01	1.28	78	0.00	20.7	0.05	172.2	
1143	4.20'	23.0	7.08	1.29	109	0.00	20.7	0.05	158.3	
										80% Recharge Level:
										Sample Collected: 1147 HRS

Field Team Leader Signature _____

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Well Development / Purge Log

Location: MCAS	Well No.:FL-03	Date: 16APR05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	OAKton ORP #174908
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 7	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: MIKE WOOLFE
GREG HEADINGTON

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 5.72'
Depth to Product:
Water Column: 9.78'
Product Layer:
Well Casing Diameter: 2" 1 volume = 12.7 GAL / 1½ vol = 19.1 GAL
Borehole Diameter:
Multiplier: 1.3
Low Flow Method ☐
Minimal Purge Sampling ☐ High Flow ☒
Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Pump Type: Peristaltic ☒ Bailer Submersible ☐
Liquid Ring ☐ Bladder Pump ☐
Pump Rate: 2.0 GPM
Purge Start Time: ~~1214~~ HRS 1215 HRS
Purge Stop Time: 1225 HRS
Total volume Purged: Gal.

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1221	6.01'	13.0	6.77	1.37	0.0	0.0	20.3	0.06	214	
1224	6.02'	20.0	6.76	1.37	0.0	0.0	20.2	0.06	206	
										80% Recharge Level:
										Sample Collected: 1228 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.:FL-04	Date: 16APR05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	OAKton ORP #174908
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: MIKE Woolfe, GREG HEADINGTON

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.4 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 5.59' Depth to Product:

Water Column: 9.91' Product Layer:

Well Casing Diameter: 2" 1 vol = 12.9 GAL / 1½ vol = 19.3 GAL

Borehole Diameter: Multiplier: 1.3

Low Flow Method ☐ 2 vol = 26 GAL

Minimal Purge Sampling ☐ HIGH FLOW ☒

Criteria used to stop purging / development: Dry Well ☐

Pump Type: Peristaltic ☒ Bailer; Liquid Ring ☐; Submersible ☐; Bladder Pump ☐

Pump Rate: 1.45 GPM

Purge Start Time: 1259 HRS

Purge Stop Time: 1317 HRS

Total volume Purged: 26.0 Gal.

Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1307	5.67'	13.5	7.06	1.01	0.0	0.0	19.8	0.06	209	
1312	5.67'	19.5	7.03	1.35	49.0	0.0	19.8	0.06	198.6	
1316	5.67'	26.0	7.02	1.36	53.0	0.0	19.8	0.06	189.4	
										80% Recharge Level:
										Sample Collected: 1318 HRS

Field Team Leader Signature _____

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Well Development / Purge Log

Location: MCAS	Well No.:FL-05	Date: 16 APr 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

OAKTON ORP 96588

Personnel: Woolte, M; Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 150.00'

Static Water Level: 4.05 | Depth to Product:

Water Column: | Product Layer:

Pump Type: Peristaltic ☐ Liquid Ring ☐ Submersible ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 150 cc/min

Borehole Diameter: | Multiplier:

Purge Start Time: 1020 HRS

Low Flow Method ☒

Purge Stop Time: 1044 HRS

Minimal Purge Sampling ☐

Total volume Purged: 4.3 L ~~Gal~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1026	4.05	—	7.86	1.16	0	0.00	21.2	0.05	-218	
1030	4.05	—	7.86	1.16	0	0.00	21.3	0.05	-206	
1034	4.05	—	7.88	1.16	0	0.00	21.2	0.05	-184.2	
1038	4.05	—	7.90	1.16	0	0.00	21.3	0.05	-171.2	
										80% Recharge Level:
										Sample Collected: 1041 HRS

Field Team Leader Signature [signature]

MCAS QCFB01 - 1040 - HRS
MCAS QC EB01 1312 - HRS

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Well Development / Purge Log

Location: MCAS	Well No.:FL-06	Date: 16APR05	Project No.: T0115
			Page 1 of 1

Equipment:

- HORIBA U 10 [X] — S/N: 101028
- HORIBA U22 [ ] — S/N:
- OAKTON ORP 96588
- FID/PHOTO VAC [ ]
- ORION 290A [ ]
- INTERFACE PROBE [X] 1
- OVA 128 [X]
- HORIBA ORP [ ]
- WATER LEVEL [ ]

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.2 PPM

WELL CONDITION
Good [X]
Fair [ ]
Poor [ ]

Total Well Depth: 150.00'

Static Water Level: 5.68 — Depth to Product:

Water Column: — Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: — Multiplier:

Low Flow Method [X]

Minimal Purge Sampling [ ]

Criteria used to stop purging / development: Dry Well [ ]

Pump Type: Peristaltic [ ] Liquid Ring [ ] Submersible [ ] Bladder Pump [X]

Pump Rate: 300 cc/min

Purge Start Time: 1211 HRS

Purge Stop Time: 1235 HRS

Total volume Purged: 7200 ml ~~Gal~~ Includes Sample Vol.

Parameter Stabilization [X]

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1214	5.68	—	8.38	0.97	0	0.00	20.9	0.04	-224	
1218	5.68	—	8.06	1.07	0	0.00	20.8	0.04	-224	
1222	5.68	—	8.00	1.07	0	0.00	20.7	0.04	-200	
1224	5.68	—	8.00	1.08	0	0.00	20.6	0.04	-188.3	
1228	5.68	—	8.01	1.08	0	0.00	20.6	0.04	-187.7	
										80% Recharge Level:
										Sample Collected: 1230 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.:FL-07	Date: 16 APR 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 1	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Oakton ORP # 174908

Personnel: Mike Woolfe, Greg Heady

EXPOSURE MONITORING
Background: 0.5 PPM
Reading: 0.3 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.40' Pump set @1540 HRS / 15 APR 05

Static Water Level: 11.15' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 2"

Pump Rate: 374 ml/min

Borehole Diameter: Multiplier:

Purge Start Time: 1625 HRS

Low Flow Method ☒

Purge Stop Time: 1450 HRS

Minimal Purge Sampling ☐

Total volume Purged: 9340 ml Gal GH

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☐

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1631	11.16'	—	7.23	1.38	0.0	0.45	19.0	0.06	227	
1635	11.16'	—	7.17	1.38	0.0	0.18	18.9	0.06	223	
1639	11.16'	—	7.19	1.38	0.0	0.05	18.8	0.06	221	
1643	11.16'	—	7.22	1.38	0.0	0.02	18.8	0.06	217	
										80% Recharge Level:
										Sample Collected: 1645 HRS

Field Team Leader Signature Greg Heady

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Well Development / Purge Log

Location: MCAS	Well No.:MW-06	Date: 16 APr 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	OAKTon orp 96588
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 7	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Woolfe, m; Headington, G

EXPOSURE MONITORING
Background: 00 PPM
Reading: 0.0 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 18.00'

Static Water Level: 5.00 Depth to Product: Ø

Water Column: Product Layer: Ø

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒ Dedicated

Well Casing Diameter: 2"

Pump Rate: 100 cc/min.

Borehole Diameter: Multiplier:

Purge Start Time: 1610 HRS

Low Flow Method ☒

Purge Stop Time: 1635 HRS

Minimal Purge Sampling ☐

Total volume Purged: 4.3 L ~~Gal.~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
								0.10 Ran.		
1614	5.10	—	7.40	2.21	0	0.00	19.5	~~0.12~~	-93.6	
1618	5.15	—	7.39	2.20	0	0.00	19.4	0.10	-107.7	
1622	5.15	—	7.40	2.21	0	0.00	19.3	0.10	-111.9	
1626	5.15	—	7.40	2.22	0	0.00	19.3	0.10	-117.4	
										80% Recharge Level:
										Sample Collected: 1627 HRS

Field Team Leader Signature _____

Collected MW06D - 1627 HR
*(only 2 TPHEXT VOA's)

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Well Development / Purge Log

Location: MCAS	Well No.:MW-07	Date: 16APR05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 ☒ S/N: 901065
- HORIBA U22 ☐ S/N: OAKTON ORP #174908
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ☒ 5
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.6 PPM
Reading: 0.3 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 13.50' pump set @1500HRS/15APR05

Static Water Level: 5.83'
Depth to Product:
Water Column:
Product Layer:
Well Casing Diameter: 2"
Borehole Diameter:
Multiplier:
Low Flow Method ☒
Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒
Pump Rate: 171 ml/min
Purge Start Time: 1432 HRS
Purge Stop Time: 1455 HRS
Total volume Purged: 3.7 l Gal. plus 240cc 3940 cc

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1440	5.91'	—	7.63	3.43	0.0	0.59	20.0	0.17	206	
1443	5.91'	—	7.62	3.41	0.0	0.03	19.9	0.17	204	
1446	5.92'	—	7.61	3.40	0.0	0.00	19.9	0.17	202	
1449	5.92'	—	7.59	3.39	0.0	0.00	19.8	0.17	200	
										80% Recharge Level:
										Sample Collected: 1450 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.: MW-08	Date: 16 APR 05	Project No.:
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Equipment:
- HORIBA U 10 ☒ S/N: 901065
- HORIBA U22 ☐ S/N: Oakton ORP ☒ 174908
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ☒ 6
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.6 PPM
Reading: 0.9 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 14.50' Pump set @1450 HRS/15APR05

Static Water Level: 6.16' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 2"

Pump Rate: 169 ml/min

Borehole Diameter: Multiplier:

Purge Start Time: 1340 HRS

Low Flow Method ☒

Purge Stop Time: 1414 HRS

Minimal Purge Sampling ☐

Total volume Purged: 5.5 Liters Gal. plus 240cc = 5740ml

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
										Flow adjusted ~120cc/min
1348	6.25'	—	7.32	4.27	0.0	1.61	20.6	0.21	223	Flow cell just full
1351	6.28'	—	7.31	4.23	0.0	0.0	20.4	0.21	219	
1356	6.31'	—	7.28	4.22	0.0	0.0	20.2	0.21	213	
1405	6.33'	—	7.29	4.21	0.0	0.0	20.1	0.21	204	
										80% Recharge Level:
										Sample Collected: 1410 HRS

Field Team Leader Signature: [signature]

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Well Development / Purge Log

Location: MCAS	Well No.:MW-012R	Date: 17 APR 05	Project No.:
			Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	Oakton ORP ☒
FID/PHOTO VAC	☐	ORION 290A	☐ #174908
INTERFACE PROBE	☒ 7	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: mike wolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.2 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 13.35' Pump set @ 0947 HR/17 APR

Static Water Level: 3.71 Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 302 ml/min

Borehole Diameter: Multiplier:

Purge Start Time: 1239 HRS

Low Flow Method ☒

Purge Stop Time: 1303 HRS

Minimal Purge Sampling ☐

Total volume Purged: 7240 ml ~~Gal.~~ GH total

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1245	3.85'	—	7.52	0.785	0.0	0.20	17.2	0.03	-103.2	
1250	3.89'	—	7.55	0.760	0.0	0.0	17.0	0.03	-152.3	
1254	3.89'	—	7.54	0.754	0.0	0.0	16.9	0.03	-160.0	
1258	3.90'	—	7.54	0.750	0.0	0.0	16.9	0.03	-164.8	
										80% Recharge Level:
										Sample Collected: 1300 HRS

Field Team Leader Signature [signature]

Battelle
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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-01	Date: 17 APR 05	Project No.:
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Equipment:

- HORIBA U 10 ☒ — S/N: 101028
- HORIBA U22 ☐ — S/N:
- OAKTON ORP ☒
- FID/PHOTO VAC ☐
- ORION 290A ☐ #174908
- INTERFACE PROBE ☒ 1
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Personnel: Mike Wooffe, Greg Headington

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.4 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.92' pump set @ 1001 HCS / 17 APR

Static Water Level: 5.03'

Depth to Product:

Water Column:

Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 164 ml/min

Borehole Diameter:

Multiplier:

Purge Start Time: 1323 HRS

Low Flow Method ☒

Purge Stop Time: 1355 HRS

Minimal Purge Sampling ☐

Total volume Purged: 5240 ml ~~Gal.~~ total

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1333	5.16'	—	7.79	1.20	0.0	0.18	19.3	0.05	18.7	
1342	5.18'	—	7.87	1.20	0.0	0.00	19.1	0.05	10.8	
1345	5.18'	—	7.87	1.20	0.0	0.00	19.1	0.05	9.0	
										80% Recharge Level:
										Sample Collected: 1350 HRS

Field Team Leader Signature: [signature]

MCAS-QCEB2-0940 HRS

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-02	Date: 17 APR05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 ☒ — HORIBA U22 ☐
- S/N: 101028 — S/N: OAKTON ORP
- FID/PHOTO VAC ☐ — ORION 290A ☐ — # 174908
- INTERFACE PROBE ☒ 1 — OVA 128 ☒
- HORIBA ORP ☐ — WATER LEVEL ☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.6 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.75' Pump set @ 0935 HR / 17 APR

Static Water Level: ~~6.66~~ 3.66' Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: Multiplier:

Low Flow Method ☐

Minimal Purge Sampling ☐

Criteria used to stop purging / development: Dry Well ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 138 ml/min

Purge Start Time: 1137 HRS

Purge Stop Time: 1204 HRS

Total volume Purged: 3.72 Liter Gal. total

Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
										Flow ~ 150 cc/min
1145	3.95'	—	7.22	5.16	0.0	0.19	19.2	0.27	215	
1149	3.94'	—	7.06	5.17	0.0	0.01	19.1	0.27	207	
1153	3.92'	—	7.05	5.14	0.0	0.00	19.2	0.26	205	
										80% Recharge Level:
										Sample Collected: 1155 HRS

Field Team Leader Signature [signature]

17 APR05/MCAS-QCFB2 — 1151 HRS

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-03	Date: 17 APR 05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 [X] S/N: 901065
- HORIBA U22 [ ] S/N: OAKTON ORP 96588
- FID/PHOTO VAC [ ]
- ORION 290A [ ]
- INTERFACE PROBE [X] 5
- OVA 128 [X]
- HORIBA ORP [ ]
- WATER LEVEL [ ]

Personnel: Woolfe, M; HeADingTon, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.1 PPM

WELL CONDITION
Good [X]
Fair [ ]
Poor [ ]

Total Well Depth: 19.78' Pump set at 0951 HRS / 17 APR

Static Water Level: 4.12 Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: Multiplier:

Low Flow Method [X]

Minimal Purge Sampling [ ]

Pump Type: Peristaltic [ ] Liquid Ring [ ] Submersible [ ] Bladder Pump [X]

Pump Rate: ~~120 cc/min~~ 154 cc/min

Purge Start Time: 1140 HRS

Purge Stop Time: 1206 HRS

Total volume Purged: 4L ~~Gal~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well [ ] Parameter Stabilization [X]

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1142	4.25	—	7.50	7.80	0	2.62	20.7	0.42	171.9	Did General well maintence
1146	4.27	—	7.49	7.82	0	0.94	20.7	0.42	172.5	
1150	4.27	—	7.55	7.82	0	0.42	20.8	0.42	168.5	
1154	4.27	—	7.56	7.83	0	0.32	20.9	0.42	162.9	
1158	4.27	—	7.57	7.82	0	0.30	21.0	0.42	158.1	
										80% Recharge Level:
										Sample Collected: 1200 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-04	Date: 17 APR 05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 ☒ S/N: 901065
- HORIBA U22 ☐ S/N: OAKTON ORP 96588
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ☒ 6
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.0 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.86' Pump set 0956 17 APR 05

Static Water Level: 3.90 Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 100 cc/min Adjusted 208 ml/min

Borehole Diameter: Multiplier:

Purge Start Time: 1244 HRS

Low Flow Method ☒

Purge Stop Time: 1308 HRS

Minimal Purge Sampling ☐

Total volume Purged: 5L ~~Gal.~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1248	4.05	—	7.76	5.26	0	0.17	20.0	0.27	152.8	
1252	4.10	—	7.74	5.23	0	0.00	20.0	0.27	150.4	
1256	4.13	—	7.74	5.21	0	0.00	19.8	0.27	148.0	
1300	4.13	—	7.76	5.21	0	0.00	19.7	0.27	145.6	
										80% Recharge Level:
										Sample Collected: 1302 HRS

Field Team Leader Signature _____

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-05	Date: 16 Apr 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐ OAKTON ORP
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.0 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.42' Pump set @ 1508 / 15 Apr

Static Water Level: 6.10 Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 100 cc/min Adjusted 265 ml/min

Borehole Diameter: Multiplier:

Purge Start Time: 1419 HRS

Low Flow Method ☒

Purge Stop Time: 1439 HRS

Minimal Purge Sampling ☐

Total volume Purged: 5.3 L ~~Gal~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1421	6.20	—	7.64	3.30	0	1.72	20.7	0.16	14.7	
1425	6.20	—	7.61	3.30	0	0.00	20.6	0.16	6.4	
1429	6.20	—	7.60	3.30	0	0.00	20.5	0.16	-1.9	
1433	6.20	—	7.60	3.30	0	0.03	20.5	0.16	-6.3	
										80% Recharge Level:
										Sample Collected: 1435 HRS

Field Team Leader Signature: Doug Henderson

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-06	Date: 16 APr 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐ OAKTON ORP
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING		WELL CONDITION	
Background:	0.0 PPM	Good	☒
Reading:	0.1 PPM	Fair	☐
		Poor	☐

Total Well Depth:	19.10'	Pump Installed @ 1517/15 Apr	
Static Water Level:	5.20	Depth to Product:	Ø
Water Column:		Product Layer:	Ø
Well Casing Diameter:	4"		
Borehole Diameter:		Multiplier:	
Low Flow Method	☒		
Minimal Purge Sampling	☐		

Pump Type:	Peristaltic ☐		Submersible ☐
	Liquid Ring ☐		Bladder Pump ☒
Pump Rate:	100 cc/min.	Flow =	350 ml/min
Purge Start Time:	1518 HRS		
Purge Stop Time:	1538 HRS		
Total volume Purged:	7 L ~~Gal.~~	Includes Sample Vol.	

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1520	5.28	—	7.92	2.86	0	0.14	19.9	0.14	47.3	
1524	5.29	—	7.91	2.85	0	0.00	19.8	0.14	41.5	
1528	5.30	—	7.91	2.85	0	0.00	19.7	0.14	30.5	
1532	5.30	—	7.93	2.85	0	0.00	19.7	0.14	23.6	
										80% Recharge Level:
										Sample Collected: 1534 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-07	Date: 16APR05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 ☒ — HORIBA U22 ☐
- S/N: 901065 — S/N: Oakton ORP # 174908
- FID/PHOTO VAC ☐ — ORION 290A ☐
- INTERFACE PROBE ☒ 5 — OVA 128 ☒
- HORIBA ORP ☐ — WATER LEVEL ☐

Personnel: Mike Woolfe, Greg Hendrickson

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.6 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.93' pump set @1525 HRS/15 APR05

Static Water Level: 5.20' — Depth to Product:

Water Column: — Product Layer:

Well Casing Diameter: 4" — Borehole Diameter: — Multiplier:

Low Flow Method ☒ — Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ — Liquid Ring ☐ — Submersible ☐ — Bladder Pump ☒

Pump Rate: 200 ml/min

Purge Start Time: 1532 HRS

Purge Stop Time: 1552 HRS

Total volume Purged: 4 Liters Gal.

Criteria used to stop purging / development: Dry Well ☐ — Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
										Flow ~ 200 cc/min
1538	5.24'	—	7.43	2.15	0.0	0.20	20.7	0.10	204	
1542	5.24'	—	7.34	2.10	0.0	0.0	20.6	0.10	204	
1546	5.24'	—	7.31	2.09	0.0	~~20.56~~ 0.0	20.5	0.10	202	
										80% Recharge Level:
										Sample Collected: 1548 HRS

Field Team Leader Signature: Greg Hendrickson

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Well Development / Purge Log

Location: MCAS	Well No.: PW 2393	Date: 20 APR 05	Project No.:	Page 1 of 1

Equipment:		Personnel: Mike Woolfe, Greg Headingford	
HORIBA U 10 ☐	HORIBA U22 ☐		
S/N:	S/N:		
FID/PHOTO VAC ☐	ORION 290A ☐	EXPOSURE MONITORING	WELL CONITION
INTERFACE PROBE ☐	OVA 128 ☐	Background:_____PPM	Good ☐
HORIBA ORP ☐	WATER LEVEL ☐	Reading:_____PPM	Fair ☐
Total Well Depth			Poor ☐
Static Water Level:	Depth to Product:	Pump Type: Peristaltic ☐	Submersible ☐
Water Column:	Product Layer:	Liquid Ring ☐	Bailer ☐
Well Casing Diameter:		Pump Rate:	
Borehole Diameter:	Multiplier:	Purge Start Time: HRS	
One Well Volume:	1 ½ Well Volume:	Purge Stop Time: HRS	
Three Well Volumes:		Total volume Purged: Gal.	

Criteria used to stop purging / development: Required Volume ☐ Dry Well ☐ Parameter Stabilization ☐

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp. (°C)	Salinity (%)	ORP (mV)	Comments
										Production Well Bld 2393 WELL
										meter Reading = 225908000 03-31-05
										Reading given by Water Department.
										80% Recharge Level:
										Sample Collected: HRS

Field Team Leader Signature Dwy Headington

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Well Development / Purge Log

Location: MCAS	Well No.: PW 2373	Date: 15 APR 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☐	HORIBA U22	☐
S/N:		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☐	OVA 128	☐
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: MIKE WOOLFE
GREG HEADINGTON

EXPOSURE MONITORING
Background:_____PPM
Reading:_____PPM

WELL CONITION
Good ☐
Fair ☐
Poor ☐

Total Well Depth

Static Water Level: Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bailer ☐

Well Casing Diameter:

Pump Rate:

Borehole Diameter: Multiplier:

Purge Start Time: HRS

One Well Volume: 1 ½ Well Volume:

Purge Stop Time: HRS

Three Well Volumes:

Total volume Purged: Gal.

Criteria used to stop purging / development: Required Volume ☐ Dry Well ☐ Parameter Stabilization ☐

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp. (°C)	Salinity (%)	ORP (mV)	Comments
										NOT SAMPLED meter reading ONLY
										1552 HRS
										Meter reading 367042000 GAL
										Meter @ BLD 23074
										80% Recharge Level:
										Sample Collected: HRS

Field Team Leader Signature [signature]

3rd Quarter

Field Data Collection Log Sheets

Subsurface Investigation
Well Sampling Forms

Site Number: MCAS

Monitoring Well ID's: FL-01, FL-02, FL-03, FL-04, FL-05
FL-06, FL-07, MW-06, MW-07, MW-08, MW-12R
FF-MW-01, FF-MW-02, FF-MW-03, FF-MW-04, FF-MW-05
FF-MW-06, FF-MW-07

Well Purge Log

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Well Development / Purge Log

Location: MCAS	Well No.:FL-01	Date: 09 JUL 05	Project No.:	Page 1 of 1

Equipment:
- HORIBA U 10 ☒ — S/N: 901065
- HORIBA U22 ☐ — S/N: OAKton ORP #174980
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ☒ 1
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 4.74'
Depth to Product:

Water Column: 10.76'
Product Layer:

Pump Type: Peristaltic ☒ Submersible ☐ Liquid Ring ☐ Bladder Pump ☐

Well Casing Diameter: 2"
1 vol = 13.98 G 1½ vol = 20.98'

Borehole Diameter:
Multiplier x 1.3 2 vol = 28 G
3 vol = 42 GAL

Pump Rate: 1.38 GPM

Purge Start Time: 1017 HRS

Purge Stop Time: 1035 HRS

Low Flow Method ☐

Minimal Purge Sampling ☐

Total volume Purged: 25.0 Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1026	8.76'	14.0	7.33	1.82	0.0	7.5 0.24	22.6	0.08	217	
1034	7.92'	21.5	7.31	1.71	0.0	0.35	22.8	0.08	203	
										80% Recharge Level:
										Sample Collected: 1040 HRS

Field Team Leader Signature: Greg Headington

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Well Development / Purge Log

Location: MCAS	Well No.:FL-02	Date: 09 JUL 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: #901065		S/N: OAKTON ORP #174980	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 5	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.0 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 4.57' Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☒ Submersible ☐ Liquid Ring ☐ Bladder Pump ☐

Well Casing Diameter: 2" 1 volume = 11 GAL 1½ vol = 16.5

Pump Rate: 1.0 GPM

Borehole Diameter: Multiplier: 1.3

Purge Start Time: 1103 HRS

Low Flow Method ☐ 2 vol = 22 G / 3 vol = 33 GAL

Purge Stop Time: 1123 HRS

Minimal Purge Sampling ☐

Total volume Purged: 20.0 Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1111	4.88'	6.5	6.78	1.36	0.0	1.31	22.0	0.06	215	
1117	4.88'	11.5	6.71	1.36	0.0	0.34	21.9	0.06	197.7	
1122	4.88'	16.5	6.71	1.36	0.0	0.14	21.9	0.06	184.5	
										80% Recharge Level:
										Sample Collected: 1125 HRS

Field Team Leader Signature Doug Henderson

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Well Development / Purge Log

Location: MCAS	Well No.:FL-03	Date: 09JUL05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N: OAKTON ORP ☒ #174908	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 2	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.3 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 15.50'

Static Water Level: 6.49' Depth to Product:

Water Column: 9.01 Product Layer:

Pump Type: Peristaltic ☒ Submersible ☐ Liquid Ring ☐ Bladder Pump ☐

Well Casing Diameter: 2" 1 vol = 11.7 GAL 1½ vol = 17.6 GAL

Pump Rate: 1.05 GPM

Borehole Diameter: Multiplier: 1.3

Purge Start Time: 1156 HRS

Low Flow Method ☐ 3 vol = 35 GAL

Purge Stop Time: 1215 HRS

Minimal Purge Sampling ☐

Total volume Purged: 20.0 Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1205	6.63'	7.0	6.55	1.47	0.0	0.03	23.1	0.06	204	
1209	6.64'	12.0	6.54	1.48	0.0	0.01	23.0	0.06	192.5	
1214	6.63'	18.0	6.52	1.48	0.0	0.00	23.0	0.06	181.7	
										80% Recharge Level:
										Sample Collected: 1215 HRS

Field Team Leader Signature [signature]

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.:FL-04	Date: 09JUL05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 ☒ — S/N: 901065
- HORIBA U22 ☐ — S/N: OAKton ORP ☒ #174908
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ☒ 5
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Total Well Depth: 15.50'

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.2 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Static Water Level: 6.39'
Depth to Product:
Water Column: 9.11'
Product Layer:

Pump Type: Peristaltic ☒ Submersible ☐ Liquid Ring ☐ Bladder Pump ☐

Well Casing Diameter: 2" 1 volume = 11.9 GAL 1½ vol = 17.8 GAL
Pump Rate: 1.04 GPM
Borehole Diameter:
Multiplier: 1.3
Purge Start Time: 1242 HRS
Low Flow Method ☐ 3 volume = 35.5 GAL
Purge Stop Time: 1304 HRS
Minimal Purge Sampling ☐
Total volume Purged: 23.0 Gal.
Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1249	6.44'	6.5	6.80	1.44	0.0	0.37	22.2	0.06	192.2	
1254	6.44'	12.0	6.75	1.44	0.0	0.41	22.1	0.06	182.6	
1300	6.44'	18.0	6.71	1.43	0.0	0.39	22.1	0.06	174.5	
										80% Recharge Level:
										Sample Collected: 1302 HRS

Field Team Leader Signature: Doug Hughton

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.: FL-05	Date: 09 Jul 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Oakton ORP 96588

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 150.00'

Static Water Level: 4.82' Depth to Product: Ø

Water Column: Product Layer: Ø

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 250 cc/min *305 cc/min DH

Borehole Diameter: Multiplier:

Purge Start Time: 1003 HRS

Low Flow Method ☒

Purge Stop Time: 1030 HRS

Minimal Purge Sampling ☐

Total volume Purged: 8.246 L ~~Gal~~. Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1005	4.83'	—	6.98	1.24	0	0.00	22.2	0.05	-45.7	
1010	4.83'	—	7.06	1.23	0	0.00	22.0	0.05	-39.5	
1015	4.83'	—	7.12	1.23	0	0.00	22.0	0.05	-25.8	
1019	4.83'	—	7.15	1.22	0	0.00	21.9	0.05	-20.8	
1023	4.83	—	7.18	1.23	0	0.00	21.9	0.05	-18.8	
										80% Recharge Level:
										Sample Collected: 1025 HRS

Field Team Leader Signature: Doug Humphrey

QCTB1 - 09JUL05
QCFB1 - 1020
QCEB1 - 1239

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.:FL-06	Date: 09JUL05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22 ☐	OAKTON ORP 96588
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A ☐	
INTERFACE PROBE	☒ 7	OVA 128 ☒	
HORIBA ORP	☐	WATER LEVEL ☐	

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 150.00'

Static Water Level: 6.55 Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 350 cc/min. 345 cc/min

Purge Start Time: ~~1155~~ HRS RMW 1155

Purge Stop Time: ~~1155~~ HRS RMW 1216

Total volume Purged: 7.240 L ~~Gal.~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1159	6.55'	—	7.25	1.13	0	0.00	21.6	0.05	-184.5	
1203	6.55'	—	7.21	1.13	0	0.00	21.5	0.05	-170.6	
1206	6.55'	—	7.17	1.13	0	0.00	21.4	0.05	-154.6	
1209	6.55	—	7.16	1.13	0	0.00	21.4	0.05	-142.8	
1212	6.55	—	7.22	1.13	0	0.00	21.3	0.05	-138.0	
										80% Recharge Level:
										Sample Collected: 1213 HRS

Field Team Leader Signature: Doug Hardy

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.:FL-07	Date: 09 Jul 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐ OAKTON ORP
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ S	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Total Well Depth: 19.40'

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Static Water Level: 11.75 | Depth to Product:

Water Column: | Product Layer:

Pump Type: Peristaltic ☐ | Submersible ☐ | Liquid Ring ☐ | Bladder Pump ☒

Well Casing Diameter: 2"

Pump Rate: 400 cc/min ~~375 cc/min~~ AH

Borehole Diameter: | Multiplier:

Purge Start Time: 1332 HRS — Pump SET @ 0924

Low Flow Method ☒

Purge Stop Time: 1354 HRS

Minimal Purge Sampling ☐

Total volume Purged: 8.240 L ~~Gal~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well ☐ | Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1336	11.75	—	6.90	1.23	0	1.58	20.4	0.05	105.5	
1339	11.75	—	6.86	1.23	0	1.42	19.8	0.05	113.5	
1342	11.75	—	6.90	1.22	0	1.26	19.7	0.05	115.1	
1345	11.75	—	6.91	1.21	0	1.12	19.5	0.05	115.5	
										80% Recharge Level:
										Sample Collected: 1346 HRS

Field Team Leader Signature: [signature]

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-01	Date: 11Jul05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 1	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

OAKTON ORP 96588

Personnel: Woolfe, M
HEADINGTON

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.92'

Static Water Level: 6.00 | Depth to Product:

Water Column: | Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: | Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 150 cc/min pump set @ 1355 HR (10JUL05)

Purge Start Time: 1008 HRS

Purge Stop Time: 1024 HRS

Total volume Purged: 5L ~~Gal.~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1011	6.10'	—	7.34	1.40	0	0.00	20.1	0.06	200	
1014	6.20'	—	7.45	1.44	0	0.00	20.0	0.06	196.7	
1017	6.25'	—	7.44	1.44	0	0.00	20.0	0.06	195.7	
1020	6.25'	—	7.43	1.44	0	0.00	20.0	0.06	195.0	
										80% Recharge Level:
										Sample Collected: 1022 HRS

Field Team Leader Signature [signature]

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-02	Date: 11JUL05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N: OAKTON ORP #174908	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ S	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Mike Woolfe
Greg Headington

EXPOSURE MONITORING
Background: 0.3 PPM
Reading: 0.2 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.75'

Static Water Level: 4.58' Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 130 cc/min Pump set @ 1400 HR (10JUL05)

Purge Start Time: 0937 HRS

Purge Stop Time: 1000 HRS

Total volume Purged: 3 Liter Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
0942	4.76'	—	7.55	4.23	0.0	0.00	20.6	0.21	110.2	
0945	4.77'	—	7.56	4.23	0.0	0.00	20.7	0.21	107.6	
0949	4.79'	—	7.56	4.24	0.0	0.00	20.6	0.21	104.0	
										80% Recharge Level:
										Sample Collected: 0955 HRS

Field Team Leader Signature Greg Headington

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-03	Date: 11JUL05	Project No.:	Page 1 of 1

Equipment:
- HORIBA U 10 ☒ — ~~HORIBA U22~~ ☒ 016
- S/N: 901065 — S/N: OAKTON ORP #174980
- FID/PHOTO VAC ☐ — ORION 290A ☐
- INTERFACE PROBE ☒ 2 — OVA 128 ☒
- HORIBA ORP ☐ — WATER LEVEL ☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
- Background: 0.4 PPM
- Reading: 0.5 PPM

WELL CONDITION
- Good ☒
- Fair ☐
- Poor ☐

Total Well Depth: 19.78'

Static Water Level: 5.12' — Depth to Product:

Water Column: — Product Layer:

Well Casing Diameter: 4" — Multiplier:

Borehole Diameter:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 237 cc/min Pump set @ 1405 HR (10JUL05)

Purge Start Time: 0855 HRS

Purge Stop Time: 0914 HRS

Total volume Purged: 4.5 Liter Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
0859	5.38'	—	6.98	7.97	0.0	0.00	21.7	0.43	145.5	
0903	5.36'	—	6.99	8.00	0.0	0.00	21.8	0.43	141.3	
0907	5.36'	—	7.01	8.01	0.0	0.00	21.8	0.43	133.5	
										80% Recharge Level:
										Sample Collected: 0910 HRS

Field Team Leader Signature: Greg Headington

MCAS-QCTB2 - 11JUL05
MCAS-QCFB2 - 0840 HRS
MCAS-QCEB2 - 0845 HRS

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-04	Date: 11 Jul 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 6	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

OAKTON ORP 96588

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.86'

Static Water Level: 5.00 | Depth to Product:

Water Column: | Product Layer:

Pump Type: Peristaltic ☐ | Liquid Ring ☐ 368 cc/min | Submersible ☐ | Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 150 cc/min pump set @ 1315 HRS (10 JUL 05)

Borehole Diameter: | Multiplier:

Purge Start Time: 0837 HRS

Low Flow Method ☒

Purge Stop Time: 0856 HRS

Minimal Purge Sampling ☐

Total volume Purged: 7L ~~Gal.~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
	5.10	—	7.45	4.33	0	0.00	20.4	0.22	219	
	5.15	—	7.48	4.39	0	0.00	20.4	0.22	219	
	5.18	—	7.49	4.39	0	0.00	20.4	0.22	215	
	5.18	—	7.50	4.39	0	0.00	20.7	0.22	213	
										80% Recharge Level:
										Sample Collected: 0851 HRS

Field Team Leader Signature Doug Headington

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Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-05	Date: 09Jul05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22 ☐	OAKTON ORP 96588
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A ☐	
INTERFACE PROBE	☒ 7	OVA 128 ☒	
HORIBA ORP	☐	WATER LEVEL ☐	

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.42'

Static Water Level: 6.95' Depth to Product: Ø

Water Column: Product Layer: Ø

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 4"

Pump Rate: 250 cc/min 265 CC/min

Borehole Diameter: Multiplier:

Purge Start Time: 1432 HRS Pump Set @ 0915

Low Flow Method ☒

Purge Stop Time: 1448 HRS

Minimal Purge Sampling ☐

Total volume Purged: 4.240 L ~~Gal~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1434	7.15'	—	7.05	3.71	0	0.00	21.6	0.18	119.9	
1437	7.15'	—	7.05	3.72	0	0.00	21.5	0.18	119.5	
1440	7.17'	—	7.04	3.72	0	0.00	21.5	0.18	117.9	
1443	7.17	—	7.04	3.72	0	0.00	21.5	0.18	116.3	
										80% Recharge Level:
										Sample Collected: 1444 HRS

Field Team Leader Signature Doug Headington

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.:FF-MW-06	Date: 09JUL05	Project No.:	Page 1 of 1

Equipment:

- HORIBA U 10 ☒ S/N: 901065
- HORIBA U22 ☐ S/N: OAKton ORP #174980
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ☒ 2
- OVA 128 ☒
- HORIBA ORP ☐
- WATER LEVEL ☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.4 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.10'

Static Water Level: 6.09' Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 134 cc/min Pump set @ 0935

Purge Start Time: 1455 HRS

Purge Stop Time: 1519 HRS

Total volume Purged: 3.2 Liter Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1501	6.13'	—	7.35	3.02	0.0	1.15	21.9	0.15	195.9	Flow 125 cc/min
1506	6.15'	—	7.34	3.00	0.0	0.24	21.8	0.14	193.7	
1509	6.15'	—	7.28	3.00	0.0	0.00	21.7	0.14	192.5	
1513	6.15'	—	7.27	3.00		0.00	21.7	0.14	190.9	
										80% Recharge Level:
										Sample Collected: 1515 HRS

Field Team Leader Signature: Greg Headington

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.: FF-MW-07	Date: 09Jul05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ S	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

OAKTON ORP 96588

Personnel: Woolfe, M; Headington, G

EXPOSURE MONITORING
Background: 0.0 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 19.93'

Static Water Level: 6.20 | Depth to Product:

Water Column: | Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: | Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Pump Rate: 200 cc/min 212cc/min

Purge Start Time: 1522 HRS Pump SET @ 0930 HRS

Purge Stop Time: 1542 HRS

Total volume Purged: 4.240 L ~~Gal~~ Includes Sample Vol.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1527	6.25	—	7.11	2.29	0	0.00	21.5	0.11	125.0	
1530	6.25	—	7.08	2.28	0	0.00	21.4	0.11	125.8	
1533	6.25	—	7.08	2.28	0	0.00	21.4	0.11	124.0	
1534	6.25	—	7.07	2.28	0	0.00	21.3	0.11	123.8	
										80% Recharge Level:
										Sample Collected: 1537 HRS

Field Team Leader Signature: Doug Headington

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Well Development / Purge Log

Location: MCAS	Well No.: MW-06	Date: 09JUL05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N: OAKton ORP #174908	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☐	OVA 128	☐
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: Mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.4 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 18.00'

Static Water Level: 5.93'
Depth to Product:
Water Column:
Product Layer:
Well Casing Diameter: 2"
Borehole Diameter:
Multiplier:
Low Flow Method ☒
Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Dedicated Bladder Pump ☒
Pump Rate: 230 cc / min Dedicated Pump (PVC)
Purge Start Time: 1539 HRS
Purge Stop Time: 1559 HRS
Total volume Purged: 4.6 Liter Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1545	6.08'	—	7.02	2.61	0.0	0.00	21.5	0.12	-117.3	
1549	6.13'	—	6.98	2.61	0.0	0.00	21.3	0.12	-130.7	
1552	6.13'	—	6.94	2.61	0.0	0.00	21.2	0.12	-150.0	
										80% Recharge Level:
										Sample Collected: 1555 HRS

Field Team Leader Signature Greg Headington

MCAS-MW06DUP – VOC's ONLY

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Well Development / Purge Log

Location: MCAS	Well No.: ~~MW-08~~ ~~MW-11~~ MW-07	Date: 09JUL05	Project No.:
Page 1 of 1			

Equipment:
- HORIBA U 10 ☒ S/N: 901065
- HORIBA U22 ☐ S/N: OAKton ORP #174908
- FID/PHOTO VAC ☐
- ORION 290A ☐
- INTERFACE PROBE ~~☒~~ 2
- OVA 128 ~~☒~~
- HORIBA ORP ☐
- WATER LEVEL ☐

Personnel: mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.3 PPM

WELL CONDITION
Good ~~☒~~
Fair ☐
Poor ☐

Total Well Depth: ~~14.50'~~ 13.50'

Static Water Level: 6.76'

Depth to Product:

Water Column:

Product Layer:

Pump Type: Peristaltic ☐ Liquid Ring ☐ Submersible ☐ Bladder Pump ~~☒~~

Well Casing Diameter: 2"

Pump Rate: 167 cc/min Pump set @ 0915

Borehole Diameter:

Multiplier:

Purge Start Time: 1418 HRS

Low Flow Method ~~☒~~

Purge Stop Time: 1436 HRS

Minimal Purge Sampling ☐

Total volume Purged: 3 Liter Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ~~☒~~

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1423	6.81'	—	7.28	3.51	0.0	1.30	23.6	0.17	196.1	
1427	6.83'	—	7.22	3.54	0.0	0.20	22.1	0.17	196.3	Flow ≈ 100 ml/min
1431	6.85'	—	7.21	3.50	0.0	0.00	21.8	0.17	195.3	
										80% Recharge Level:
										Sample Collected: 1433 HRS

Field Team Leader Signature: Greg Headington

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No. ~~MW-07~~ MW08	Date: 09JUL05	Project No.:
			Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 901065		S/N: OAKton ORP ☒ #174980	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 2	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: mike Woolfe, Greg Headington

EXPOSURE MONITORING
Background: 0.4 PPM
Reading: 0.3 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: ~~18.50'~~ MH 14.50

Static Water Level: 7.08'

Depth to Product:

Water Column:

Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐ Liquid Ring ☐ Bladder Pump ☒

Well Casing Diameter: 2"

Pump Rate: 116 cc/min Pump set @ 0915 HR

Borehole Diameter:

Multiplier:

Purge Start Time: 1327 HRS Stop Repair Controller Restart 1344 HRS

Low Flow Method ☒

Purge Stop Time: 1358 HRS Total Stop 1402 HRS

Minimal Purge Sampling ☐

Total volume Purged: 3.6 Lity Gal.

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
1350	7.22'	—	7.09	4.56	0.0	0.00	22.5	0.23	182.0	Flowrate 100 cc/min
1354	7.22'	—	7.09	4.55	0.0	0.00	22.4	0.23	180.6	
1357	7.22'	—	7.08	4.56	0.0	0.00	22.3	0.23	179.4	
										80% Recharge Level:
										Sample Collected: 1400 HRS

Field Team Leader Signature Greg Headington

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MCB Camp Pendleton

Well Development / Purge Log

Location: MCAS	Well No.:MW-012R	Date: 11 Jul 05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☒	HORIBA U22	☐
S/N: 101028		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☒ 1	OVA 128	☒
HORIBA ORP	☐	WATER LEVEL	☐

OAKTON ORP 96588

Personnel: Woolfe, M. Headington, G

EXPOSURE MONITORING
Background: 0.1 PPM
Reading: 0.1 PPM

WELL CONDITION
Good ☒
Fair ☐
Poor ☐

Total Well Depth: 13.35'

Static Water Level: 4.85' Depth to Product:

Water Column: Product Layer:

Well Casing Diameter: 4"

Borehole Diameter: Multiplier:

Low Flow Method ☒

Minimal Purge Sampling ☐

Pump Type: Peristaltic ☐ Liquid Ring ☐ Submersible ☐ Bladder Pump ☒

272.7 cc/min

Pump Rate: 150 cc/min pump set @ 1410 HRS (10JUL05)

Purge Start Time: 0918 HRS

Purge Stop Time: 0935 HRS

Total volume Purged: 6L ~~Gal.~~ Includes Sample Vol

Criteria used to stop purging / development: Dry Well ☐ Parameter Stabilization ☒

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units) +/- 0.2	Conductivity (mS/cm) +/- 5%	Turbidity (NTU) +/- 10%	Dissolved Oxygen (mg/l) +/- 0.2	Temp. (°C) +/- 3%	Salinity (%) -	ORP (mV) +/- 20	Comments
0920	5.20	—	6.85	.665	0	0.00	19.8	0.02	225	
0923	5.30	—	6.87	.645	0	0.00	19.9	0.02	229	
0926	5.30	—	6.86	.639	0	0.00	19.9	0.02	229	
0929	5.30	—	6.83	.634	0	0.00	20.1	0.02	223	
										80% Recharge Level:
										Sample Collected: 0931 HRS

Field Team Leader Signature _____

MCAS-QCTB2

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Well Development / Purge Log

Location: MCAS	Well No.: PW 2373	Date: 10JUL05	Project No.:	Page 1 of 1

Equipment:

HORIBA U 10	☐	HORIBA U22	☐
S/N:		S/N:	
FID/PHOTO VAC	☐	ORION 290A	☐
INTERFACE PROBE	☐	OVA 128	☐
HORIBA ORP	☐	WATER LEVEL	☐

Personnel: MIKE Woolfe, Greg Headington

EXPOSURE MONITORING
Background:_____PPM
Reading:_____PPM

WELL CONITION
Good ☐
Fair ☐
Poor ☐

Total Well Depth

Static Water Level: Depth to Product:

Water Column: Product Layer:

Pump Type: Peristaltic ☐ Submersible ☐
Liquid Ring ☐ Bailer ☐

Well Casing Diameter:

Pump Rate:

Borehole Diameter: Multiplier:

Purge Start Time: HRS

One Well Volume: 1 ½ Well Volume:

Purge Stop Time: HRS

Three Well Volumes:

Total volume Purged: Gal.

Criteria used to stop purging / development: Required Volume ☐ Dry Well ☐ Parameter Stabilization ☐

Time	Water Depth (btoc)	Volume Recovered (gal)	PH (units)	Conductivity (mS/cm)	Turbidity (NTU)	Dissolved Oxygen (mg/l)	Temp. (°C)	Salinity (%)	ORP (mV)	Comments meter reading ONLY, BLD. 23074
1415										meter = 367,034,000 gallons
										80% Recharge Level:
										Sample Collected: HRS

Field Team Leader Signature Greg Headington

Appendix B

Laboratory Analytical Results and Data Validation Packet

Laboratory Analytical Results

First Quarter Analytical – A

Billing Information:
Name: Gerald Tompkins
Address: 505 King Avenue
City, State, Zip: Columbus, OH 43201
Phone Number: 614-424-4849 Fax: 614-424-3667

LABORATORY
Name: ALPHA ANALYTICAL
Address: 255 GLENDALE AVE SPARKS, NV 89431
Phone: 775 355 1044

Page # _____ of _____

Client Name: **Battelle Memorial Institute**	P.O. #	D.O. 105	
Address: **505 King Avenue**	PWS #	DWR #	
City, State, Zip: **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Sampled by: MW/GH	Report Attention: BOB JANOSY		

Analyses Required: Diesel/JP5; TPH/E; TPH/P; NO_2, NO_3, SO_4; Pb, Mn^{+2}, Fe^{+2}; TDS, AlK; TOC; VOC* see below; Other:; Other:

DATA REPORT: NEDTS FORMAT ☒; EDF FORMAT ☒

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	Total and type of containers **See below	Diesel/JP5	TPH/E	TPH/P	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AlK	TOC	VOC* see below	Other:	Other:	REMARKS
22JAN05		AQ	BMI05012504-01	MCAS-QCTB2	1V								X			
0850	1-22	AQ	-02	MCAS-QCFB2	3V								X			
0905	1-22	AQ	-03	MCAS-QCEB2	3V		X						X			
1055	1-22	AQ	-04	MCAS-FL06	6V		X						X			
1600	1-22	AQ	-05	MCAS-FL07	6V		X						X			
1455	1-22	AQ	-06	MCAS-MW06	6V		X						X			
1455	1-22	AQ	-07	MCAS-MW06D	6V		X						X			
1230	1-22	AQ	-08	MCAS-MW07	6V		X						X			
1235	1-22	AQ	-09	MCAS-MW08	6V		X						X			

ADDITIONAL INSTRUCTIONS: **Specific VOC Requirements (please specify)** * MTBE/BTEX ONLY FOR VOC'S

QC LEVEL IV, DATA VALIDATION REQUIRED FOR: MCAS FF01, MCAS-FF04, MCAS-FL03, MCAS-MW06. Report with CD-ROM

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	BATTELLE	24JAN05	0756
Received by	Stacy Strock	Stacy Strock	Alpha	1/25/05	11:25
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *09-Feb-05*

Bob Janosy
Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
(614) 424-7358

CASE NARRATIVE

Project: TO105

Work Order: BMI05012504 **Cooler Temp:** 4 °C

Alpha's Sample ID	Client's Sample ID	Matrix
05012504-01A	MCAS-QCTB2	Aqueous
05012504-02A	MCAS-QCFB2	Aqueous
05012504-03A	MCAS-QCEB2	Aqueous
05012504-04A	MCAS-FL06	Aqueous
05012504-05A	MCAS-FL07	Aqueous
05012504-06A	MCAS-MW06	Aqueous
05012504-07A	MCAS-MW06D	Aqueous
05012504-08A	MCAS-MW07	Aqueous
05012504-09A	MCAS-MW08	Aqueous

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received 01/25/05

Job#: TO105

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration		Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MCAS-QCTB2**	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
Lab ID :	BMI05012504-01A	Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	91		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	103		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	95		%REC	01/22/05	01/27/05
Client ID :	**MCAS-QCFB2**	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
Lab ID :	BMI05012504-02A	Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	88		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	103		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	90		%REC	01/22/05	01/27/05
Client ID :	**MCAS-QCEB2**	TPH-E (Jet Fuel)	ND	+	0.10 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012504-03A	TPH-E (Diesel)	ND	+	0.10 mg/L	01/22/05	01/28/05
		Surr: Nonane	97		%REC	01/22/05	01/28/05
Client ID :	**MCAS-FL06**	TPH-E (Jet Fuel)	ND		0.050 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012504-04A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/28/05
		Surr: Nonane	97		%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
		Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	96		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	97		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	93		%REC	01/22/05	01/27/05

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Client ID :	**MCAS-FL07**	TPH-E (Jet Fuel)	ND		0.050 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012504-05A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/28/05
		Surr: Nonane	83		%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
		Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	96		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	99		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	96		%REC	01/22/05	01/27/05
Client ID :	**MCAS-MW06**	TPH-E (Jet Fuel)	1.2	I	0.050 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012504-06A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/28/05
		Surr: Nonane	87		%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
		Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	94		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	96		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	84		%REC	01/22/05	01/27/05
Client ID :	**MCAS-MW06D**	TPH-E (Jet Fuel)	1.2	I	0.050 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012504-07A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/28/05
		Surr: Nonane	89		%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
		Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	95		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	97		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	82		%REC	01/22/05	01/27/05
Client ID :	**MCAS-MW07**	TPH-E (Jet Fuel)	ND		0.050 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012504-08A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/28/05
		Surr: Nonane	102		%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
		Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	103		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	102		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	90		%REC	01/22/05	01/27/05
Client ID :	**MCAS-MW08**	TPH-E (Jet Fuel)	ND	+	0.10 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012504-09A	TPH-E (Diesel)	ND	+	0.10 mg/L	01/22/05	01/28/05
		Surr: Nonane	91		%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/27/05
		Benzene	ND		0.50 µg/L	01/22/05	01/27/05
		Toluene	ND		0.50 µg/L	01/22/05	01/27/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/27/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/27/05
		Surr: 1,2-Dichloroethane-d4	99		%REC	01/22/05	01/27/05
		Surr: Toluene-d8	98		%REC	01/22/05	01/27/05
		Surr: 4-Bromofluorobenzene	97		%REC	01/22/05	01/27/05

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- = Reporting Limits were increased due to sample matrix interferences.

I = Concentrations reported in the range of jet fuel may include other products such as kerosene, mineral spirits, weathered Gasoline, etc.

Note: Jet Fuel elutes out in the range of DRO, therefore the DRO calibration was used to quantitate the Jet Fuel.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05

Report Date

Alpha Analytical, Inc.

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VOC pH Report

Work Order: BMI05012504 **Project:** TO105

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05012504-01A	MCAS-QCTB2	Aqueous	
05012504-02A	MCAS-QCFB2	Aqueous	2
05012504-04A	MCAS-FL06	Aqueous	2
05012504-05A	MCAS-FL07	Aqueous	2
05012504-06A	MCAS-MW06	Aqueous	2
05012504-07A	MCAS-MW06D	Aqueous	2
05012504-08A	MCAS-MW07	Aqueous	2
05012504-09A	MCAS-MW08	Aqueous	2

2/7/05

Report Date

Alpha Analytical, Inc.

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Date: *09-Feb-05*

QC Summary Report

Work Order: 05012504

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11562** Analysis Date: **01/27/2005 14:47**

Sample ID: **MBLK-11562** Units : **mg/L** Run ID: **FID_4_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Jet Fuel)	ND	0.05								
TPH-E (Diesel)	ND	0.05								
Surr: Nonane	114		100		114	47	141			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11562** Analysis Date: **01/27/2005 13:03**

Sample ID: **LCS-11562** Units : **mg/L** Run ID: **FID_4_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Diesel)	2.7	0.5	2.5		108	64	129			
Surr: Nonane	123		100		123	47	141			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11562** Analysis Date: **01/27/2005 19:28**

Sample ID: **05012545-03AMS** Units : **mg/L** Run ID: **FID_4_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Diesel)	2.37	0.5	2.5	0	95	56	147			
Surr: Nonane	85.2		100		85	47	141			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11562** Analysis Date: **01/27/2005 21:48**

Sample ID: **05012545-03AMSD** Units : **mg/L** Run ID: **FID_4_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Diesel)	2.36	0.5	2.5	0	95	56	147	2.367	0.2(25)	
Surr: Nonane	93.2		100		93	47	141			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

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Date: *09-Feb-05*

QC Summary Report

Work Order: 05012504

Method Blank

Type **MBLK** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\050127\05012705.D** Batch ID: **MS10W0127A** Analysis Date: **01/27/2005 09:02**

Sample ID: **MBLK MS10W0127A** Units : **µg/L** Run ID: **MSD_10_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Methyl tert-butyl ether (MTBE)	ND	0.5								
Benzene	ND	0.5								
Toluene	ND	0.5								
Ethylbenzene	ND	0.5								
m,p-Xylene	ND	0.5								
o-Xylene	ND	0.5								
Surr: 1,2-Dichloroethane-d4	9.7		10		97	76	127			
Surr: Toluene-d8	9.9		10		99	84	113			
Surr: 4-Bromofluorobenzene	9.48		10		95	79	119			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\050127\05012704.D** Batch ID: **MS10W0127A** Analysis Date: **01/27/2005 08:41**

Sample ID: **LCS MS10W0127A** Units : **µg/L** Run ID: **MSD_10_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	9.78	0.5	10		98	81	122			
Toluene	10.3	0.5	10		103	80	120			
Ethylbenzene	10.9	0.5	10		109	80	120			
m,p-Xylene	10.3	0.5	10		103	80	129			
o-Xylene	10.1	0.5	10		101	80	129			
Surr: 1,2-Dichloroethane-d4	9.8		10		98	76	127			
Surr: Toluene-d8	10.6		10		106	84	113			
Surr: 4-Bromofluorobenzene	9.94		10		99	79	119			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\050127\05012710.D** Batch ID: **MS10W0127A** Analysis Date: **01/27/2005 10:46**

Sample ID: **05012504-06AMS** Units : **µg/L** Run ID: **MSD_10_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	49.2	1.3	50	0	98	74	125			
Toluene	50.1	1.3	50	0	100	76	120			
Ethylbenzene	53.5	1.3	50	0	107	77	124			
m,p-Xylene	51.1	1.3	50	0	102	73	130			
o-Xylene	52.2	1.3	50	0	104	74	131			
Surr: 1,2-Dichloroethane-d4	44.4		50		89	76	127			
Surr: Toluene-d8	51.9		50		104	84	113			
Surr: 4-Bromofluorobenzene	47.5		50		95	79	119			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8260B**

File ID: **D:\HPCHEM\MS10\DATA\050127\05012711.D** Batch ID: **MS10W0127A** Analysis Date: **01/27/2005 11:07**

Sample ID: **05012504-06AMSD** Units : **µg/L** Run ID: **MSD_10_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Benzene	47.9	1.3	50	0	96	74	124	49.19	2.6(13)	
Toluene	48.8	1.3	50	0	98	76	119	50.07	2.6(13)	
Ethylbenzene	53.7	1.3	50	0	107	77	124	53.45	0.5(13)	
m,p-Xylene	50.2	1.3	50	0	100	73	130	51.05	1.7(14)	
o-Xylene	51.4	1.3	50	0	103	74	131	52.23	1.5(13)	
Surr: 1,2-Dichloroethane-d4	46.4		50		93	76	127			
Surr: Toluene-d8	51.6		50		103	84	113			
Surr: 4-Bromofluorobenzene	47.5		50		95	79	119			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

First Quarter Analytical – B

Billing Information:
Name: Gerald Tompkins
Address: 505 King Avenue
City, State, Zip: Columbus, OH 43201
Phone Number: 614-424-4849 Fax: 614-424-3667

LABORATORY
Name: ALPHA ANALYTICAL
Address: 255 GLENDALE AVE SPARKS, NV 89431
Phone: 775 355 1044

Page # 1 of 1

Client Name: **Battelle Memorial Institute**
Address: **505 King Avenue**
City, State, Zip: **Columbus, OH 43201**
P.O. #:
D.O.: 105
PWS #:
DWR #:
Phone #: 614 424 7160
Fax #: 614 424 3667
Report Attention: BOB JANOSY
Sampled by: MW/GH

Analyses Required

DATA REPORT: NEDTS FORMAT ☒ EDF FORMAT ☒

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E Diesel JP5	TPH/P	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AlK	TOC	VOC* see below	Other:	Other:	REMARKS
0935	1-22	AQ	05012521-01	MCAS-FL01	6V	X						X			
1015	1-22	AQ	2	MCAS-FL02	6V	X						X			
1055	1-22	AQ	3	MCAS-FL03	6V	X						X			
1145	1-22	AQ	4	MCAS-FL04	6V	X						X			
0927	1-22	AQ	5	MCAS-FL05	6V	X						X			
1415	1-22	AQ	6	MCAS-FF05	6V	X						X			
1405	1-22	AQ	7	MCAS-FF06	6V	X						X			
1505	1-22	AQ	8	MCAS-FF07	6V	X						X			

ADDITIONAL INSTRUCTIONS: Specific VOC Requirements (please specify) *BTEX/MTBE ONLY FOR VOCs

QC Level IV, Data Validation REQUIRED FOR: MCAS-FF01, MCAS-FF04, MCAS-FL03, MCAS-MW06. Report to include CD.

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	BATTELLE	24 JAN 05	0754
Received by	G Navarrete	G Navarrete	Alpha	1-25-05	12:00
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *09-Feb-05*

Bob Janosy
Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
(614) 424-7358

CASE NARRATIVE

Project: TO105

Work Order: BMI05012521 **Cooler Temp:** 2 °C

Alpha's Sample ID	Client's Sample ID	Matrix
05012521-01A	MCAS-FL01	Aqueous
05012521-02A	MCAS-FL02	Aqueous
05012521-03A	MCAS-FL03	Aqueous
05012521-04A	MCAS-FL04	Aqueous
05012521-05A	MCAS-FL05	Aqueous
05012521-06A	MCAS-FF05	Aqueous
05012521-07A	MCAS-FF06	Aqueous
05012521-08A	MCAS-FF07	Aqueous

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received 01/25/05

Job#: TO105

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MCAS-FL01**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012521-01A	TPH-E (Diesel)	ND	0.050 mg/L	01/22/05	01/28/05
		Surr: Nonane	98	%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/22/05	01/26/05
		Benzene	ND	0.50 µg/L	01/22/05	01/26/05
		Toluene	ND	0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	88	%REC	01/22/05	01/26/05
		Surr: Toluene-d8	99	%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	91	%REC	01/22/05	01/26/05
Client ID :	**MCAS-FL02**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/22/05	01/28/05
Lab ID :	BMI05012521-02A	TPH-E (Diesel)	ND	0.050 mg/L	01/22/05	01/28/05
		Surr: Nonane	98	%REC	01/22/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/22/05	01/26/05
		Benzene	ND	0.50 µg/L	01/22/05	01/26/05
		Toluene	ND	0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	92	%REC	01/22/05	01/26/05
		Surr: Toluene-d8	100	%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	96	%REC	01/22/05	01/26/05
Client ID :	**MCAS-FL03**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/22/05	01/31/05
Lab ID :	BMI05012521-03A	TPH-E (Diesel)	ND	0.050 mg/L	01/22/05	01/31/05
		Surr: Nonane	90	%REC	01/22/05	01/31/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/22/05	01/26/05
		Benzene	ND	0.50 µg/L	01/22/05	01/26/05
		Toluene	ND	0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	88	%REC	01/22/05	01/26/05
		Surr: Toluene-d8	102	%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	96	%REC	01/22/05	01/26/05

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Client ID :	**MCAS-FL04**	TPH-E (Jet Fuel)	ND		0.050 mg/L	01/22/05	01/31/05
Lab ID :	BMI05012521-04A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/31/05
		Surr: Nonane	87		%REC	01/22/05	01/31/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/26/05
		Benzene	ND		0.50 µg/L	01/22/05	01/26/05
		Toluene	ND		0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	87		%REC	01/22/05	01/26/05
		Surr: Toluene-d8	99		%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	92		%REC	01/22/05	01/26/05
Client ID :	**MCAS-FL05**	TPH-E (Jet Fuel)	ND		0.050 mg/L	01/22/05	01/31/05
Lab ID :	BMI05012521-05A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/31/05
		Surr: Nonane	92		%REC	01/22/05	01/31/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/26/05
		Benzene	ND		0.50 µg/L	01/22/05	01/26/05
		Toluene	ND		0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	88		%REC	01/22/05	01/26/05
		Surr: Toluene-d8	102		%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	93		%REC	01/22/05	01/26/05
Client ID :	**MCAS-FF05**	TPH-E (Jet Fuel)	0.23	I*	0.050 mg/L	01/22/05	01/31/05
Lab ID :	BMI05012521-06A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/31/05
		Surr: Nonane	81		%REC	01/22/05	01/31/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/26/05
		Benzene	ND		0.50 µg/L	01/22/05	01/26/05
		Toluene	ND		0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	94		%REC	01/22/05	01/26/05
		Surr: Toluene-d8	94		%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	80		%REC	01/22/05	01/26/05
Client ID :	**MCAS-FF06**	TPH-E (Jet Fuel)	ND		0.050 mg/L	01/22/05	01/31/05
Lab ID :	BMI05012521-07A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/31/05
		Surr: Nonane	94		%REC	01/22/05	01/31/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/26/05
		Benzene	ND		0.50 µg/L	01/22/05	01/26/05
		Toluene	ND		0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	92		%REC	01/22/05	01/26/05
		Surr: Toluene-d8	102		%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	86		%REC	01/22/05	01/26/05
Client ID :	**MCAS-FF07**	TPH-E (Jet Fuel)	ND		0.050 mg/L	01/22/05	01/31/05
Lab ID :	BMI05012521-08A	TPH-E (Diesel)	ND		0.050 mg/L	01/22/05	01/31/05
		Surr: Nonane	94		%REC	01/22/05	01/31/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	01/22/05	01/26/05
		Benzene	ND		0.50 µg/L	01/22/05	01/26/05
		Toluene	ND		0.50 µg/L	01/22/05	01/26/05
		Ethylbenzene	ND		0.50 µg/L	01/22/05	01/26/05
		m,p-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		o-Xylene	ND		0.50 µg/L	01/22/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	89		%REC	01/22/05	01/26/05
		Surr: Toluene-d8	106		%REC	01/22/05	01/26/05
		Surr: 4-Bromofluorobenzene	95		%REC	01/22/05	01/26/05

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*Note: Reported Jet Fuel concentration may include some undifferentiated lighter-end hydrocarbons.
I = Concentrations reported in the range of jet fuel may include other products such as kerosene, mineral spirits, weathered Gasoline, etc.
Note: Jet Fuel elutes out in the range of DRO, therefore the DRO calibration was used to quantitate the Jet Fuel.
ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05
Report Date

Alpha Analytical, Inc.

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VOC pH Report

Work Order: BMI05012521 **Project:** TO105

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05012521-01A	MCAS-FL01	Aqueous	2
05012521-02A	MCAS-FL02	Aqueous	2
05012521-03A	MCAS-FL03	Aqueous	2
05012521-04A	MCAS-FL04	Aqueous	2
05012521-05A	MCAS-FL05	Aqueous	2
05012521-06A	MCAS-FF05	Aqueous	2
05012521-07A	MCAS-FF06	Aqueous	2
05012521-08A	MCAS-FF07	Aqueous	2

2/7/05
Report Date

Alpha Analytical, Inc.

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Date: *09-Feb-05*

QC Summary Report

Work Order: 05012521

Method Blank

Type **MBLK** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11564** Analysis Date: **01/28/2005 16:43**

Sample ID: **MBLK-11564** Units : **mg/L** Run ID: **FID_1_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Jet Fuel)	ND	0.05								
TPH-E (Diesel)	ND	0.05								
Surr: Nonane	96.1		100		96	47	141			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11564** Analysis Date: **01/28/2005 16:12**

Sample ID: **LCS-11564** Units : **mg/L** Run ID: **FID_1_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Diesel)	2.47	0.5	2.5		99	64	129			
Surr: Nonane	97.4		100		97	47	141			

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11564** Analysis Date: **01/28/2005 17:45**

Sample ID: **05012421-03AMS** Units : **mg/L** Run ID: **FID_1_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Diesel)	2.4	0.5	2.5	0	96	56	147			
Surr: Nonane	97.2		100		97	47	141			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8015**

File ID: Batch ID: **11564** Analysis Date: **01/28/2005 18:16**

Sample ID: **05012421-03AMSD** Units : **mg/L** Run ID: **FID_1_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
TPH-E (Diesel)	2.33	0.5	2.5	0	93	56	147	2.4	2.8(25)	
Surr: Nonane	80.1		100		80	47	141			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

First Quarter Analytical – C

Billing Information:

Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY

Name Alpha Analytical
Address 255 Glendale Ave
SPARKS, NV 89431
Phone 775 355 1044

Page # _____ of _____

Client Name **Battelle Memorial Institute**	P.O. #	D.O. 105	
Address **505 King Avenue**	PWS #	DWR #	
City, State, Zip **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Sampled by MW/GH	Report Attention		

DATA REPORT: NEDTS FORMAT X; EDF FORMAT X

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E	TPH/P	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AIK	TOC	VOC* see below	Other: PNA's	Other:	REMARKS
1335	1-21	AQ	BM105012542-01	MCAS-FF01	1L								X		
1443	1-21	AQ	02	MCAS-FF02	1L								X		
1454	1-21	AQ	03	MCAS-FF03	1L								X		
1346	1-21	AQ	04	MCAS-FF04	1L								X		
1346	1-21	AQ	05	MCAS-FF04D	1L								X		
1346	1-21	AQ		MCAS-FF04 MS (lab use)	1L								X		Matrix Spike
1346	1-21	AQ		MCAS-FF04 MSD (lab use)	1L								X		Matrix Spike DUP
1545	1-21	AQ	06	MCAS-MW12R	1L								X		

ADDITIONAL INSTRUCTIONS: **Specific VOC Requirements (please specify)**

QC Level IV, Data Validation REQUIRED FOR: MCAS-FF01, MCAS-FF04

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	Battelle	24JAN05	0750
Received by	Laura Long	Laura Long	Alpha	1/25/05	940
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *08-Feb-05*

Bob Janosy
Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
(614) 424-7358

CASE NARRATIVE

Project: TO105

Work Order: BMI05012542

Cooler Temp: 5 °C

Alpha's Sample ID	Client's Sample ID	Matrix
05012542-01A	MCAS-FF01	Aqueous
05012542-02A	MCAS-FF02	Aqueous
05012542-03A	MCAS-FF03	Aqueous
05012542-04A	MCAS-FF04	Aqueous
05012542-05A	MCAS-FF04D	Aqueous
05012542-06A	MCAS-MW12R	Aqueous

Enclosed please find the analytical results of the samples received by Alpha Analytical, Inc. under the above mentioned Work Order/Chain-of-Custody.

Alpha Analytical, Inc. has a formal Quality Assurance/Quality Control program, which is designed to meet or exceed the EPA requirements. All relevant QC met quality assurance objectives for this project unless otherwise stated in the footnotes.

If you have any questions with regards to this report, please contact Randy Gardner, Project Manager, at (800) 283-1183.

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMJ05012542-01A
Client I.D. Number: MCAS-FF01

Sampled: 01/21/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	104	%REC
18	Surr: 2-Fluorobiphenyl	96	%REC
19	Surr: 4-Terphenyl-d14	105	%REC

This replaces the report originally signed on 2/7/05 due to a correction of the date of analysis.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/23/05
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012542-02A
Client I.D. Number: MCAS-FF02

Sampled: 01/21/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	106	%REC
18	Surr: 2-Fluorobiphenyl	95	%REC
19	Surr: 4-Terphenyl-d14	106	%REC

This replaces the report originally signed on 2/7/05 due to a correction of the date of analysis.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/23/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012542-03A
Client I.D. Number: MCAS-FF03

Sampled: 01/21/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	96	%REC
18	Surr: 2-Fluorobiphenyl	85	%REC
19	Surr: 4-Terphenyl-d14	98	%REC

This replaces the report originally signed on 2/7/05 due to a correction of the date of analysis.

ND - Not Detected

Roger Scholl Randy Gardner Walter Hirschman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hirschman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/23/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012542-04A
Client I.D. Number: MCAS-FF04

Sampled: 01/21/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	99	%REC
18	Surr: 2-Fluorobiphenyl	89	%REC
19	Surr: 4-Terphenyl-d14	98	%REC

This replaces the report originally signed on 2/7/05 due to a correction of the date of analysis.

ND -- Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/23/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012542-05A
Client I.D. Number: MCAS-FF04D

Sampled: 01/21/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	106	%REC
18	Surr: 2-Fluorobiphenyl	92	%REC
19	Surr: 4-Terphenyl-d14	107	%REC

This replaces the report originally signed on 2/7/05 due to a correction of the date of analysis.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/23/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012542-06A
Client I.D. Number: MCAS-MW12R

Sampled: 01/21/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	98	%REC
18	Surr: 2-Fluorobiphenyl	90	%REC
19	Surr: 4-Terphenyl-d14	99	%REC

This replaces the report originally signed on 2/7/05 due to a correction of the date of analysis.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/23/05
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778

(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *08-Feb-05*

QC Summary Report

Work Order: 05012542

Method Blank

Type **MBLK** Test Code: **EPA Method SW8270C**

File ID: **C:\HPCHEM\MS02\DATA\050128\05012803.D** Batch ID: **11565** Analysis Date: **01/28/2005 11:32**

Sample ID: **MBLK 11565** Units : **µg/L** Run ID: **MSD_02_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Naphthalene	ND	10								
Acenaphthylene	ND	10								
Acenaphthene	ND	10								
Fluorene	ND	10								
Phenanthrene	ND	10								
Anthracene	ND	10								
Fluoranthene	ND	10								
Pyrene	ND	10								
Benzo(a)anthracene	ND	10								
Chrysene	ND	10								
Benzo(b)fluoranthene	ND	10								
Benzo(k)fluoranthene	ND	10								
Benzo(a)pyrene	ND	10								
Indeno(1,2,3-cd)pyrene	ND	10								
Dibenz(a,h)anthracene	ND	10								
Benzo(g,h,i)perylene	ND	10								
Surr: Nitrobenzene-d5	98		100		98	65	130			
Surr: 2-Fluorobiphenyl	78.4		100		78	54	133			
Surr: 4-Terphenyl-d14	101		100		101	57	136			

Laboratory Control Spike

Type **LCS** Test Code: **EPA Method SW8270C**

File ID: **C:\HPCHEM\MS02\DATA\050128\05012805.D** Batch ID: **11565** Analysis Date: **01/28/2005 13:12**

Sample ID: **LCS 11565** Units : **µg/L** Run ID: **MSD_02_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Naphthalene	85	10	100		85	44	134			
Acenaphthylene	94	10	100		94	60	131			
Acenaphthene	87.8	10	100		88	49	138			
Fluorene	87.1	10	100		87	61	129			
Phenanthrene	91.7	10	100		92	60	128			
Anthracene	94.8	10	100		95	62	128			
Fluoranthene	103	10	100		103	61	126			
Pyrene	94.3	10	100		94	60	130			
Benzo(a)anthracene	95.9	10	100		96	66	126			
Chrysene	96.7	10	100		97	62	129			
Benzo(b)fluoranthene	96.3	10	100		96	64	127			
Benzo(k)fluoranthene	96.9	10	100		97	58	130			
Benzo(a)pyrene	101	10	100		101	67	124			
Indeno(1,2,3-cd)pyrene	111	10	100		111	59	131			
Dibenz(a,h)anthracene	109	10	100		109	54	133			
Benzo(g,h,i)perylene	119	10	100		119	54	135			
Surr: Nitrobenzene-d5	94.6		100		95	65	130			
Surr: 2-Fluorobiphenyl	82.1		100		82	54	133			
Surr: 4-Terphenyl-d14	95.8		100		96	57	136			

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

Date: *08-Feb-05*

QC Summary Report

Work Order: 05012542

Sample Matrix Spike

Type **MS** Test Code: **EPA Method SW8270C**

File ID: **C:\HPCHEM\MS02\DATA\050202\05020210.D** Batch ID: **11565** Analysis Date: **02/02/2005 18:05**

Sample ID: **05012542-04AMS** Units : **µg/L** Run ID: **MSD_02_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Naphthalene	87.3	10	100	0	87	28	142			
Acenaphthylene	103	10	100	0	103	42	143			
Acenaphthene	97.4	10	100	0	97	49	138			
Fluorene	96.5	10	100	0	97	57	132			
Phenanthrene	100	10	100	0	100	58	130			
Anthracene	104	10	100	0	104	44	144			
Fluoranthene	111	10	100	0	111	59	127			
Pyrene	100	10	100	0	100	55	132			
Benzo(a)anthracene	100	10	100	0	100	57	133			
Chrysene	101	10	100	0	101	59	130			
Benzo(b)fluoranthene	95.8	10	100	0	96	57	133			
Benzo(k)fluoranthene	105	10	100	0	105	55	132			
Benzo(a)pyrene	106	10	100	0	106	42	144			
Indeno(1,2,3-cd)pyrene	117	10	100	0	117	53	136			
Dibenz(a,h)anthracene	114	10	100	0	114	48	141			
Benzo(g,h,i)perylene	126	10	100	0	126	49	139			
Surr: Nitrobenzene-d5	102		100		102	65	130			
Surr: 2-Fluorobiphenyl	92.4		100		92	54	133			
Surr: 4-Terphenyl-d14	105		100		105	57	136			

Sample Matrix Spike Duplicate

Type **MSD** Test Code: **EPA Method SW8270C**

File ID: **C:\HPCHEM\MS02\DATA\050202\05020211.D** Batch ID: **11565** Analysis Date: **02/02/2005 18:55**

Sample ID: **05012542-04AMSD** Units : **µg/L** Run ID: **MSD_02_050127A** Prep Date: **01/27/2005**

Analyte	Result	PQL	SpkVal	SpkRefVal	%REC	LowLimit	HighLimit	RPDRefVal	%RPD(Limit)	Qual
Naphthalene	91.9	10	100	0	92	28	142	87.31	5.1(28)	
Acenaphthylene	107	10	100	0	107	42	143	103	3.4(18)	
Acenaphthene	99.9	10	100	0	99.9	49	138	97.43	2.5(20)	
Fluorene	99.5	10	100	0	99	57	132	96.5	3.0(12)	
Phenanthrene	102	10	100	0	102	58	130	100.1	1.9(10)	
Anthracene	104	10	100	0	104	44	144	103.8	0.2(10)	
Fluoranthene	109	10	100	0	109	59	127	110.6	1.7(10)	
Pyrene	104	10	100	0	104	55	132	100.4	3.8(10)	
Benzo(a)anthracene	103	10	100	0	103	57	133	99.98	3.2(10)	
Chrysene	105	10	100	0	105	59	130	101.2	3.3(10)	
Benzo(b)fluoranthene	102	10	100	0	102	57	133	95.79	6.7(11)	
Benzo(k)fluoranthene	105	10	100	0	105	55	132	105.3	0.0(12)	
Benzo(a)pyrene	108	10	100	0	108	42	144	105.8	2.3(10)	
Indeno(1,2,3-cd)pyrene	119	10	100	0	119	53	136	116.5	1.8(13)	
Dibenz(a,h)anthracene	114	10	100	0	114	48	141	114.1	0.3(13)	
Benzo(g,h,i)perylene	127	10	100	0	127	49	139	125.9	0.6(15)	
Surr: Nitrobenzene-d5	104		100		104	65	130			
Surr: 2-Fluorobiphenyl	95.6		100		96	54	133			
Surr: 4-Terphenyl-d14	110		100		110	57	136			

Comments:

Calculations are based off of raw (non-rounded) data. However, for reporting purposes, all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.

First Quarter Analytical – D

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012543-01A
Client I.D. Number: MCAS-FL06

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	112	%REC
18	Surr: 2-Fluorobiphenyl	97	%REC
19	Surr: 4-Terphenyl-d14	109	%REC

ND - Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 • Las Vegas, NV • (702) 281-4848 • info@alpha-analytical.com

2/7/05
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012543-02A
Client I.D. Number: MCAS-FL07

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	96	%REC
18	Surr: 2-Fluorobiphenyl	75	%REC
19	Surr: 4-Terphenyl-d14	98	%REC

ND – Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/7/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012543-03A
Client I.D. Number: MCAS-MW06

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	97	%REC
18	Surr: 2-Fluorobiphenyl	86	%REC
19	Surr: 4-Terphenyl-d14	97	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/7/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012543-04A
Client I.D. Number: MCAS-MW06D

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	98	%REC
18	Surr: 2-Fluorobiphenyl	84	%REC
19	Surr: 4-Terphenyl-d14	96	%REC

ND – Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/7/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012543-05A
Client I.D. Number: MCAS-MW07

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	102	%REC
18	Surr: 2-Fluorobiphenyl	85	%REC
19	Surr: 4-Terphenyl-d14	100	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/7/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012543-06A
Client I.D. Number: MCAS-MW08

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	103	%REC
18	Surr: 2-Fluorobiphenyl	88	%REC
19	Surr: 4-Terphenyl-d14	105	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

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2/7/05
Report Date

Billing Information:
Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY
Name Alpha Analytical
Address 255 Glendale Ave. Sparks, NV 89431
Phone 775 355 1044

Page # _____ of _____

Client Name **Battelle Memorial Institute**	P.O. #	D.O. 105 7 64	
Address **505 King Avenue**	PWS #	DWR #	
City, State, Zip **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Sampled by MW / GH	Report Attention BOB JAWOSY		

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E	TPH/P	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AlK	TOC	VOC* see below	Other: PNA's	Other:	REMARKS
1055	1-22	AQ	BM105012543-01	MCAS-FL06	1 L								X		
1600	1-22	AQ	02	MCAS-FL07	1 L								X		
1455	1-22	AQ	03	MCAS-MW06	1 L								X		
1455	1-22	AQ	04	MCAS-MW06D	1 L								X		
1230	1-22	AQ	05	MCAS-MW07	1 L								X		
1235	1-22	AQ	06	MCAS-MW08	1 L								X		

DATA REPORT
NEDTS FORMAT X
EDF FORMAT X

ADDITIONAL INSTRUCTIONS: **Specific VOC Requirements (please specify)**

QC Level IV, Data Validation Required for: MCAS-FF01, MCAS-FF04, MCAS-FL03, MCAS-MW06

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	BATTELLE	24 JAN 05	0756
Received by	Laura Long	Laura Long	Alpha	1/25/05	1000
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

First Quarter Analytical – E

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-01A
Client I.D. Number: MCAS-FL01

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	97	%REC
18	Surr: 2-Fluorobiphenyl	85	%REC
19	Surr: 4-Terphenyl-d14	94	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-02A
Client I.D. Number: MCAS-FL02

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	100	%REC
18	Surr: 2-Fluorobiphenyl	90	%REC
19	Surr: 4-Terphenyl-d14	104	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/7/05
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-03A
Client I.D. Number: MCAS-FL03

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	99	%REC
18	Surr: 2-Fluorobiphenyl	91	%REC
19	Surr: 4-Terphenyl-d14	101	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/7/05
Report Date

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-04A
Client I.D. Number: MCAS-FL04

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	103	%REC
18	Surr: 2-Fluorobiphenyl	90	%REC
19	Surr: 4-Terphenyl-d14	105	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05
Report Date

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-05A
Client I.D. Number: MCAS-FL05

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 01/31/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	100	%REC
18	Surr: 2-Fluorobiphenyl	92	%REC
19	Surr: 4-Terphenyl-d14	102	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
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2/7/05
Report Date

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-06A
Client I.D. Number: MCAS-FF05

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 02/01/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	100	%REC
18	Surr: 2-Fluorobiphenyl	88	%REC
19	Surr: 4-Terphenyl-d14	99	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • Randy Gardner, Laboratory Manager • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-07A
Client I.D. Number: MCAS-FF06

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	97	%REC
18	Surr: 2-Fluorobiphenyl	91	%REC
19	Surr: 4-Terphenyl-d14	95	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05
Report Date

Alpha Analytical, Inc.

255 Glendale Ave. • Suite 21 • Sparks, Nevada 89431-5778
(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201
Job#: TO105

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667

Alpha Analytical Number: BMI05012544-08A
Client I.D. Number: MCAS-FF07

Sampled: 01/22/05
Received: 01/25/05
Analyzed: 02/02/05

Semivolatile Organics by GC/MS
EPA Method SW8270C

	Compound	Concentration	Reporting Limit
1	Naphthalene	ND	10 µg/L
2	Acenaphthylene	ND	10 µg/L
3	Acenaphthene	ND	10 µg/L
4	Fluorene	ND	10 µg/L
5	Phenanthrene	ND	10 µg/L
6	Anthracene	ND	10 µg/L
7	Fluoranthene	ND	10 µg/L
8	Pyrene	ND	10 µg/L
9	Benzo(a)anthracene	ND	10 µg/L
10	Chrysene	ND	10 µg/L
11	Benzo(b)fluoranthene	ND	10 µg/L
12	Benzo(k)fluoranthene	ND	10 µg/L
13	Benzo(a)pyrene	ND	10 µg/L
14	Indeno(1,2,3-cd)pyrene	ND	10 µg/L
15	Dibenz(a,h)anthracene	ND	10 µg/L
16	Benzo(g,h,i)perylene	ND	10 µg/L
17	Surr: Nitrobenzene-d5	98	%REC
18	Surr: 2-Fluorobiphenyl	89	%REC
19	Surr: 4-Terphenyl-d14	101	%REC

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer
Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05
Report Date

Billing Information:

Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY

Name Alpha Analytical
Address 255 Glendale Ave.
Sparks, NV 89431
Phone 775 355 1044

Page # _____ of _____

Client Name **Battelle Memorial Institute**	P.O. #	D.O. 105	
Address **505 King Avenue**	PWS #	DWR #	
City, State, Zip **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Sampled by MW/GH	Report Attention BOB JANOSY		

DATA REPORT: NEDTS FORMAT X; EDF FORMAT X

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E	TPH/P	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AIK	TOC	VOC* see below	Other: PNA's	Other:	REMARKS
0935	1-22	AQ	BM105012544-01	MCAS-FL01	1L								X		
1015	1-22	AQ	02	MCAS-FL02	1L								X		
1055	1-22	AQ	03	MCAS-FL03	1L								X		
1145	1-22	AQ	04	MCAS-FL04	1L								X		
0927	1-22	AQ	05	MCAS-FL05	1L								X		
1415	1-22	AQ	06	MCAS-~~FL06~~ GH FF05	1L								X		
1405	1-22	AQ	07	MCAS-FF06	1L								X		
1505	1-22	AQ	08	MCAS-FF07	1L								X		

ADDITIONAL INSTRUCTIONS: **Specific VOC Requirements (please specify)**

QC Level IV, DATA VALIDATION REQUIRED FOR: MCAS-FF01, MCAS-FF04, MCAS-FL03, MCAS-MW06. Report to include CD-Rom

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	BAttelle	24JAN05	0754
Received by	Laura Long	Laura Long	Alpha	1/25/05	1940
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

First Quarter Analytical – F

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received 01/25/05

Job#: TO105

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MCAS-QCTB1**	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
Lab ID :	BMI05012545-01A	Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	91	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	100	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	95	%REC	01/21/05	01/26/05
Client ID :	**MCAS-QCFB1**	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
Lab ID :	BMI05012545-02A	Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	90	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	100	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	94	%REC	01/21/05	01/26/05
Client ID :	**MCAS-QC-EB1**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/21/05	01/27/05
Lab ID :	BMI05012545-03A	TPH-E (Diesel)	ND	0.050 mg/L	01/21/05	01/27/05
		Surr: Nonane	88	%REC	01/21/05	01/27/05
Client ID :	**MCAS-FF01**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/21/05	01/27/05
Lab ID :	BMI05012545-04A	TPH-E (Diesel)	ND	0.050 mg/L	01/21/05	01/27/05
		Surr: Nonane	79	%REC	01/21/05	01/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
		Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	90	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	104	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	93	%REC	01/21/05	01/26/05

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Client ID :	**MCAS-FF02**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/21/05	01/27/05
Lab ID :	BMI05012545-05A	TPH-E (Diesel)	ND	0.050 mg/L	01/21/05	01/27/05
		Surr: Nonane	86	%REC	01/21/05	01/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
		Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	90	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	100	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	88	%REC	01/21/05	01/26/05
Client ID :	**MCAS-FF03**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/21/05	01/27/05
Lab ID :	BMI05012545-06A	TPH-E (Diesel)	ND	0.050 mg/L	01/21/05	01/27/05
		Surr: Nonane	94	%REC	01/21/05	01/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
		Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	91	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	99	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	89	%REC	01/21/05	01/26/05
Client ID :	**MCAS-FF04**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/21/05	01/28/05
Lab ID :	BMI05012545-07A	TPH-E (Diesel)	ND	0.050 mg/L	01/21/05	01/28/05
		Surr: Nonane	82	%REC	01/21/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
		Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	91	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	103	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	91	%REC	01/21/05	01/26/05
Client ID :	**MCAS-FF04D**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/21/05	01/28/05
Lab ID :	BMI05012545-08A	TPH-E (Diesel)	ND	0.050 mg/L	01/21/05	01/28/05
		Surr: Nonane	91	%REC	01/21/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
		Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	90	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	103	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	91	%REC	01/21/05	01/26/05
Client ID :	**MCAS-MW12R**	TPH-E (Jet Fuel)	ND	0.050 mg/L	01/21/05	01/28/05
Lab ID :	BMI05012545-09A	TPH-E (Diesel)	ND	0.050 mg/L	01/21/05	01/28/05
		Surr: Nonane	87	%REC	01/21/05	01/28/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	01/21/05	01/26/05
		Benzene	ND	0.50 µg/L	01/21/05	01/26/05
		Toluene	ND	0.50 µg/L	01/21/05	01/26/05
		Ethylbenzene	ND	0.50 µg/L	01/21/05	01/26/05
		m,p-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		o-Xylene	ND	0.50 µg/L	01/21/05	01/26/05
		Surr: 1,2-Dichloroethane-d4	87	%REC	01/21/05	01/26/05
		Surr: Toluene-d8	105	%REC	01/21/05	01/26/05
		Surr: 4-Bromofluorobenzene	92	%REC	01/21/05	01/26/05

Alpha Analytical, Inc.

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ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

2/7/05

Report Date

Alpha Analytical, Inc.

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VOC pH Report

Work Order: BMI05012545 **Project:** TO105

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05012545-01A	MCAS-QCTB1	Aqueous	
05012545-02A	MCAS-QCFB1	Aqueous	2
05012545-04A	MCAS-FF01	Aqueous	2
05012545-05A	MCAS-FF02	Aqueous	2
05012545-06A	MCAS-FF03	Aqueous	6
05012545-07A	MCAS-FF04	Aqueous	6
05012545-08A	MCAS-FF04D	Aqueous	6
05012545-09A	MCAS-MW12R	Aqueous	2

2/7/05
Report Date

Billing Information:

Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY

Name Alpha Analytical
Address 255 Glendale Ave
SPARKS, NV 89431
Phone 775 355 1044

Page # _____ of _____

Client Name **Battelle Memorial Institute**	P.O. #	D.O. 105	
Address **505 King Avenue**	PWS #	DWR #	
City, State, Zip **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Sampled by MW/GH	Report Attention BOB JANOSY		

DATA REPORT: NEDTS FORMAT X; EDF FORMAT X

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E Diesel JP5	TPH/P	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AIK	TOC	VOC* see below	Other: PNA3	Other:	REMARKS
21 JAN 05		AQ	BM105012545-01	MCAS-QCTB1	1V							X			
1309	1-21	AQ	02	MCAS-QCFB1	3V							X			
1312	1-21	AQ	03	MCAS-QCEB1	3V	X									
1335	1-21	AQ	04	MCAS-FF01	6V	X						X			
1443	1-21	AQ	05	MCAS-FF02	6V	X						X			
1454	1-21	AQ	06	MCAS-FF03	6V	X						X			
1346	1-21	AQ	07	MCAS-FF04	6V	X						X			
1346	1-21	AQ	08	MCAS-FF04D	6V	X						X			
1545	1-21	AQ	09	MCAS-MW12R	6V	X						X			

ADDITIONAL INSTRUCTIONS: **Specific VOC Requirements (please specify)** BTEX, MTBE ONLY FOR VOC'S

QC Level IV, DATA VALIDATION REQUIRED FOR MCAS-FF01, MCAS-FF04, Report with CD-Rom

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	BATTELLE	24 JAN 05	0748
Received by	Laura Long	Laura Long	Alpha	1/25/05	1120
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Second Quarter Analytical – A

Billing Information:
Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY
Name Alpha Analytical
Address 255 Glendale, Suite 21
Sparks, NV 89431
Phone (775) 355-1044

Page # 1 of 1

Client Name	Battelle Memorial Institute	P.O. # 190050	D.O. 105
Address	505 King Avenue	PWS #	DWR #
City, State, Zip	Columbus, OH 43201	Phone # 614 424 7160	Fax # 614 424 3667

Sampled by MW/GH
Report Attention BOB JANOSY

Analyses Required: TPH/E Diesel JET FUEL; TPH/P GAS; NO_2, NO_3, SO_4; Pb, Mn^{+2}, Fe^{+2}; TDS, AlK; TOC; VOC* see below; Other:; Other:

DATA REPORT: NEDTS FORMAT X; EDF FORMAT X

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E Diesel JET FUEL	TPH/P GAS	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AlK	TOC	VOC* see below	Other:	Other:	REMARKS
1040	4-16	AQ	05041922-01	MCAS-QCFB01	3V							X			
1312	4-16	AQ	02	MCAS-QCEB01	3V	X									
17APR05		AQ	03	MCAS-QCTB02	1V							X			
1151	4-17	AQ	04	MCAS-QCFB02	3V							X			
0940	4-17	AQ	05	MCAS-QCEB02	3V	X									
1350	4-17	AQ	06	MCAS-FF01	6V	X	X					X			
1155	4-17	AQ	07	MCAS-FF02	6V	X	X					X			
1200	4-17	AQ	08	MCAS-FF03	6V	X	X					X			
1302	4-17	AQ	09	MCAS-FF04	6V	X	X					X			
1435	4-16	AQ	10	MCAS-FF05	6V	X	X					X			
1534	4-16	AQ	11	MCAS-FF06	6V	X	X					X			
1548	4-16	AQ	12	MCAS-FF07	6V	X	X					X			

ADDITIONAL INSTRUCTIONS: Specific VOC Requirements (please specify) * (BTEX/MTBE ONLY)

Data to be forwarded to LDC for data validation. Report on CD ROM.

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	Battelle	18APR05	0830
Received by	Graciela Navarrete	G. Navarrete	Alpha	4-19-05	1:25
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Alpha Analytical, Inc.

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(775) 355-1044 • (775) 355-0406 FAX • 1-800-283-1183

ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received 04/19/05

Job#: TO105

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	**MCAS-QC FB01**	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/27/05
Lab ID :	BMI05041922-01A	Benzene	ND	0.50 µg/L	04/16/05	04/27/05
		Toluene	ND	0.50 µg/L	04/16/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	106	%REC	04/16/05	04/27/05
		Surr: Toluene-d8	100	%REC	04/16/05	04/27/05
		Surr: 4-Bromofluorobenzene	112	%REC	04/16/05	04/27/05
Client ID :	**MCAS-QC EB01**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/20/05
Lab ID :	BMI05041922-02A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/20/05
		Surr: Nonane	128	%REC	04/16/05	04/20/05
Client ID :	**MCAS-QC TB02**	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/27/05
Lab ID :	BMI05041922-03A	Benzene	ND	0.50 µg/L	04/16/05	04/27/05
		Toluene	ND	0.50 µg/L	04/16/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	100	%REC	04/16/05	04/27/05
		Surr: Toluene-d8	99	%REC	04/16/05	04/27/05
		Surr: 4-Bromofluorobenzene	111	%REC	04/16/05	04/27/05
Client ID :	**MCAS-QC FB02**	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/17/05	04/27/05
Lab ID :	BMI05041922-04A	Benzene	ND	0.50 µg/L	04/17/05	04/27/05
		Toluene	ND	0.50 µg/L	04/17/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/17/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	106	%REC	04/17/05	04/27/05
		Surr: Toluene-d8	96	%REC	04/17/05	04/27/05
		Surr: 4-Bromofluorobenzene	110	%REC	04/17/05	04/27/05
Client ID :	**MCAS-QC EB02**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/17/05	04/20/05
Lab ID :	BMI05041922-05A	TPH-E (Diesel)	ND	0.050 mg/L	04/17/05	04/20/05
		Surr: Nonane	132	%REC	04/17/05	04/20/05

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Client ID :	**MCAS-FF01**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/17/05	04/20/05
Lab ID :	BMI05041922-06A	TPH-E (Diesel)	ND	0.050 mg/L	04/17/05	04/20/05
		Surr: Nonane	132	%REC	04/17/05	04/20/05
		TPH Purgeable	ND	0.050 mg/L	04/17/05	04/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/17/05	04/27/05
		Benzene	ND	0.50 µg/L	04/17/05	04/27/05
		Toluene	ND	0.50 µg/L	04/17/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/17/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	106	%REC	04/17/05	04/27/05
		Surr: Toluene-d8	97	%REC	04/17/05	04/27/05
		Surr: 4-Bromofluorobenzene	109	%REC	04/17/05	04/27/05
Client ID :	**MCAS-FF02**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/17/05	04/20/05
Lab ID :	BMI05041922-07A	TPH-E (Diesel)	ND	0.050 mg/L	04/17/05	04/20/05
		Surr: Nonane	131	%REC	04/17/05	04/20/05
		TPH Purgeable	ND	0.050 mg/L	04/17/05	04/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/17/05	04/27/05
		Benzene	ND	0.50 µg/L	04/17/05	04/27/05
		Toluene	ND	0.50 µg/L	04/17/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/17/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	111	%REC	04/17/05	04/27/05
		Surr: Toluene-d8	98	%REC	04/17/05	04/27/05
		Surr: 4-Bromofluorobenzene	106	%REC	04/17/05	04/27/05
Client ID :	**MCAS-FF03**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/17/05	04/21/05
Lab ID :	BMI05041922-08A	TPH-E (Diesel)	ND	0.050 mg/L	04/17/05	04/21/05
		Surr: Nonane	127	%REC	04/17/05	04/21/05
		TPH Purgeable	ND	0.050 mg/L	04/17/05	04/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/17/05	04/27/05
		Benzene	ND	0.50 µg/L	04/17/05	04/27/05
		Toluene	ND	0.50 µg/L	04/17/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/17/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	117	%REC	04/17/05	04/27/05
		Surr: Toluene-d8	97	%REC	04/17/05	04/27/05
		Surr: 4-Bromofluorobenzene	107	%REC	04/17/05	04/27/05
Client ID :	**MCAS-FF04**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/17/05	04/21/05
Lab ID :	BMI05041922-09A	TPH-E (Diesel)	ND	0.050 mg/L	04/17/05	04/21/05
		Surr: Nonane	82	%REC	04/17/05	04/21/05
		TPH Purgeable	ND	0.050 mg/L	04/17/05	04/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/17/05	04/27/05
		Benzene	ND	0.50 µg/L	04/17/05	04/27/05
		Toluene	ND	0.50 µg/L	04/17/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/17/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/17/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	114	%REC	04/17/05	04/27/05
		Surr: Toluene-d8	99	%REC	04/17/05	04/27/05
		Surr: 4-Bromofluorobenzene	107	%REC	04/17/05	04/27/05

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Client ID :	**MCAS-FF05**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/21/05
Lab ID :	BMI05041922-10A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/21/05
		Surr: Nonane	87	%REC	04/16/05	04/21/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/27/05
		Benzene	ND	0.50 µg/L	04/16/05	04/27/05
		Toluene	ND	0.50 µg/L	04/16/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	106	%REC	04/16/05	04/27/05
		Surr: Toluene-d8	96	%REC	04/16/05	04/27/05
		Surr: 4-Bromofluorobenzene	103	%REC	04/16/05	04/27/05
Client ID :	**MCAS-FF06**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/21/05
Lab ID :	BMI05041922-11A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/21/05
		Surr: Nonane	89	%REC	04/16/05	04/21/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/27/05
		Benzene	ND	0.50 µg/L	04/16/05	04/27/05
		Toluene	ND	0.50 µg/L	04/16/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	104	%REC	04/16/05	04/27/05
		Surr: Toluene-d8	100	%REC	04/16/05	04/27/05
		Surr: 4-Bromofluorobenzene	105	%REC	04/16/05	04/27/05
Client ID :	**MCAS-FF07**	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/21/05
Lab ID :	BMI05041922-12A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/21/05
		Surr: Nonane	91	%REC	04/16/05	04/21/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/27/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/27/05
		Benzene	ND	0.50 µg/L	04/16/05	04/27/05
		Toluene	ND	0.50 µg/L	04/16/05	04/27/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/27/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/27/05
		Surr: 1,2-Dichloroethane-d4	108	%REC	04/16/05	04/27/05
		Surr: Toluene-d8	98	%REC	04/16/05	04/27/05
		Surr: 4-Bromofluorobenzene	107	%REC	04/16/05	04/27/05

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/2/05

Report Date

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VOC Sample Preservation Report

Work Order BMI05041922 **Project:** TO105

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05041922-01A	MCAS-QC FB01	Aqueous	2
05041922-03A	MCAS-QC TB02	Aqueous	
05041922-04A	MCAS-QC FB02	Aqueous	2
05041922-06A	MCAS-FF01	Aqueous	2
05041922-07A	MCAS-FF02	Aqueous	6
05041922-08A	MCAS-FF03	Aqueous	6
05041922-09A	MCAS-FF04	Aqueous	6
05041922-10A	MCAS-FF05	Aqueous	6
05041922-11A	MCAS-FF06	Aqueous	2
05041922-12A	MCAS-FF07	Aqueous	2

5/2/05

Report Date

Second Quarter Analytical – B

Billing Information:
Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY
Name Alpha Analytical
Address 255 Glendale, Suite 21
Sparks, NV 89431
Phone (775) 355-1044

Page # _____ of _____

Client Name **Battelle Memorial Institute**	P.O. # 190050	D.O. 105	
Address **505 King Avenue**	PWS #	DWR #	
City, State, Zip **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Office Use Only: Sampled by MW/EH	Report Attention Bob Janosy		

Analyses Required: TPH/E Diesel Jet Fuel; TPH/P GRO; NO_2, NO_3, SO_4; Pb, Mn^{+2}, Fe^{+2}; TDS, AIK; TOC; VOC* see below; Other:; Other:

DATA REPORT: NEDTS FORMAT X; EDF FORMAT X

Time Sampled	Date Sampled	Matrix* See Key Below	Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E Diesel Jet Fuel	TPH/P GRO	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AIK	TOC	VOC* see below	Other:	Other:	REMARKS
16APR05		AQ	BM1050419 45-01	MCAS-QCTB1	1V							X			
1052	4-16	AQ	-02	MCAS-FL01	6V	X	X					X			
1147	4-16	AQ	-03	MCAS-FL02	6V	X	X								
1228	4-16	AQ	-04	MCAS-FL03	6V	X	X								
1318	4-16	AQ	-05	MCAS-FL04	6V	X	X								
1041	4-16	AQ	-06	MCAS-FL05	6V	X	X								
1230	4-16	AQ	-07	MCAS-FL06	6V	X	X								
1645	4-16	AQ	-08	MCAS-FL07	6V	X	X								
1627	4-16	AQ	-09	MCAS-MW06	6V	X	X								
1627	4-16	AQ	-10	MCAS-MW06D	5V	X	X								ONLY 2 EXT VOAS
1450	4-16	AQ	-11	MCAS-MW07	6V	X	X								
1410	4-16	AQ	-12	MCAS-MW08	6V	X	X								
1300	4-17	AQ	-13	MCAS-MW12R	6V	X	X								

ADDITIONAL INSTRUCTIONS: **Specific VOC Requirements (please specify)** (BTEX/MTBE ONLY)

Data to be forwarded to LDC for data validation & Report on CD Rom.

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	Battelle	18 APR 05	0830
Received by	Patricia Edrosa	Patricia Edrosa	Alpha	4-19-05	12:28
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received 04/19/05

Job#: DO105

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	MCAS-QCTB1	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
Lab ID :	BMI05041945-01A	Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	103	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	98	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	111	%REC	04/16/05	04/26/05
Client ID :	MCAS-FL01	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-02A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/22/05
		Surr: Nonane	101	%REC	04/16/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
		Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	111	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	95	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	113	%REC	04/16/05	04/26/05
Client ID :	MCAS-FL02	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-03A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/22/05
		Surr: Nonane	93	%REC	04/16/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
		Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	112	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	96	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	112	%REC	04/16/05	04/26/05

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Client ID :	MCAS-FL03	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-04A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/22/05
		Surr: Nonane	98	%REC	04/16/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
		Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	114	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	96	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	113	%REC	04/16/05	04/26/05
Client ID :	MCAS-FL04	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-05A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/22/05
		Surr: Nonane	99	%REC	04/16/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
		Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	109	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	94	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	111	%REC	04/16/05	04/26/05
Client ID :	MCAS-FL05	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-06A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/22/05
		Surr: Nonane	99	%REC	04/16/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
		Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	107	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	100	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	110	%REC	04/16/05	04/26/05
Client ID :	MCAS-FL06	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-07A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/22/05
		Surr: Nonane	104	%REC	04/16/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
		Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	109	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	98	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	112	%REC	04/16/05	04/26/05

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Client ID :	MCAS-FL07	TPH-E (Jet Fuel)	ND		0.050	mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-08A	TPH-E (Diesel)	ND		0.050	mg/L	04/16/05	04/22/05
		Surr: Nonane	89			%REC	04/16/05	04/22/05
		TPH Purgeable	ND		0.050	mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	04/16/05	04/26/05
		Benzene	ND		0.50	µg/L	04/16/05	04/26/05
		Toluene	ND		0.50	µg/L	04/16/05	04/26/05
		Ethylbenzene	ND		0.50	µg/L	04/16/05	04/26/05
		m,p-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		o-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	114			%REC	04/16/05	04/26/05
		Surr: Toluene-d8	98			%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	106			%REC	04/16/05	04/26/05
Client ID :	MCAS-MW06	TPH-E (Jet Fuel)	0.84	I	0.25	mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-09A	TPH-E (Diesel)	ND		0.25	mg/L	04/16/05	04/22/05
		Surr: Nonane	94			%REC	04/16/05	04/22/05
		TPH Purgeable	0.29		0.050	mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	04/16/05	04/26/05
		Benzene	ND		0.50	µg/L	04/16/05	04/26/05
		Toluene	ND		0.50	µg/L	04/16/05	04/26/05
		Ethylbenzene	ND		0.50	µg/L	04/16/05	04/26/05
		m,p-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		o-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	120			%REC	04/16/05	04/26/05
		Surr: Toluene-d8	88			%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	96			%REC	04/16/05	04/26/05
Client ID :	MCAS-MW06D	TPH-E (Jet Fuel)	0.90	I	0.25	mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-10A	TPH-E (Diesel)	ND		0.25	mg/L	04/16/05	04/22/05
		Surr: Nonane	100			%REC	04/16/05	04/22/05
		TPH Purgeable	0.27		0.050	mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	04/16/05	04/26/05
		Benzene	ND		0.50	µg/L	04/16/05	04/26/05
		Toluene	ND		0.50	µg/L	04/16/05	04/26/05
		Ethylbenzene	ND		0.50	µg/L	04/16/05	04/26/05
		m,p-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		o-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	111			%REC	04/16/05	04/26/05
		Surr: Toluene-d8	93			%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	97			%REC	04/16/05	04/26/05
Client ID :	MCAS-MW07	TPH-E (Jet Fuel)	ND		0.050	mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-11A	TPH-E (Diesel)	ND		0.050	mg/L	04/16/05	04/22/05
		Surr: Nonane	99			%REC	04/16/05	04/22/05
		TPH Purgeable	ND		0.050	mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND		0.50	µg/L	04/16/05	04/26/05
		Benzene	ND		0.50	µg/L	04/16/05	04/26/05
		Toluene	ND		0.50	µg/L	04/16/05	04/26/05
		Ethylbenzene	ND		0.50	µg/L	04/16/05	04/26/05
		m,p-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		o-Xylene	ND		0.50	µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	106			%REC	04/16/05	04/26/05
		Surr: Toluene-d8	101			%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	103			%REC	04/16/05	04/26/05

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Client ID :	MCAS-MW08	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/16/05	04/22/05
Lab ID :	BMI05041945-12A	TPH-E (Diesel)	ND	0.050 mg/L	04/16/05	04/22/05
		Surr: Nonane	98	%REC	04/16/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/16/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/16/05	04/26/05
		Benzene	ND	0.50 µg/L	04/16/05	04/26/05
		Toluene	ND	0.50 µg/L	04/16/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/16/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/16/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	112	%REC	04/16/05	04/26/05
		Surr: Toluene-d8	96	%REC	04/16/05	04/26/05
		Surr: 4-Bromofluorobenzene	105	%REC	04/16/05	04/26/05
Client ID :	MCAS-MW12R	TPH-E (Jet Fuel)	ND	0.050 mg/L	04/17/05	04/22/05
Lab ID :	BMI05041945-13A	TPH-E (Diesel)	ND	0.050 mg/L	04/17/05	04/22/05
		Surr: Nonane	96	%REC	04/17/05	04/22/05
		TPH Purgeable	ND	0.050 mg/L	04/17/05	04/26/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	04/17/05	04/26/05
		Benzene	ND	0.50 µg/L	04/17/05	04/26/05
		Toluene	ND	0.50 µg/L	04/17/05	04/26/05
		Ethylbenzene	ND	0.50 µg/L	04/17/05	04/26/05
		m,p-Xylene	ND	0.50 µg/L	04/17/05	04/26/05
		o-Xylene	ND	0.50 µg/L	04/17/05	04/26/05
		Surr: 1,2-Dichloroethane-d4	107	%REC	04/17/05	04/26/05
		Surr: Toluene-d8	97	%REC	04/17/05	04/26/05
		Surr: 4-Bromofluorobenzene	108	%REC	04/17/05	04/26/05

1 = Concentrations reported in the range of jet fuel may include other products such as kerosene, mineral spirits, weathered Gasoline, etc.

This replaces the report signed 5/2/05, due to a change in the analyte list, per client request.

ND = Not Detected

Roger Scholl Randy Gardner Walter Hinchman

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

5/3/05

Report Date

Alpha Analytical, Inc.

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VOC Sample Preservation Report

Work Order BMI05041945 **Project:** DO105

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05041945-01A	MCAS-QCTB1	Aqueous	
05041945-02A	MCAS-FL01	Aqueous	2
05041945-03A	MCAS-FL02	Aqueous	2
05041945-04A	MCAS-FL03	Aqueous	2
05041945-05A	MCAS-FL04	Aqueous	2
05041945-06A	MCAS-FL05	Aqueous	2
05041945-07A	MCAS-FL06	Aqueous	2
05041945-08A	MCAS-FL07	Aqueous	2
05041945-09A	MCAS-MW06	Aqueous	2
05041945-10A	MCAS-MW06D	Aqueous	2
05041945-11A	MCAS-MW07	Aqueous	6
05041945-12A	MCAS-MW08	Aqueous	6
05041945-13A	MCAS-MW12R	Aqueous	2

5/2/05

Report Date

Third Quarter Analytical

Billing Information:
Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY

Name ALPHA ANALYTICAL
Address 255 Glendale, Suite 21
SPARKS, NV 89431
Phone 775-355-1044

Page # 1 of 2

Client Name **Battelle Memorial Institute**	P.O. # 190050	D.O. To 105	
Address **505 King Avenue**	PWS #	DWR #	
City, State, Zip **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Sampled by MW/GH	Report Attention BOB JANOSY		

DATA REPORT: NEDTS FORMAT X; EDF FORMAT X

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only / Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E Diesel Jet Fuel	TPH/P GAS	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AIK	TOC	VOC* see below	Other:	Other:	REMARKS
09 JUL 05		AQ	05071221-01	MCAS-QCTB1	1V							X			
1020	7-9	AQ	2	MCAS-QCFB1	3V							X			
1239	7-9	AQ	3	MCAS-QCEB1	3V	X									
1022	7-11	AQ	4	MCAS-FF01	6V	X	X					X			
0955	7-11	AQ	5	MCAS-FF02	6V	X	X					X			
0910	7-11	AQ	6	MCAS-FF03	6V	X	X					X			
0851	7-11	AQ	7	MCAS-FF04	6V	X	X					X			
1444	7-9	AQ	8	MCAS-FF05	6V	X	X					X			
1515	7-9	AQ	9	MCAS-FF06	6V	X	X					X			
1537	7-9	AQ	10	MCAS-FF07	6V	X	X					X			
1555	7-9	AQ	11	MCAS-MW06	6V	X	X					X			
1555	7-9	AQ	12	MCAS-MW06 DUP	3V							X			BTEX, MTBE ONLY
1433	7-9	AQ	13	MCAS-MW07	6V	X	X					X			
1400	7-9	AQ	14	MCAS-MW08	6V	X	X					X			

ADDITIONAL INSTRUCTIONS: Specific VOC Requirements (please specify) * BTEX/MTBE ONLY

Data validation REQUIRED FO MCAS-MW06. Forwarded data to LDC for data validation, Reports emailed OR send CD-ROM

	Signature	Print Name	Company	Date	Time
Relinquished by	Greg Headington	GREG HEADINGTON	Battelle	11 JUL 05	1400
Received by	Graciela Navarrete	G. Navarrete	Alpha	7-12-05	11:35
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information:
Name Gerald Tompkins
Address 505 King Avenue
City, State, Zip Columbus, OH 43201
Phone Number 614-424-4849 Fax 614-424-3667

LABORATORY
Name Alpha Analytical
Address 255 Glendale Suite 21
Sparks, NV 89431
Phone 775-355-1044

Page # 2 of 2

Client Name **Battelle Memorial Institute**	P.O. # 190050	D.O. 70105	
Address **505 King Avenue**	PWS #	DWR #	
City, State, Zip **Columbus, OH 43201**	Phone # 614 424 7160	Fax # 614 424 3667	
Sampled by MW/GH	Report Attention Bob Janosy		

Analyses Required

Time Sampled	Date Sampled	Matrix* See Key Below	Office Use Only Lab ID Number	Sample Description	Total and type of containers **See below	TPH/E Diesel Jet Fuel	TPH/P & AS	NO_2, NO_3, SO_4	Pb, Mn^{+2}, Fe^{+2}	TDS, AlK	TOC	VOC* see below	Other:	Other:	REMARKS
11JUL05		AQ	15	MCAS-QCTB2	1V							X			
0840	7-11	AQ	16	MCAS-QC FB2	3V							X			
0845	7-11	AQ	17	MCAS-QC EB2	3V	X									
1040	7-9	AQ	18	MCAS-FL01	6V	X	X					X			
1125	7-9	AQ	19	MCAS-FL02	6V	X	X					X			
1215	7-9	AQ	20	MCAS-FL03	6V	X	X					X			
1302	7-9	AQ	21	MCAS-FL04	6V	X	X					X			
1025	7-9	AQ	22	MCAS-FL05	6V	X	X					X			
1213	7-9	AQ	23	MCAS-FL06	6V	X	X					X			
1346	7-9	AQ	24	MCAS-FL07	6V	X	X					X			
0931	7-11	AQ	16	MCAS-MW12 R	6V	X	X					X			

DATA REPORT
NEDTS FORMAT X
EDF FORMAT X

ADDITIONAL INSTRUCTIONS: **Specific VOC Requirements (please specify)** * BTEX/MTBE ONLY

Data to be forwarded to LDC for data validation. Report submitted in .pdf format either emailed or CD-Rom

	Signature	Print Name	Company	Date	Time
Relinquished by	[signature]	Greg Headington	Battelle	11 JUL05	1400
Received by	[signature]	Graciela Nuverrete	Alpha	7-12-05	11:35
Relinquished by					
Received by					
Relinquished by					
Received by					

*Key: AQ - Aqueous SO - Soil WA - Waste OT - Other **: L- Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Alpha Analytical, Inc.

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ANALYTICAL REPORT

Battelle Memorial Institute
505 King Avenue
Columbus, OH 43201

Attn: Bob Janosy
Phone: (614) 424-7160
Fax: (614) 424-3667
Date Received : 07/12/05

Job#: TO105-MCAS

Total Petroleum Hydrocarbons - Extractable (TPH-E) EPA Method SW8015B/DHS LUFT Manual
Total Petroleum Hydrocarbons - Purgeable (TPH-P) EPA Method SW8015B/DHS LUFT Manual
Volatile Organic Compounds (VOCs) EPA Method SW8260B

		Parameter	Concentration	Reporting Limit	Date Sampled	Date Analyzed
Client ID :	MCAS-QC TB1	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/13/05
Lab ID :	BMI05071221-01A	Benzene	ND	0.50 µg/L	07/09/05	07/13/05
		Toluene	ND	0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	82	%REC	07/09/05	07/13/05
		Surr: Toluene-d8	103	%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	100	%REC	07/09/05	07/13/05
Client ID :	MCAS-QC FB1	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/13/05
Lab ID :	BMI05071221-02A	Benzene	ND	0.50 µg/L	07/09/05	07/13/05
		Toluene	ND	0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	85	%REC	07/09/05	07/13/05
		Surr: Toluene-d8	100	%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	99	%REC	07/09/05	07/13/05
Client ID :	MCAS-QC EB1	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-03A	TPH-E (Diesel)	ND	0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	81	%REC	07/09/05	07/14/05
Client ID :	MCAS-FF01	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/11/05	07/14/05
Lab ID :	BMI05071221-04A	TPH-E (Diesel)	ND	0.050 mg/L	07/11/05	07/14/05
		Surr: Nonane	84	%REC	07/11/05	07/14/05
		TPH Purgeable	ND	0.050 mg/L	07/11/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/11/05	07/13/05
		Benzene	ND	0.50 µg/L	07/11/05	07/13/05
		Toluene	ND	0.50 µg/L	07/11/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/11/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	85	%REC	07/11/05	07/13/05
		Surr: Toluene-d8	100	%REC	07/11/05	07/13/05
		Surr: 4-Bromofluorobenzene	96	%REC	07/11/05	07/13/05

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Client ID :	MCAS-FF02	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/11/05	07/14/05
Lab ID :	BMI05071221-05A	TPH-E (Diesel)	ND	0.050 mg/L	07/11/05	07/14/05
		Surr: Nonane	85	%REC	07/11/05	07/14/05
		TPH Purgeable	ND	0.050 mg/L	07/11/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/11/05	07/13/05
		Benzene	ND	0.50 µg/L	07/11/05	07/13/05
		Toluene	ND	0.50 µg/L	07/11/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/11/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	86	%REC	07/11/05	07/13/05
		Surr: Toluene-d8	103	%REC	07/11/05	07/13/05
		Surr: 4-Bromofluorobenzene	100	%REC	07/11/05	07/13/05
Client ID :	MCAS-FF03	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/11/05	07/14/05
Lab ID :	BMI05071221-06A	TPH-E (Diesel)	ND	0.050 mg/L	07/11/05	07/14/05
		Surr: Nonane	85	%REC	07/11/05	07/14/05
		TPH Purgeable	ND	0.050 mg/L	07/11/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/11/05	07/13/05
		Benzene	ND	0.50 µg/L	07/11/05	07/13/05
		Toluene	ND	0.50 µg/L	07/11/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/11/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	88	%REC	07/11/05	07/13/05
		Surr: Toluene-d8	100	%REC	07/11/05	07/13/05
		Surr: 4-Bromofluorobenzene	98	%REC	07/11/05	07/13/05
Client ID :	MCAS-FF04	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/11/05	07/14/05
Lab ID :	BMI05071221-07A	TPH-E (Diesel)	ND	0.050 mg/L	07/11/05	07/14/05
		Surr: Nonane	81	%REC	07/11/05	07/14/05
		TPH Purgeable	ND	0.050 mg/L	07/11/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/11/05	07/13/05
		Benzene	ND	0.50 µg/L	07/11/05	07/13/05
		Toluene	ND	0.50 µg/L	07/11/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/11/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	86	%REC	07/11/05	07/13/05
		Surr: Toluene-d8	103	%REC	07/11/05	07/13/05
		Surr: 4-Bromofluorobenzene	98	%REC	07/11/05	07/13/05
Client ID :	MCAS-FF05	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-08A	TPH-E (Diesel)	ND	0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	86	%REC	07/09/05	07/14/05
		TPH Purgeable	ND	0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/13/05
		Benzene	ND	0.50 µg/L	07/09/05	07/13/05
		Toluene	ND	0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	88	%REC	07/09/05	07/13/05
		Surr: Toluene-d8	98	%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	97	%REC	07/09/05	07/13/05

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Client ID :	**MCAS-FF06**	TPH-E (Jet Fuel)	ND		0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-09A	TPH-E (Diesel)	ND		0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	87		%REC	07/09/05	07/14/05
		TPH Purgeable	ND		0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
		Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	87		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	102		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	97		%REC	07/09/05	07/13/05
Client ID :	**MCAS-FF07**	TPH-E (Jet Fuel)	ND		0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-10A	TPH-E (Diesel)	ND		0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	87		%REC	07/09/05	07/14/05
		TPH Purgeable	ND		0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
		Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	84		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	101		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	98		%REC	07/09/05	07/13/05
Client ID :	**MCAS-MW06**	TPH-E (Jet Fuel)	0.96	1	0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-11A	TPH-E (Diesel)	ND		0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	90		%REC	07/09/05	07/14/05
		TPH Purgeable	0.26		0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
		Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	90		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	94		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	89		%REC	07/09/05	07/13/05
Client ID :	**MCAS-MW06 DUP**	Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
Lab ID :	BMI05071221-12A	Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	87		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	95		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	89		%REC	07/09/05	07/13/05

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Client ID :	**MCAS-MW07**	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-13A	TPH-E (Diesel)	ND	0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	90	%REC	07/09/05	07/14/05
		TPH Purgeable	ND	0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/13/05
		Benzene	ND	0.50 µg/L	07/09/05	07/13/05
		Toluene	ND	0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	87	%REC	07/09/05	07/13/05
		Surr: Toluene-d8	105	%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	92	%REC	07/09/05	07/13/05
Client ID :	**MCAS-MW08**	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-14A	TPH-E (Diesel)	ND	0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	94	%REC	07/09/05	07/14/05
		TPH Purgeable	ND	0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/13/05
		Benzene	ND	0.50 µg/L	07/09/05	07/13/05
		Toluene	ND	0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	89	%REC	07/09/05	07/13/05
		Surr: Toluene-d8	103	%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	94	%REC	07/09/05	07/13/05
Client ID :	**MCAS-QC TB2**	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/13/05
Lab ID :	BMI05071221-15A	Benzene	ND	0.50 µg/L	07/09/05	07/13/05
		Toluene	ND	0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	83	%REC	07/09/05	07/13/05
		Surr: Toluene-d8	100	%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	100	%REC	07/09/05	07/13/05
Client ID :	**MCAS-QC FB2**	Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/11/05	07/13/05
Lab ID :	BMI05071221-16A	Benzene	ND	0.50 µg/L	07/11/05	07/13/05
		Toluene	ND	0.50 µg/L	07/11/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/11/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/11/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	86	%REC	07/11/05	07/13/05
		Surr: Toluene-d8	97	%REC	07/11/05	07/13/05
		Surr: 4-Bromofluorobenzene	98	%REC	07/11/05	07/13/05
Client ID :	**MCAS-QC EB2**	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/11/05	07/14/05
Lab ID :	BMI05071221-17A	TPH-E (Diesel)	ND	0.050 mg/L	07/11/05	07/14/05
		Surr: Nonane	88	%REC	07/11/05	07/14/05

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Client ID :	**MCAS-FL01**	TPH-E (Jet Fuel)	ND	N	0.10 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-18A	TPH-E (Diesel)	ND	N	0.10 mg/L	07/09/05	07/14/05
		Surr: Nonane	105		%REC	07/09/05	07/14/05
		TPH Purgeable	ND		0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
		Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	87		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	104		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	97		%REC	07/09/05	07/13/05
Client ID :	**MCAS-FL02**	TPH-E (Jet Fuel)	ND		0.050 mg/L	07/09/05	07/14/05
Lab ID :	BMI05071221-19A	TPH-E (Diesel)	ND		0.050 mg/L	07/09/05	07/14/05
		Surr: Nonane	92		%REC	07/09/05	07/14/05
		TPH Purgeable	ND		0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
		Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	88		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	104		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	96		%REC	07/09/05	07/13/05
Client ID :	**MCAS-FL03**	TPH-E (Jet Fuel)	ND	N	0.10 mg/L	07/09/05	07/15/05
Lab ID :	BMI05071221-20A	TPH-E (Diesel)	ND	N	0.10 mg/L	07/09/05	07/15/05
		Surr: Nonane	110		%REC	07/09/05	07/15/05
		TPH Purgeable	ND		0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
		Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	86		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	101		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	98		%REC	07/09/05	07/13/05
Client ID :	**MCAS-FL04**	TPH-E (Jet Fuel)	ND	N	0.10 mg/L	07/09/05	07/15/05
Lab ID :	BMI05071221-21A	TPH-E (Diesel)	ND	N	0.10 mg/L	07/09/05	07/15/05
		Surr: Nonane	114		%REC	07/09/05	07/15/05
		TPH Purgeable	ND		0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND		0.50 µg/L	07/09/05	07/13/05
		Benzene	ND		0.50 µg/L	07/09/05	07/13/05
		Toluene	ND		0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND		0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND		0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	86		%REC	07/09/05	07/13/05
		Surr: Toluene-d8	99		%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	96		%REC	07/09/05	07/13/05

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Client ID :	**MCAS-FL05**	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/09/05	07/15/05
Lab ID :	BMI05071221-22A	TPH-E (Diesel)	ND	0.050 mg/L	07/09/05	07/15/05
		Surr: Nonane	75	%REC	07/09/05	07/15/05
		TPH Purgeable	ND	0.050 mg/L	07/09/05	07/13/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/13/05
		Benzene	ND	0.50 µg/L	07/09/05	07/13/05
		Toluene	ND	0.50 µg/L	07/09/05	07/13/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/13/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/13/05
		Surr: 1,2-Dichloroethane-d4	85	%REC	07/09/05	07/13/05
		Surr: Toluene-d8	100	%REC	07/09/05	07/13/05
		Surr: 4-Bromofluorobenzene	97	%REC	07/09/05	07/13/05
Client ID :	**MCAS-FL06**	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/09/05	07/15/05
Lab ID :	BMI05071221-23A	TPH-E (Diesel)	ND	0.050 mg/L	07/09/05	07/15/05
		Surr: Nonane	92	%REC	07/09/05	07/15/05
		TPH Purgeable	ND	0.050 mg/L	07/09/05	07/14/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/14/05
		Benzene	ND	0.50 µg/L	07/09/05	07/14/05
		Toluene	ND	0.50 µg/L	07/09/05	07/14/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/14/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/14/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/14/05
		Surr: 1,2-Dichloroethane-d4	84	%REC	07/09/05	07/14/05
		Surr: Toluene-d8	100	%REC	07/09/05	07/14/05
		Surr: 4-Bromofluorobenzene	100	%REC	07/09/05	07/14/05
Client ID :	**MCAS-FL07**	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/09/05	07/15/05
Lab ID :	BMI05071221-24A	TPH-E (Diesel)	ND	0.050 mg/L	07/09/05	07/15/05
		Surr: Nonane	93	%REC	07/09/05	07/15/05
		TPH Purgeable	ND	0.050 mg/L	07/09/05	07/14/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/09/05	07/14/05
		Benzene	ND	0.50 µg/L	07/09/05	07/14/05
		Toluene	ND	0.50 µg/L	07/09/05	07/14/05
		Ethylbenzene	ND	0.50 µg/L	07/09/05	07/14/05
		m,p-Xylene	ND	0.50 µg/L	07/09/05	07/14/05
		o-Xylene	ND	0.50 µg/L	07/09/05	07/14/05
		Surr: 1,2-Dichloroethane-d4	85	%REC	07/09/05	07/14/05
		Surr: Toluene-d8	101	%REC	07/09/05	07/14/05
		Surr: 4-Bromofluorobenzene	101	%REC	07/09/05	07/14/05
Client ID :	**MCAS-MW12R**	TPH-E (Jet Fuel)	ND	0.050 mg/L	07/11/05	07/15/05
Lab ID :	BMI05071221-25A	TPH-E (Diesel)	ND	0.050 mg/L	07/11/05	07/15/05
		Surr: Nonane	82	%REC	07/11/05	07/15/05
		TPH Purgeable	ND	0.050 mg/L	07/11/05	07/14/05
		Methyl tert-butyl ether (MTBE)	ND	0.50 µg/L	07/11/05	07/14/05
		Benzene	ND	0.50 µg/L	07/11/05	07/14/05
		Toluene	ND	0.50 µg/L	07/11/05	07/14/05
		Ethylbenzene	ND	0.50 µg/L	07/11/05	07/14/05
		m,p-Xylene	ND	0.50 µg/L	07/11/05	07/14/05
		o-Xylene	ND	0.50 µg/L	07/11/05	07/14/05
		Surr: 1,2-Dichloroethane-d4	83	%REC	07/11/05	07/14/05
		Surr: Toluene-d8	101	%REC	07/11/05	07/14/05
		Surr: 4-Bromofluorobenzene	98	%REC	07/11/05	07/14/05

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I = Concentrations reported in the range of Jet Fuel / Kerosene may include other products such as Mineral Spirits, weathered Gasoline, etc.

N = Reporting Limits were increased due to sample matrix interferences.

ND = Not Detected

Roger L. Scholl, Ph.D., Laboratory Director • • Randy Gardner, Laboratory Manager • • Walter Hinchman, Quality Assurance Officer

Sacramento, CA • (916) 366-9089 / Las Vegas, NV • (702) 281-4848 / info@alpha-analytical.com

7/25/05

Report Date

Alpha Analytical, Inc.

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VOC Sample Preservation Report

Work Order: BMI05071221 **Project:** TO105-MCAS

Alpha's Sample ID	Client's Sample ID	Matrix	pH
05071221-01A	MCAS-QC TB1	Aqueous	
05071221-02A	MCAS-QC FB1	Aqueous	2
05071221-04A	MCAS-FF01	Aqueous	2
05071221-05A	MCAS-FF02	Aqueous	6
05071221-06A	MCAS-FF03	Aqueous	6
05071221-07A	MCAS-FF04	Aqueous	2
05071221-08A	MCAS-FF05	Aqueous	2
05071221-09A	MCAS-FF06	Aqueous	2
05071221-10A	MCAS-FF07	Aqueous	2
05071221-11A	MCAS-MW06	Aqueous	2
05071221-12A	MCAS-MW06 DUP	Aqueous	2
05071221-13A	MCAS-MW07	Aqueous	6
05071221-14A	MCAS-MW08	Aqueous	2
05071221-15A	MCAS-QC TB2	Aqueous	
05071221-16A	MCAS-QC FB2	Aqueous	2
05071221-18A	MCAS-FL01	Aqueous	2
05071221-19A	MCAS-FL02	Aqueous	2
05071221-20A	MCAS-FL03	Aqueous	2
05071221-21A	MCAS-FL04	Aqueous	2
05071221-22A	MCAS-FL05	Aqueous	2
05071221-23A	MCAS-FL06	Aqueous	2
05071221-24A	MCAS-FL07	Aqueous	2
05071221-25A	MCAS-MW12R	Aqueous	2

7/25/05

Report Date

Data Validation Packet

1st Quarter 2005

Data Validation

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Battelle
505 King Ave
Columbus, OH 43201-2693
ATTN: Ms. Melody Graves

March 15, 2005

SUBJECT: MCB Camp Pendleton, TO #105, Data Validation

Dear Ms. Graves,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on February 23, 2005. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 13190:

SDG #	Fraction
BMI05012504, BMI05012521, BMI05012542, BMI05012543, BMI05012544, BMI05012545	Volatiles, Polynuclear Aromatic Hydrocarbons, TPH as Extractables

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- USEPA, Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, February 1994
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

LDC #13190 (Battelle-Columbus OH / MCB Camp Pendleton, TO 105)

LDC	SDG#	DATE REC'D	DATE DUE	BTEX (8260B)		PAHs (8270C)		TPH-E (8015)																															
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	BMI05012504	02/23/05	03/16/05	9	0	-	-	6	0																														
A	BMI05012504	02/23/05	03/16/05	1	0	-	-	1	0																														
B	BMI05012521	02/23/05	03/16/05	10	0	-	-	8	0																														
C	BMI05012542	02/23/05	03/16/05	-	-	6	0	-	-																														
C	BMI05012542	02/23/05	03/16/05	-	-	2	0	-	-																														
D	BMI05012543	02/23/05	03/16/05	-	-	5	0	-	-																														
D	BMI05012543	02/23/05	03/16/05	-	-	1	0	-	-																														
E	BMI05012544	02/23/05	03/16/05	-	-	8	0	-	-																														
F	BMI05012545	02/23/05	03/16/05	6	0	-	-	7	0																														
F	BMI05012545	02/23/05	03/16/05	2	0	-	-	2	0																														
Total	8			28	0	22	0	24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	74

Shaded cells indicate Level IV validation (all other cells are Level III validation).

2nd Quarter 2005

Data Validation

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2I, Carlsbad, CA 92009 Phone: 760 634 0437 Fax: 760 634 0539

Battelle
505 King Ave
Columbus, OH 43201-2693
ATTN: Mr. Dave Clexton

June 30, 2005

SUBJECT: MCB Camp Pendleton, Data Validation

Dear Mr. Clexton,

Enclosed are the final validation reports for the fractions listed below. These SDGs were received on June 24, 2005. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 13666:

SDG #	**Fraction**
BMI05041922, BMI05041945	Volatiles, TPH as Purgeables, TPH as Extractables

The data validation was performed under EPA Level III and Level IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998

Please feel free to contact us if you have any questions.

Sincerely,

Erlinda T. Rauto
Operations Manager/Senior Chemist

V:\LOGIN\Battelle\Pendleton\13666COV.wpd

Attachment 1

LDC #13666 (Battelle-Columbus OH / MCB Camp Pendleton, CTO 105)

LDC	SDG#	DATE REC'D	(3) DATE DUE	VOA (8260B)		TPH-P (8260B)		TPH-E (8015)																													
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	BMI05041922	06/24/05	07/18/05	12	0	9	0	11	0																												
B	BMI05041945	06/24/05	07/18/05	14	0	13	0	11	0																												
B	BMI05041945	06/24/05	07/18/05	1	0	1	0	1	0																												
Total	B/LR			27	0	23	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	73

Shaded cells indicate Level IV validation (all other cells are Level III validation).

13666ST.wpd

3rd Quarter 2005

Data Validation

LABORATORY DATA CONSULTANTS, INC.
7750 El Camino Real, Suite 2L Carlsbad, CA 92009 Phone: 760/634-0437 Fax: 760/634-0439

Battelle
505 King Ave
Columbus, OH 43201-2693
ATTN: Mr. Dave Clexton

August 23, 2005

SUBJECT: MCB Camp Pendleton, CTO 105, Data Validation

Dear Mr. Clexton,

Enclosed are the final validation reports for the fractions listed below. This SDG was received on August 12, 2005. Attachment 1 is a summary of the samples that were reviewed for each analysis.

LDC Project # 13859:

SDG #	Fraction
BMI05071221	Volatiles, TPH as Purgeables, TPH as Extractables

The data validation was performed under EPA Level III and IV guidelines. The analyses were validated using the following documents, as applicable to each method:

- USEPA, Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999
- EPA SW 846, Third Edition, Test Methods for Evaluating Solid Waste, update 1, July 1992; update IIA, August 1993; update II, September 1994; update IIB, January 1995; update III, December 1996; update IIIA, April 1998

Please feel free to contact us if you have any questions.

Sincerely,

ERauto

Erlinda T. Rauto
Operations Manager/Senior Chemist

Attachment 1

LDC #13859 (Battelle-Columbus OH / MCB Camp Pendleton, CTO 105)

LDC	SDG#	DATE REC'D	(3) DATE DUE	BTEX &MTBE (8260B)		TPH-P (8260B)		TPH-E (8015)																													
Matrix:	Water/Soil			W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S	W	S
A	BMI05071221	08/12/05	09/02/05	24	0	19	0	21	0																												
A	BMI05071221	08/12/05	09/02/05	1	0	1	0	1	0																												
Total	B/LR			25	0	20	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	67

Shaded cells indicate Level IV validation (all other cells are Level III validation).

13859ST.wpd

APPENDIX C

Chain-of-Custody Documentation

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention : Bob Janosy
CC Report :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Bob Janosy
TEL : (614) 424-7160
FAX : (614) 424-3667
EMail janosyr@battelle.org

Job : TO105
PO :

Client's COC # : none

CA

WorkOrder : BMI05012504

Report Due By : 5:00 PM On : 08-Feb-05

EDD Required : Yes PDF Required : No

Sampled by : MW/GH

Cooler Temp : 4 °C 25-Jan-05

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	VOC_W	Sample Remarks
BMI05012504-01A	MCAS-QCTB2	AQ	01/22/05 00:00	1	0	10			BTXE/M_C	RENO TB 12/20/04
BMI05012504-02A	MCAS-QCFB2	AQ	01/22/05 08:50	3	0	10			BTXE/M_C	
BMI05012504-03A	MCAS-QCEB2	AQ	01/22/05 09:05	3	0	10		TPH/E_C		
BMI05012504-04A	MCAS-FL06	AQ	01/22/05 10:55	6	0	10		TPH/E_C	BTXE/M_C	
BMI05012504-05A	MCAS-FL07	AQ	01/22/05 16:00	6	0	10		TPH/E_C	BTXE/M_C	
BMI05012504-06A	MCAS-MW06	AQ	01/22/05 14:55	6	0	10		TPH/E_C	BTXE/M_C	
BMI05012504-07A	MCAS-MW06D	AQ	01/22/05 14:55	6	0	10		TPH/E_C	BTXE/M_C	
BMI05012504-08A	MCAS-MW07	AQ	01/22/05 12:30	6	0	10		TPH/E_C	BTXE/M_C	
BMI05012504-09A	MCAS-MW08	AQ	01/22/05 12:35	6	0	10		TPH/E_C	BTXE/M_C	

Comments: No security seals-frozen ice. Temp Blank # 6908 @ 2'C. QC level IV, Data Validation required for: MCAS-FF01,MCAS-FF04,MCAS-FL03,MCAS-MW06. Report with CD-rom. For sample #03 (MCAS-QCEB2) only 3 un-pres VOAs were rcvd. Chain is marked for TPH/E and VOCs : to be run, but cannot run VOCs due to no pres VOAs being rcvd. Needs NEDTS and EDF format.

	Signature	Print Name	Company	Date/Time
Received by:	Stacy M Strock	Stacy Strock	Alpha Analytical, Inc.	1/25/05 11:25

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention : Bob Janosy
CC Report :

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Bob Janosy
TEL : (614) 424-7160
FAX : (614) 424-3667
EMail janosyr@battelle.org

Job : TO105
PO :
Client's COC # : none

CA

WorkOrder : BMI05012521

Report Due By : 5:00 PM On : 08-Feb-05

EDD Required : **Yes** PDF Required : **No**

Sampled by : MW/GH

Cooler Temp : 2 °C **25-Jan-05**

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	VOC_W							Sample Remarks
BMI05012521-01A	MCAS-FL02	AQ	01/22/05 09:35	6	0	10		TPH/E_C	BTXE/M_C							
BMI05012521-02A	MCAS-FL02	AQ	01/22/05 10:15	6	0	10		TPH/E_C	BTXE/M_C							
BMI05012521-03A	MCAS-FL03	AQ	01/22/05 10:55	6	0	10		TPH/E_C	BTXE/M_C							
BMI05012521-04A	MCAS-FL04	AQ	01/22/05 11:45	6	0	10		TPH/E_C	BTXE/M_C							
BMI05012521-05A	MCAS-FL05	AQ	01/22/05 09:27	6	0	10		TPH/E_C	BTXE/M_C							
BMI05012521-06A	MCAS-FF05	AQ	01/22/05 14:15	6	0	10		TPH/E_C	BTXE/M_C							
BMI05012521-07A	MCAS-FL06	AQ	01/22/05 14:05	6	0	10		TPH/E_C	BTXE/M_C							
BMI05012521-08A	MCAS-FL07	AQ	01/22/05 15:05	6	0	10		TPH/E_C	BTXE/M_C							

Comments: No security seals intact, ice frozen. Temp Blank #6908 @2'C. Level IV QC required. Data validation required for: MCAS-FF01,MCAS-FF04,MCAS-FL03,MCAS-MW06. Report to include CD. Needs NEDTS & EDF format. : Samples should be used as control spike sample if possible (I.E.: MS/MSD).

	Signature	Print Name	Company	Date/Time
Received by:	Graciela Navarrete	G. Navarrete	Alpha Analytical, Inc.	1-25-05 12:00

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMI05012542

Report Due By : 5:00 PM On : 08-Feb-05

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Melody Graves
TEL : (614) 424-5922
FAX : (614) 424-3667
EMail gravesmj@battelle.org

EDD Required : **Yes** PDF Required : **No**

Sampled by : MW/GH

Report Attention : Melody Graves Job : TO105 Cooler Temp : 5 °C **25-Jan-05**

CC Report : PO : Client's COC # : none

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Requested Tests

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	BNA_W	Sample Remarks
BMI05012542-01A	MCAS-FF01	AQ	01/21/05 13:35	1	0	10		PNA PAH	
BMI05012542-02A	MCAS-FF02	AQ	01/21/05 14:43	1	0	10		PNA PAH	
BMI05012542-03A	MCAS-FF03	AQ	01/21/05 14:54	1	0	10		PNA PAH	
BMI05012542-04A	MCAS-FF04	AQ	01/21/05 13:46	1	0	10		PNA PAH	Run MS/MSD on this sample.
BMI05012542-05A	MCAS-FF04D	AQ	01/21/05 13:46	1	0	10		PNA PAH	
BMI05012542-06A	MCAS-MW12R	AQ	01/21/05 15:45	1	0	10		PNA PAH	

Comments: Frozen ice. No security seals. QC Level IV required for MCAS-FF01,MCAS-FF04. Temp Blank 5567. :

	Signature	Print Name	Company	Date/Time
Received by:	Laura Long	Laura Long	Alpha Analytical, Inc.	1/25/05 940

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

CA

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMI05041922

Report Due By : 5:00 PM On : 03-May-0

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Bob Janosy
TEL : (614) 424-7160 x
FAX : (614) 424-3667
EMail janosyr@battelle.org

EDD Required : **Yes** PDF Required : **No**

Sampled by : MW/GH

Report Attention : Bob Janosy
CC Report :

Job : TO105
PO : 190050
Client's COC # : none

Cooler Temp : 2 °C **19-Apr-05**

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	TPH/P_W	VOC_W	Sample Remarks
BMI05041922-01A	MCAS-QC FB01	AQ	04/16/05 10:40	3	0	10				BTXE/M_C	
BMI05041922-02A	MCAS-QC EB01	AQ	04/16/05 13:12	3	0	10		TPH/E_C			
BMI05041922-03A	MCAS-QC TB02	AQ	04/16/05 00:00	1	0	10				BTXE/M_C	TB lab provided with date of 3/28/05.
BMI05041922-04A	MCAS-QC FB02	AQ	04/17/05 11:51	3	0	10				BTXE/M_C	
BMI05041922-05A	MCAS-QC EB02	AQ	04/17/05 09:40	3	0	10		TPH/E_C			
BMI05041922-06A	MCAS-FF01	AQ	04/17/05 13:50	6	0	10		TPH/E_C	GAS-C	BTXE/M_C	
BMI05041922-07A	MCAS-FF02	AQ	04/17/05 11:55	6	0	10		TPH/E_C	GAS-C	BTXE/M_C	
BMI05041922-08A	MCAS-FF03	AQ	04/17/05 12:00	6	0	10		TPH/E_C	GAS-C	BTXE/M_C	
BMI05041922-09A	MCAS-FF04	AQ	04/17/05 13:02	6	0	10		TPH/E_C	GAS-C	BTXE/M_C	
BMI05041922-10A	MCAS-FF05	AQ	04/16/05 14:35	6	0	10		TPH/E_C	GAS-C	BTXE/M_C	

Comments: No security seals, ice frozen. Ca samples.Temp Blank # 7258 @ 2'C. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC required. Needs NEDTS/EDF Format. Data to be forwarded to LDC for data validation. Report on CD : Rom.

	Signature	Print Name	Company	Date/Time
Received by:	Gloria Navarrete	G. Navarrete	Alpha Analytical, Inc.	4/19/05 1:25

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

CA

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMI05041922

Report Due By : 5:00 PM On : 03-May-0

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Bob Janosy
TEL : (614) 424-7160 x
FAX : (614) 424-3667
EMail janosyr@battelle.org

EDD Required : **Yes** PDF Required : **No**

Sampled by : MW/GH

Report Attention : Bob Janosy
CC Report :

Job : TO105
PO : 190050
Client's COC # : none

Cooler Temp : 2 °C

19-Apr-05

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	TPH/E_W	TPH/P_W	VOC_W	Requested Tests	Sample Remarks
BMI05041922-11A	MCAS-FF06	AQ	04/16/05 15:34	6	0	10		TPH/E_C	GAS-C	BTXEM_C		
BMI05041922-12A	MCAS-FF07	AQ	04/16/05 15:48	6	0	10		TPH/E_C	GAS-C	BTXEM_C		

Comments: No security seals, ice frozen. Ca samples.Temp Blank # 7258 @ 2°C. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC required. Needs NEDTS/EDF Format. Data to be forwarded to LDC for data validation. Report on CD : Rom.

	Signature	Print Name	Company	Date/Time
Received by:	Gracielle Navarrete	G. Navarrete	Alpha Analytical, Inc.	4/19/05 1:25

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CA AMENDED #2

CHAIN-OF-CUSTODY RECORD

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMI05041945

Report Due By : 5:00 PM On : 03-May-05

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Bob Janosy
TEL : (614) 424-7160 x
FAX : (614) 424-3667
EMail janosyr@battelle.org

EDD Required : Yes

Sampled by : MW/GH

Report Attention : Bob Janosy
CC Report :

Job : DO105
PO : 190050

Client's COC # : none

Cooler Temp : 4 °C

Date Printed: **03-May-05**

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	TPH/P_W	VOC_W	Sample Remarks
BMI05041945-01A	MCAS-QCTB1	AQ	04/16/05 00:00	1	0	10				BTXE-M_C	Reno Trip Blank 03/15/05
BMI05041945-02A	MCAS-FL01	AQ	04/16/05 10:52	6	0	10		TPH/E_C	BTXE-MTBE -GAS_C	BTXE-MTBE -GAS_C	
BMI05041945-03A	MCAS-FL02	AQ	04/16/05 11:47	6	0	10		TPH/E_C	GAS-C	BTXE-M_C	
BMI05041945-04A	MCAS-FL03	AQ	04/16/05 12:28	6	0	10		TPH/E_C	GAS-C	BTXE-M_C	
BMI05041945-05A	MCAS-FL04	AQ	04/16/05 13:18	6	0	10		TPH/E_C	GAS-C	BTXE-M_C	
BMI05041945-06A	MCAS-FL05	AQ	04/16/05 10:41	6	0	10		TPH/E_C	GAS-C	BTXE-M_C	
BMI05041945-07A	MCAS-FL06	AQ	04/16/05 12:30	6	0	10		TPH/E_C	GAS-C	BTXE-M_C	
BMI05041945-08A	MCAS-FL07	AQ	04/16/05 16:45	6	0	10		TPH/E_C	GAS-C	BTXE-M_C	
BMI05041945-09A	MCAS-MW06	AQ	04/16/05 16:27	6	0	10		TPH/E_C	GAS-C	BTXE-M_C	
BMI05041945-10A	MCAS-MW06D	AQ	04/16/05 16:27	5	0	10		TPH/E_C	GAS-C	BTXE-M_C	

Comments: No security seals. Frozen ice. Temp Blank # 7197 received at 4 degrees C. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC required. Amended 04/26/05 to remove VOC's from -03 through -13 due to log in error. LE : Amended 05/03/05 per Greg Headington to run BTEX/MTBE on -03 through -13. LE

	Signature	Print Name	Company	Date/Time
Received by:	Patricia Edrosa	Patricia Edrosa	Alpha Analytical, Inc.	5/3/05 10:45

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.

Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

CA AMENDED

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMI05041945

Report Due By : 5:00 PM On : 03-May-05

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Bob Janosy
TEL : (614) 424-7160 x
FAX : (614) 424-3667
EMail janosyr@battelle.org

EDD Required : Yes

Sampled by : MW/GH

Report Attention : Bob Janosy
CC Report :

Job : DO105
PO : 190050

Client's COC # : none

Cooler Temp : 4 °C

Date Printed: 03-May-05

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	TPH/P_W	VOC_W	Sample Remarks
BMI05041945-11A	MCAS-MW07	AQ	04/16/05 14:50	6	0	10		TPH-E_C	GAS-C	BTXE-M_C	
BMI05041945-12A	MCAS-MW08	AQ	04/16/05 14:10	6	0	10		TPH-E_C	GAS-C	BTXE-M_C	
BMI05041945-13A	MCAS-MW12R	AQ	04/17/05 13:00	6	0	10		TPH-E_C	GAS-C	BTXE-M_C	

Comments: No security seals. Frozen ice. Temp Blank # 7197 received at 4 degrees C. Samples should be used as the control spike sample if possible (I.E.: MS/MSD). Level IV QC required. Amended 04/26/05 to remove VOC's from -03 through -13 due to log in error. LE : Amended 05/03/05 per Greg Headington to run BTEX/MTBE on -03 through -13. LE

	Signature	Print Name	Company	Date/Time
Received by:	Patricia Edrosa	Patricia Edrosa	Alpha Analytical, Inc.	5/3/05 10:45

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

CA

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Report Attention : Bob Janosy
CC Report :

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

Bob Janosy
TEL : (614) 424-7160 x
FAX : (614) 424-3667
EMail janosyr@battelle.org

Job : TO105
PO : 190050
Client's COC # : none

WorkOrder : BMI05071221

Report Due By : 5:00 PM On : 26-Jul-05

EDD Required : Yes
Sampled by : MW/GH
Cooler Temp : 4 °C
Date Printed: 12-Jul-05

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	TPH/P_W	VOC_W	Sample Remarks
BMI05071221-01A	MCAS-QC TB1	AQ	07/09/05 00:00	1	0	10				BTXE/M_C	TB lab provided with date of 6/22/05.
BMI05071221-02A	MCAS-QC FB1	AQ	07/09/05 10:20	3	0	10				BTXE/M_C	
BMI05071221-03A	MCAS-QC EB1	AQ	07/09/05 12:39	3	0	10		TPH/E_C			
BMI05071221-04A	MCAS-FF01	AQ	07/11/05 10:22	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-05A	MCAS-FF02	AQ	07/11/05 09:55	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-06A	MCAS-FF03	AQ	07/11/05 09:10	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-07A	MCAS-FF04	AQ	07/11/05 08:51	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-08A	MCAS-FF05	AQ	07/09/05 14:44	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-09A	MCAS-FF06	AQ	07/09/05 15:15	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-10A	MCAS-FF07	AQ	07/09/05 15:37	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	

Comments: No security seals intact, ice frozen. Temp Blank #6908 @4'C. Data validation (Level IV QC) required on sample #11 (MCAS-MW06). Samples should be used as the control spike sample if possible. :

	Signature	Print Name	Company	Date/Time
Received by:	Francisco Navarrete	S. Navarrete	Alpha Analytical, Inc.	7/12/05 11:35

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.
255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMI05071221

Report Due By : 5:00 PM On : 26-Jul-05

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Bob Janosy
TEL : (614) 424-7160 x
FAX : (614) 424-3667
EMail janosyr@battelle.org

EDD Required : **Yes**

Sampled by : MW/GH

Report Attention : Bob Janosy
CC Report :

Job : TO105
PO : 190050

Client's COC # : none

Cooler Temp : 4 °C

Date Printed: **12-Jul-05**

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	TPH/P_W	VOC_W	Sample Remarks
BMI05071221-11A	MCAS-MW06	AQ	07/09/05 15:15	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	Level IV QC required on this sample.
BMI05071221-12A	MCAS-MW06 DUP	AQ	07/09/05 15:15	3	0	10				BTXE/M_C	
BMI05071221-13A	MCAS-MW7	AQ	07/09/05 14:33	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-14A	MCAS-MW8	AQ	07/09/05 14:00	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-15A	MCAS-QC TB2	AQ	07/09/05 00:00	1	0	10				BTXE/M_C	TB lab provided with date of 6/22/05.
BMI05071221-16A	MCAS-QC FB2	AQ	07/11/05 08:40	3	0	10				BTXE/M_C	
BMI05071221-17A	MCAS-QC EB2	AQ	07/11/05 08:45	3	0	10		TPH/E_C			
BMI05071221-18A	MCAS-FL01	AQ	07/09/05 10:40	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-19A	MCAS-FL02	AQ	07/09/05 11:25	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-20A	MCAS-FL03	AQ	07/09/05 12:15	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	

Comments: No security seals intact, ice frozen. Temp Blank #6908 @4°C. Data validation (Level IV QC) required on sample #11 (MCAS-MW06). Samples should be used as the control spike sample if possible. :

	Signature	Print Name	Company	Date/Time
Received by:	Graciela Navarrete	G. Navarrete	Alpha Analytical, Inc.	7/12/05 11:35

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

CHAIN-OF-CUSTODY RECORD

CA

Alpha Analytical, Inc.

255 Glendale Avenue, Suite 21 Sparks, Nevada 89431-5778
TEL: (775) 355-1044 FAX: (775) 355-0406

WorkOrder : BMI05071221

Report Due By : 5:00 PM On : 26-Jul-05

Billing Information :
Battelle
505 King Avenue

Columbus, OH 43201

Client:
Battelle Memorial Institute
505 King Avenue

Columbus, OH 43201

Bob Janosy
TEL : (614) 424-7160 x
FAX : (614) 424-3667
EMail janosyr@battelle.org

EDD Required : **Yes**

Sampled by : MW/GH

Report Attention : Bob Janosy
CC Report :

Job : TO105
PO : 190050

Client's COC # : none

Cooler Temp : 4 °C

Date Printed: **12-Jul-05**

QC Level : DS3 = DOD QC Required : Final Rpt, MBLK, LCS, MS/MSD With Surrogates

Alpha Sample ID	Client Sample ID	Matrix	Collection Date	No. of Bottles ORG	SUB	TAT	PWS #	Requested Tests TPH/E_W	TPH/P_W	VOC_W	Sample Remarks
BMI05071221-21A	MCAS-FL04	AQ	07/09/05 13:02	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-22A	MCAS-FL05	AQ	07/09/05 10:25	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-23A	MCAS-FL06	AQ	07/09/05 12:13	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-24A	MCAS-FL07	AQ	07/09/05 13:46	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	
BMI05071221-25A	MCAS-MW12R	AQ	07/09/05 09:31	6	0	10		TPH/E_C	BTXE/GAS/ Mtbe_C	BTXE/GAS/ Mtbe_C	

Comments: No security seals intact, ice frozen. Temp Blank #6908 @4'C. Data validation (Level IV QC) required on sample #11 (MCAS-MW06). Samples should be used as the control spike sample if possible. :

	Signature	Print Name	Company	Date/Time
Received by:	Graciela Olavarrete	G. Navarret	Alpha Analytical, Inc.	7/12/05 11:35

NOTE: Samples are discarded 60 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client expense.
The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for the report.
Matrix Type : AQ(Aqueous) AR(Air) SO(Soil) WS(Waste) DW(Drinking Water) OT(Other) Bottle Type: L-Liter V-Voa S-Soil Jar O-Orbo T-Tedlar B-Brass P-Plastic OT-Other

APPENDIX D

EDF Submittal Files & Confirmation Sheets

APPENDIX E

Waste Manifests

1st Quarter 2005

Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator US EPA ID No.

Manifest Document No. 24736

2. Page 1 of 1

3. Generator's Name and Mailing Address: USMC AC/S ENVIRO. SEC.
PO BOX 555008
ER#760-725-4321 CAMP PENDLETON, CA 92055

4. Generator's Phone: 760-725-4375 CONTACT: TRACY SAHAGUN

5. Transporter 1 Company Name: EFR ENVIRONMENTAL SERVICES, INC.

6. US EPA ID Number: CAR000011205

A. Transporter's Phone: 619-722-6781

7. Transporter 2 Company Name:

8. US EPA ID Number:

B. Transporter's Phone:

9. Designated Facility Name and Site Address: DOME ROCK INDUSTRIES, INC.
3125 W. DOME ROCK RD.
QUARTZSITE, AZ 85346

10. US EPA ID Number: AZR000035915

C. Facility's Phone: 928 927-7688

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS WASTE LIQUID	001	TT	00070	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
11A. ACCEPTANCE#3533PW139 (PURGE WATER)
SITE NO'S-1523,1536,1575,21503,2264,2653, MCAS

E. Handling Codes for Wastes Listed Above
11a. 01

15. Special Handling Instructions and Additional Information
ALWAYS WEAR APPROPRIATE P.P.E. AND USE SAFE HANDLING METHODS.
24 HR. EMERGENCY NUMBER 1-800-244-1202/619-722-6781 *EFR*

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

Printed/Typed Name: X Nathaniel D. Deeth
Signature: [signature]
Month Day Year: 02 08 05

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: RANDY JARRETT
Signature: [signature]
Month Day Year: 02 08 05

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

19. Discrepancy Indication Space

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

Printed/Typed Name: JERRY R. JARRETT
Signature: [signature]
Month Day Year: 02 14 05

2nd Quarter 2005

Waste Manifest

[redacted]

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No. 2515 3
2. Page 1 of 1

3. Generator's Name and Mailing Address USMC AC/S ENVIRO. SECURITY
PO BOX 555008
CAMP PENDLETON, CA 92055

4. Generator's Phone (760 725-3617 ATTN: TRACY SAHAGUN

5. Transporter 1 Company Name EFR ENVIRONMENTAL SERVICES, INC.
6. US EPA ID Number CAR000011205
A. Transporter's Phone 619-722-6781

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

9. Designated Facility Name and Site Address DOME ROCK INDUSTRIES, INC.
3125 W. DOME ROCK RD.
QUARTZSITE, AZ 85346
10. US EPA ID Number AZR000035915
C. Facility's Phone 928 927-7688

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS WASTE LIQUID	001	T	00175	G
b.				
c.				
d.				

GENERATOR

D. Additional Descriptions for Materials Listed Above
11A. ACCEPTANCE#4321PW370(PURGE WATER)
SITE: 14151,1255,13016,1294,31511,1413,1523,1575,MCAS,43286,21503

E. Handling Codes for Wastes Listed Above
11a. 01

15. Special Handling Instructions and Additional Information
ALWAYS WEAR APPROPRIATE P.P.E. AND USE SAFE HANDLING METHODS.
24 HR. EMERGENCY NUMBER 1-800-424-9300 *CHEMTREC*
AC/S ES (760)725-4321

16. GENERATOR'S CERTIFICATION: I certify the materials described above on this manifest are not subject to federal regulations for reporting proper disposal of Hazardous Waste.
Printed/Typed Name MAC A JOHNSON
Signature
Month 06 Day 20 Year 05

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name RANDY JARRETT
Signature
Month 06 Day 20 Year 05

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name
Signature
Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of waste materials covered by this manifest except as noted in Item 19.
Printed/Typed Name JERRY R JARRETT
Signature
Month 07 Day 16 Year 05

[redacted]

ORIGINAL - RETURN TO GENERATOR

[redacted]

3rd Quarter 2005

Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No. 2556 0

2. Page 1 of 1

3. Generator's Name and Mailing Address USMC AC/S Enviro. Sec.
PO Box 555008
Camp Pendleton, CA 92055

4. Generator's Phone (760 725-4375 Contact: Margo Williams

5. Transporter 1 Company Name EFR Environmental Services, Inc.

6. US EPA ID Number CAR000011205

A. Transporter's Phone 619-722-6781

7. Transporter 2 Company Name

8. US EPA ID Number

B. Transporter's Phone

9. Designated Facility Name and Site Address Dame Rock Industries, Inc.
3125 W. Dame Rock Rd.
Quartzsite, AZ 85346

10. US EPA ID Number AZR000035915

C. Facility's Phone 928 927-7688

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. Non-Hazardous Waste Liquid	001	TT	0018	G
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above 11d. Acceptance#4321PW370 (Purge Water)

Site: 14151,1413,1523,MCAS,43286

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
ALWAYS WEAR APPROPRIATE P.P.E. AND USE SAFE HANDLING METHODS.
24 HR. EMERGENCY NUMBER 1-800-424-9300 *Chemtrec*
AC/S ES 760-725-4321

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

Printed/Typed Name	Signature	Month	Day	Year
Margo Williams	Margo Williams	09	12	05

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Douglas Ford	Douglas Ford	09	12	05

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

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

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY

APPENDIX F

Site Closure Letter

California Regional Water Quality Control Board

San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties

Recipient of the 2004 Environmental Award for Outstanding Achievement from USEPA

Alan C. Lloyd, Ph.D.
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

9174 Sky Park Court, Suite 100, San Diego, California 92123-4340
(858) 467-2952 • Fax (858) 571-6972
http:// www.waterboards.ca.gov/sandiego

October 31, 2005

In Response Refer to:
TSMC:50-2652.05:jebsen

Office of the Assistant Chief of Staff
Environmental Security
P.O. Box 555008
U.S. Marine Corps Base
Camp Pendleton, CA 92055-5008
Attn: Ms. Tracy Sahagun, LUFT RPM

Dear Ms. Sahagun:

RE: NO FURTHER ACTION FOR MCAS FORMER FUEL FARM, AREA 23, U.S. MARINE CORPS BASE, CAMP PENDLETON, SAN DIEGO COUNTY, 9UT2652

This letter confirms the completion of a site investigation and corrective action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25296.10 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.3 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (g) of Section 25296.10 of the Health and Safety Code. The heading portion of this letter includes a Regional Board code number noted after "In reply refer to:" In order to assist us in the processing of your correspondence please include this code number in the heading or subject line portion of all correspondence and reports to the Regional Board pertaining to this matter.

Please contact Ms. Jody Ebsen of my staff at 858-636-3146 or by email at jebsen@waterboards.ca.gov if you have any questions regarding this matter.

Sincerely,

JOHN H. ROBERTUS
Executive Officer

JHR:jro:jme

Enclosure: Order No. R9-2005-0240: Rescission of Cleanup and Abatement Order No. 95-09

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN DIEGO REGION

ORDER NO. R9-2005-0240

AN ORDER RESCINDING
CLEANUP AND ABATEMENT ORDER NO. 95-09

ISSUED TO
THE UNITED STATES (U.S.) MARINE CORPS
FOR THE GROUNDWATER POLLUTION
AT THE MCAS FORMER FUEL FARM
23 AREA, U.S. MARINE CORPS BASE
CAMP PENDLETON, CALIFORNIA
SAN DIEGO COUNTY

The California Regional Water Quality Control Board, San Diego (hereinafter Regional Board) finds that:

1. On March 16, 1995, the Regional Board issued Cleanup and Abatement Order (CAO) No. 95-09 to the U.S. Marine Corps Base at Camp Pendleton (hereinafter Discharger) for discharges of petroleum fuel wastes into ground water at the Former Fuel Farm at the Marine Corps Air Station (MCAS).

2. CAO No. 95-09 established requirements for cleanup of pollution caused by the unauthorized release(s) (discharges) of petroleum fuel wastes into the ground water.

3. The ground water remediation and reporting directives of CAO No. 95-09, were amended Addendum No. 1 to CAO No. 95-09 on March 30, 1999.

4. The Discharger permanently ceased aircraft fueling operations at the former MCAS fuel farm (the site) in July 2000. Demolition of the site, which included dismantling and removal of all equipment, was completed by June 2001.

5. A capture zone analysis for the three active potable water supply wells located near the site showed that the ground water, located within the area of the former Fuel Farm, was not influenced by active production of the wells.

6. Sentry ground water monitoring wells were installed at locations between the site and the nearby active potable water supply wells to establish an early warning system to detect migration of ground water pollutants from the site towards the water supply wells. Monitoring data from the sentry wells do not indicate detections of total petroleum hydrocarbons that would show migration of ground water pollutants toward the nearby potable water supply wells.

7. Approximately 6 gallons of Light Non-Aqueous Phase Liquids (LNAPL) were recovered from the ground water monitoring wells. Since 2003, LNAPL has not been observed in ground water monitoring wells.

8. An in-situ air sparging (IAS) system was installed in the area containing pollutant concentrations in excess of water quality objectives (i.e., maximum contaminant levels or MCLs) in the ground water. The IAS system was operated from October 1999 through March 2003, when it was estimated that 99-100% removal of benzene, toluene, ethlybenzene, and total xylenes had been achieved. Subsequent ground water monitoring over 6 quarters indicates that pollutant concentrations have not rebounded since termination of the IAS system at the site.

9. All verification soil samples collected within the IAS area of influence indicate non-detectable levels of benzene, toluene, ethylbenzene, total xylenes, methyl tertiary butyl ether (MTBE), total petroleum hydrocarbons (TPH)-quantified as JP5, and total petroleum hydrocarbons (TPH)-quantified as diesel fuel.

10. An estimated 8,500 cubic yards of soil were impacted by the unauthorized release of petroleum fuel wastes. Fuel contaminated soil wastes were excavated from the vadose zone. The volume of residual soil wastes remaining in-situ is estimated to be 1,790 cubic yards located within small-localized areas of the site. Further excavation of the residual contaminated soil waste is not possible due to subsurface obstructions and presence of ground water.

11. Over the last eight quarters most of the ground water monitoring for benzene, toluene, ethylbenzene, total xylenes, and methyl tertiary butyl ether were below detectable levels. Over this same time period the few samples with detectable levels were all below the respective primary maximum contaminant levels.

12. The Discharger has complied with the Directives of CAO 95-09 and addenda thereto.

13. The Discharger's compliance with the ground-water remediation directives in CAO No. 95-09 is documented in *Closure Report for the Former Fuel Farm, Marine Corps Air Station, MCB Camp Pendleton,* dated December 17, 2004.

14. The Discharger has completed the corrective actions required by CAO No. 95-09 for the property at the Former Fuel Farm, Area 23 at Camp Pendleton. No further action is required at this time.

15. A public notice of this rescission order was included in the Notifications section of the August 10, 2005 Regional Board meeting agenda to allow the public an opportunity to comment on this action.

16. The current property owner(s), U.S. Marine Corps, has been notified of this action in accordance with section 25299.37.2 of the Health and Safety Code and section 13307.1 of the Water Code.

17. This enforcement action is exempt from the provisions of the California Environmental Quality Act (Public Resource Code, section 21000 et seq.) in accordance with section 15321, Chapter 3, Title 14, California Code of Regulations.

IT IS HEREBY ORDERED that under the authority of Water Code section 13304,

1. Cleanup and Abatement Order No. 95-09, issued to U.S. Marine Corps Base, Camp Pendleton, San Diego County, is hereby rescinded.

JOHN H. ROBERTUS
Executive Officer

Date: October 31, 2005

APPENDIX G

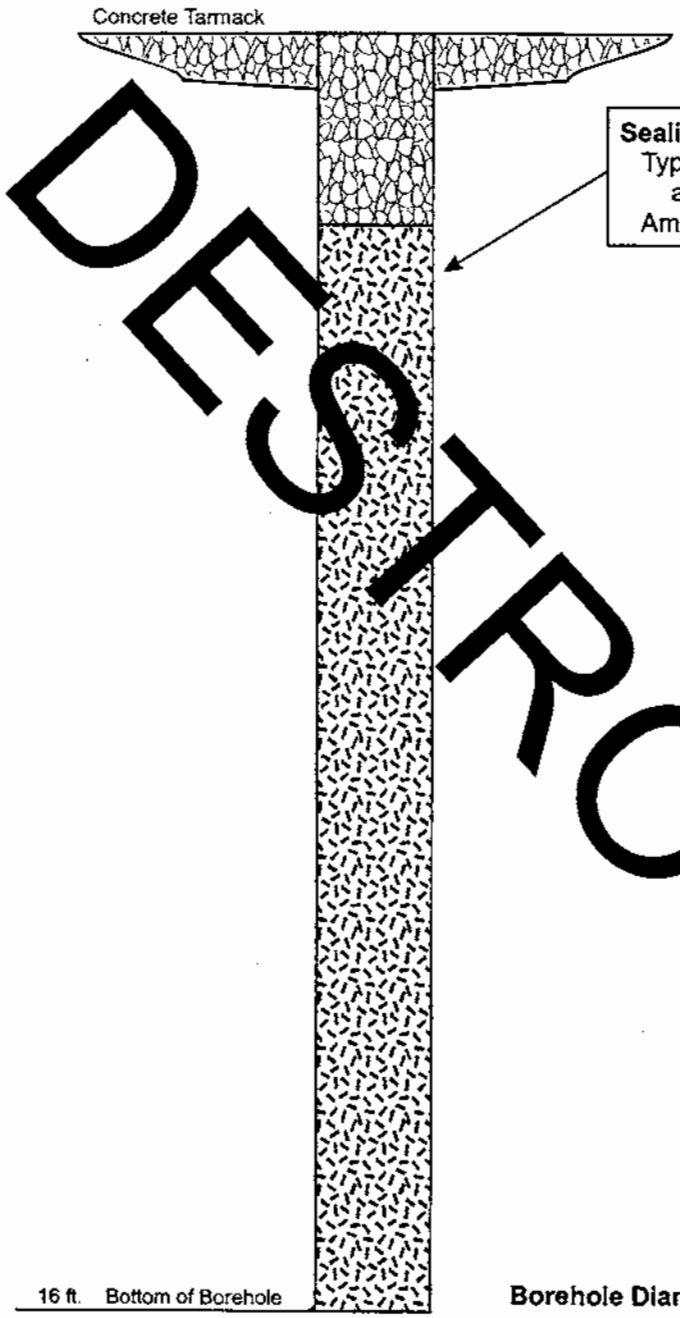
Documentation of Well Abandonment Activities

MW Destruction Documents

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FL-01	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/3/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 67.4 ft



Sealing Material:
Type: Bentonite Grout and quickset cement
Amount: approx. 11.4 ft^3

Well Destruction Procedure:
- Wellbox broken up and removed
- 2" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 16 ft bgs
- Borehole backfilled from 2-16 ft bgs with 8 ft^3 bentonite grout
- Borehole backfilled from 0-2 ft bgs with 3.4 ft^3 quickset cement

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

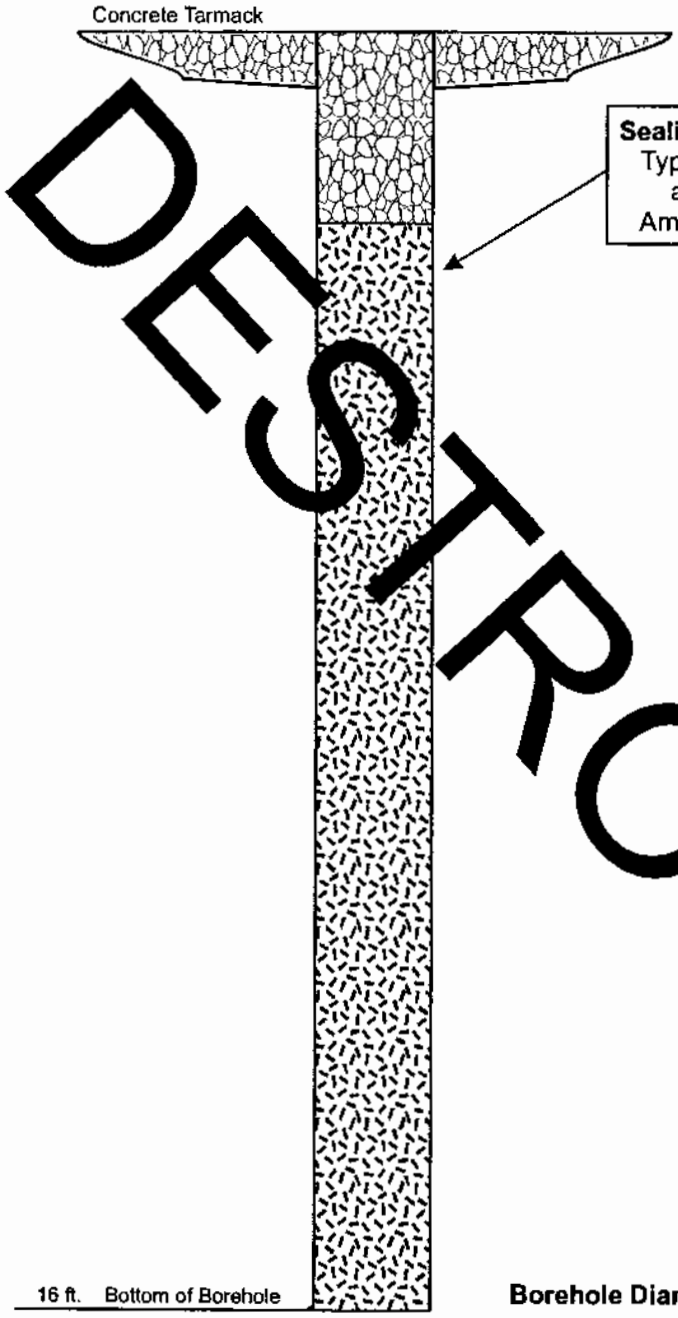
NOT TO SCALE

MCAS-FL-01-DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FL-02	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/3/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 67.41 ft



Sealing Material:
Type: Bentonite Grout and quickset cement
Amount: approx. 11.4 ft^3

Well Destruction Procedure:
- Wellbox broken up and removed
- 2" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 16 ft bgs
- Borehole backfilled from 2-16 ft bgs with 8 ft^3 bentonite grout
- Borehole backfilled from 0-2 ft bgs with 3.4 ft^3 quickset cement

DESTROYED

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

Borehole Diameter: 10.25 in.

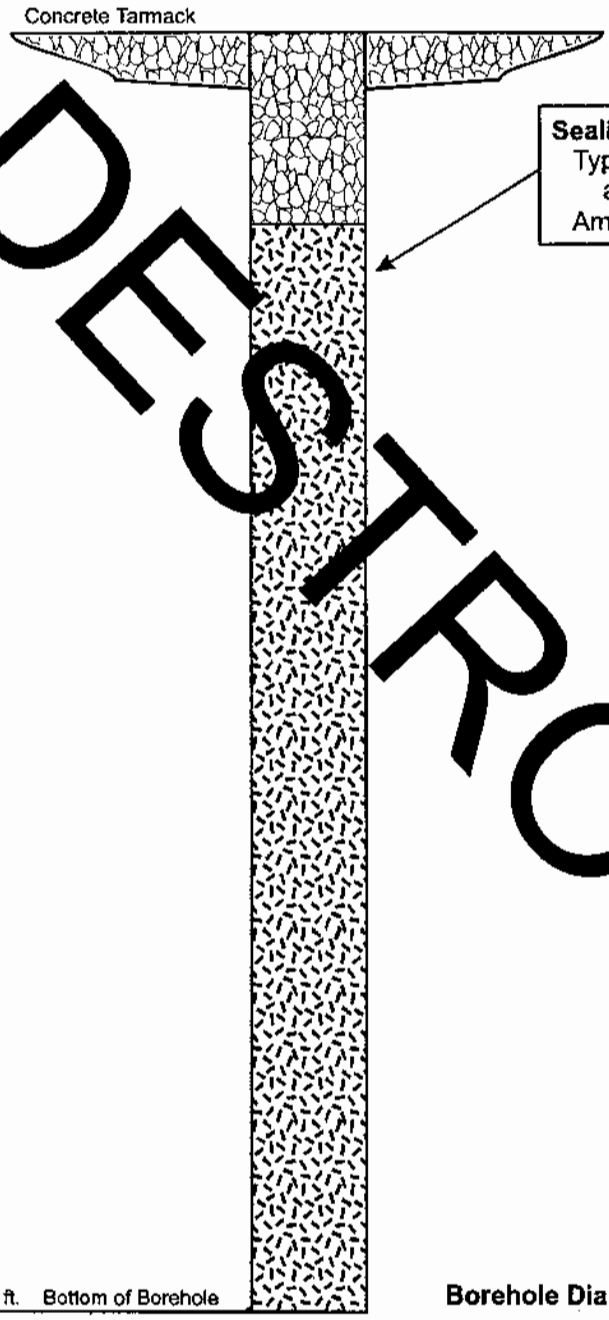
NOT TO SCALE

MCAS-FL-02- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FL-04	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/3/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 73.23 ft



Sealing Material:
Type: Bentonite Grout and quickset cement
Amount: approx. 11.4 ft^3

Well Destruction Procedure:
- Wellbox broken up and removed
- 2" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 16 ft bgs
- Borehole backfilled from 2-16 ft bgs with 8 ft^3 bentonite grout
- Borehole backfilled from 0-2 ft bgs with 3.4 ft^3 quickset cement

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

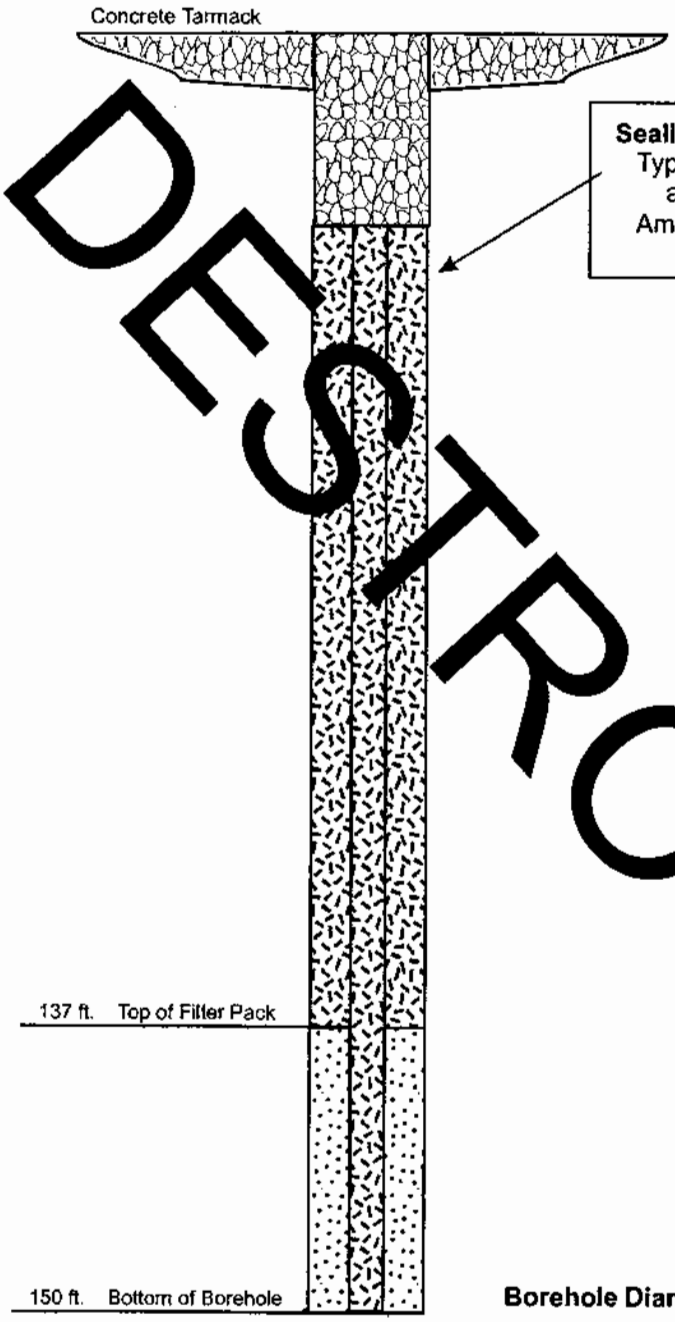
NOT TO SCALE

MCAS-FL-04- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FL-05	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/3/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 67.27 ft



Sealing Material:
Type: Bentonite Grout
and quickset cement
Amount: approx. 13.1 ft^3 (in casing)
approx. 1.64 ft^3 (surface seal)

Well Destruction Procedure:
- Wellbox broken up and removed
- Well casing/screen tremied from 2-150 ft bgs with approximately 13.1 ft^3 bentonite grout by pressure grouting through 1.25"dia. PVC piping
- Borehole backfilled from 0-2 ft bgs with 1.64 ft^3 quickset cement

DESTROYED

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

Borehole Diameter: 12.25 in.

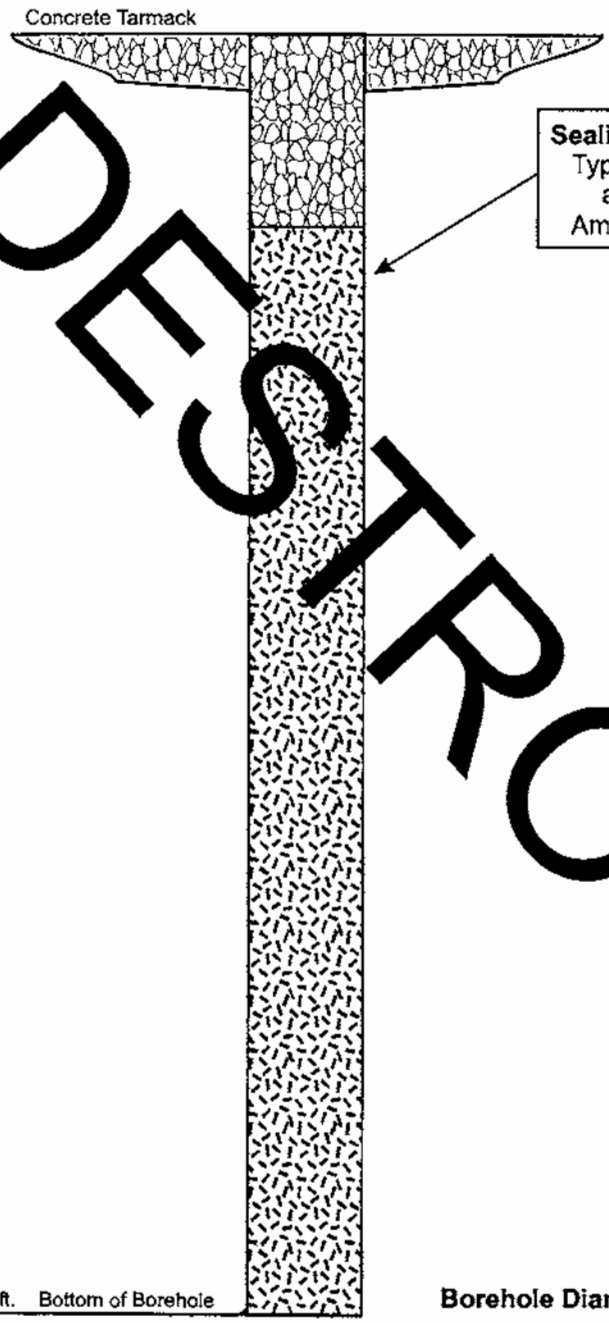
NOT TO SCALE

MCAS-FL-05- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FL-07	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/3/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 81.26 ft



Sealing Material:
Type: Bentonite Grout and quickset cement
Amount: approx. 11.4 ft^3

Well Destruction Procedure:
- Wellbox broken up and removed
- 2" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 16 ft bgs
- Borehole backfilled from 2-16 ft bgs with 8 ft^3 bentonite grout
- Borehole backfilled from 0-2 ft bgs with 3.4 ft^3 quickset cement

DESTROYED

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

Borehole Diameter: 10.25 in.

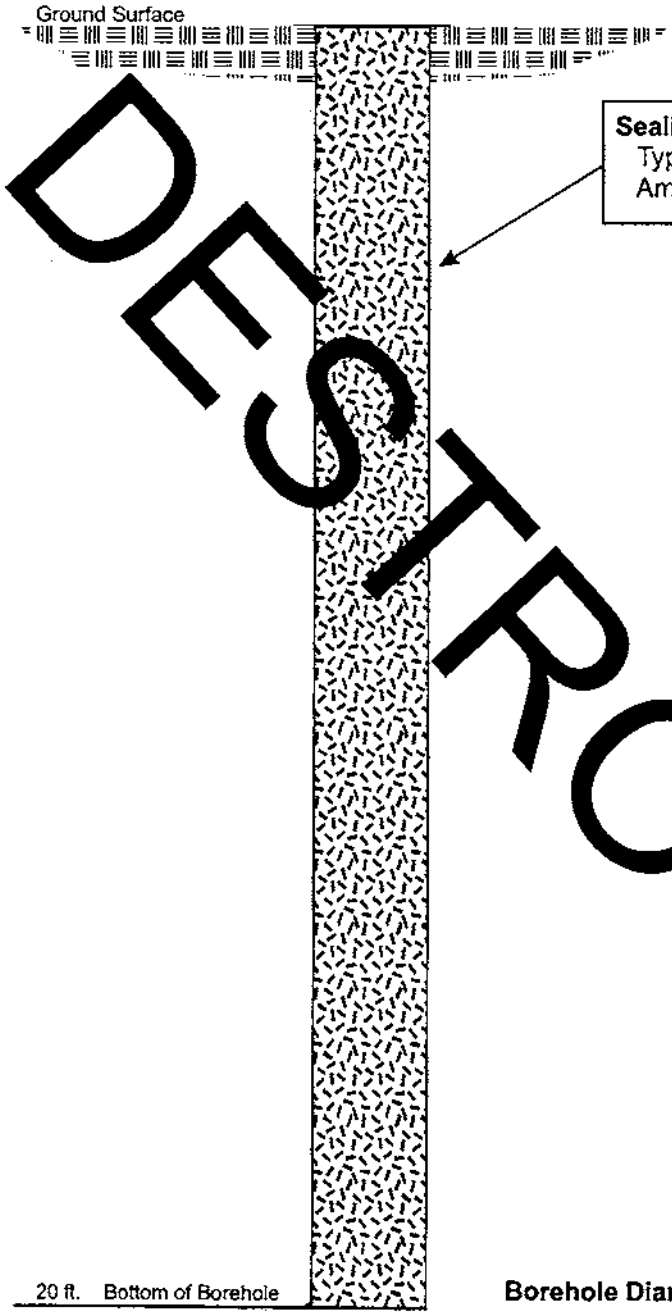
NOT TO SCALE

MCAS-FL-07- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: MW-06	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/2/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 73.92 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 11.4 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 2" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 20 ft bgs
- Borehole backfilled with 11.4 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

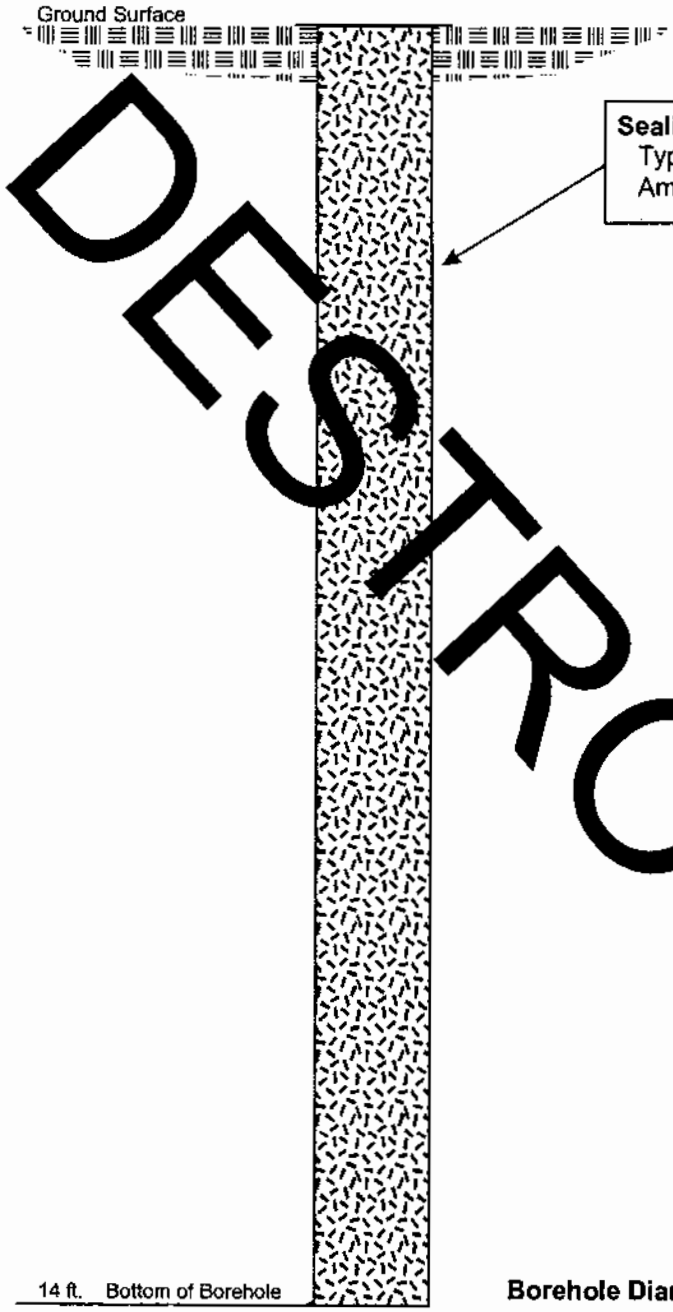
NOT TO SCALE

MCAS-MW06- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: MW-07	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/1/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 74.31 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 8.0 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 2" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 14 ft bgs
- Borehole backfilled with 8.0 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

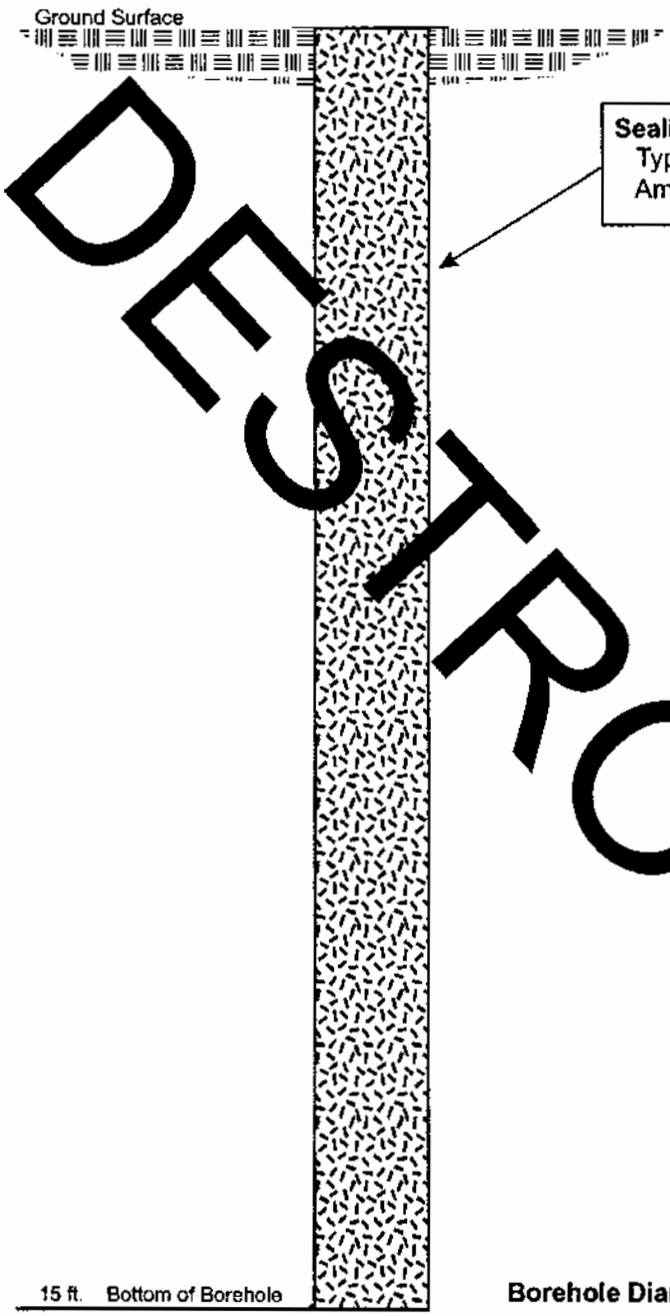
NOT TO SCALE

MCAS-MW07- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: MW-08	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/1/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 74.75 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 8.55 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 2" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 15 ft bgs
- Borehole backfilled with 8.55 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

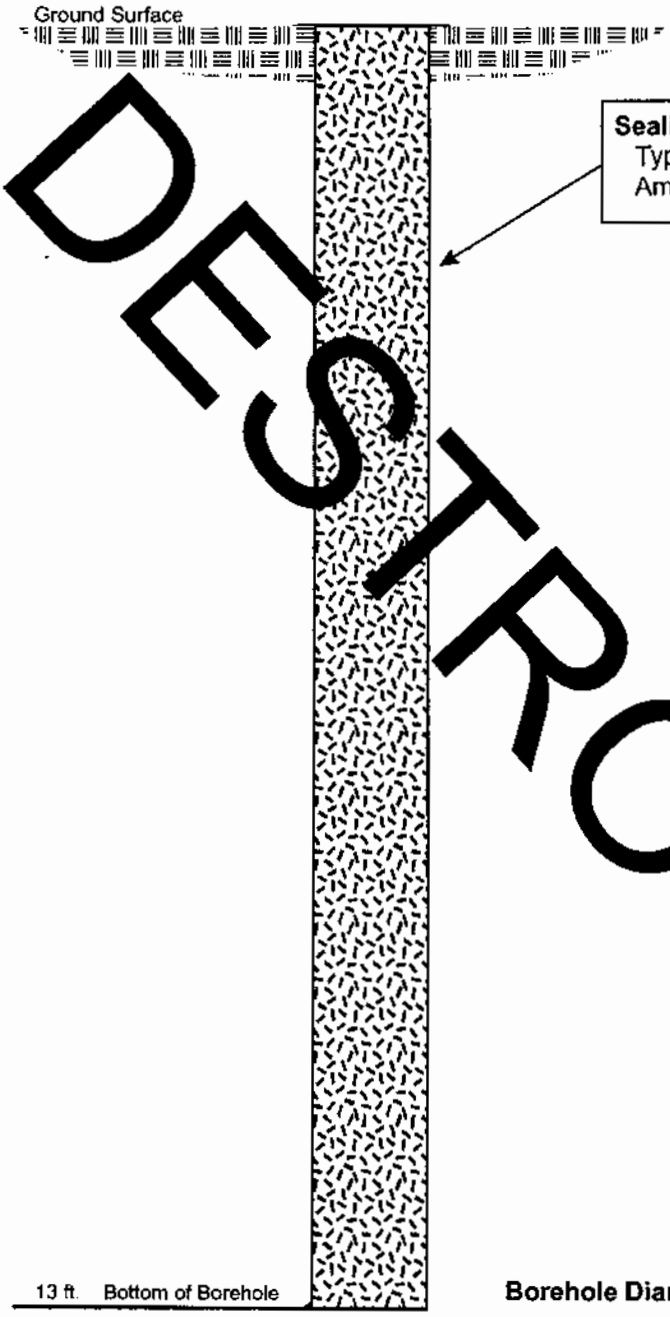
NOT TO SCALE

MCAS-MW06- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: MW12R	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/1/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 72.18 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 7.41 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 4" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 13 ft bgs
- Borehole backfilled with 7.41 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

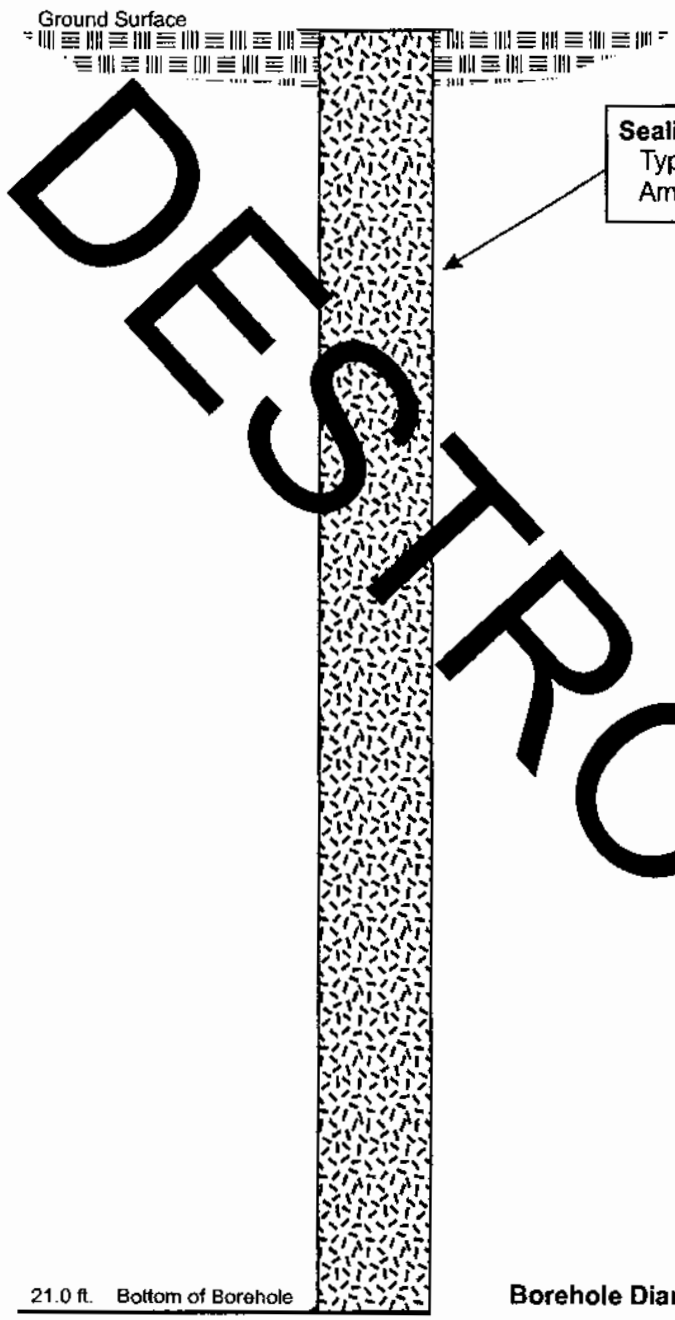
NOT TO SCALE

MCAS-MW12R-DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FF-MW-02	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/1/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 73.69 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 12 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 4" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 21 ft bgs
- Borehole backfilled with 12 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7348
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

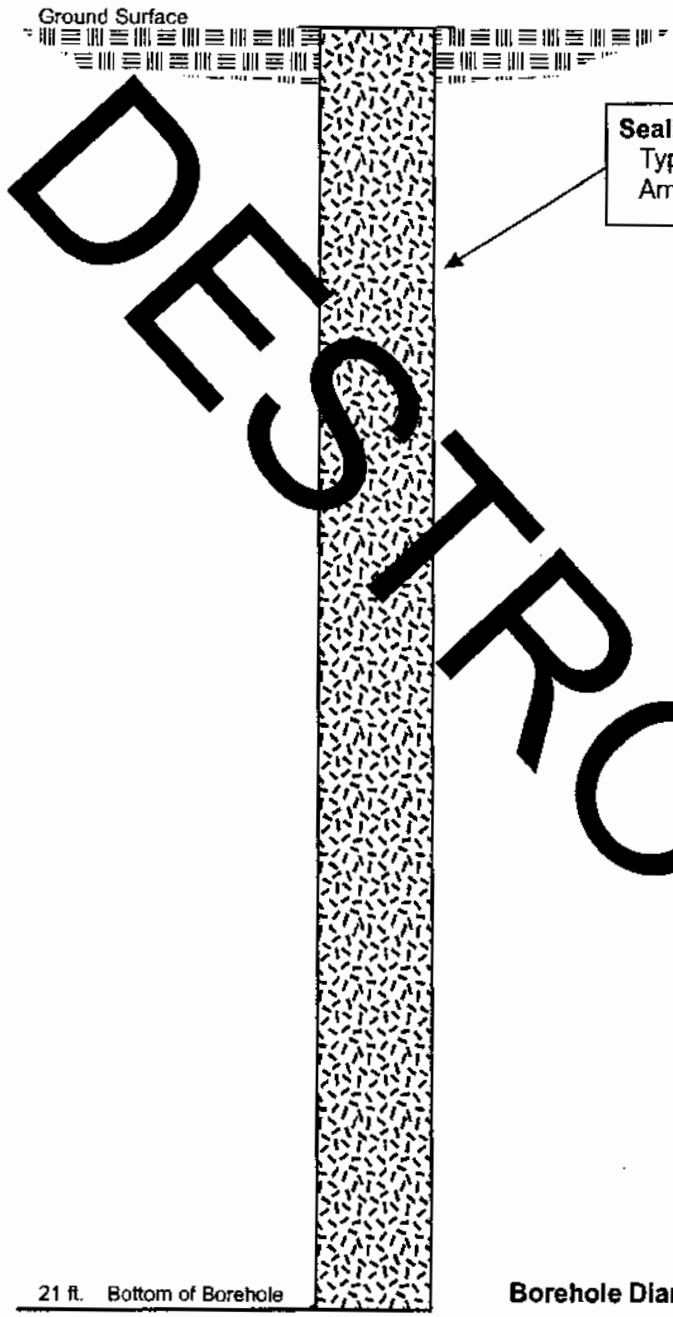
NOT TO SCALE

MCAS-FFMW02- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FF-MW-03	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/1/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 74.30 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 12 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 4" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 21 ft bgs
- Borehole backfilled with 12 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7346
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

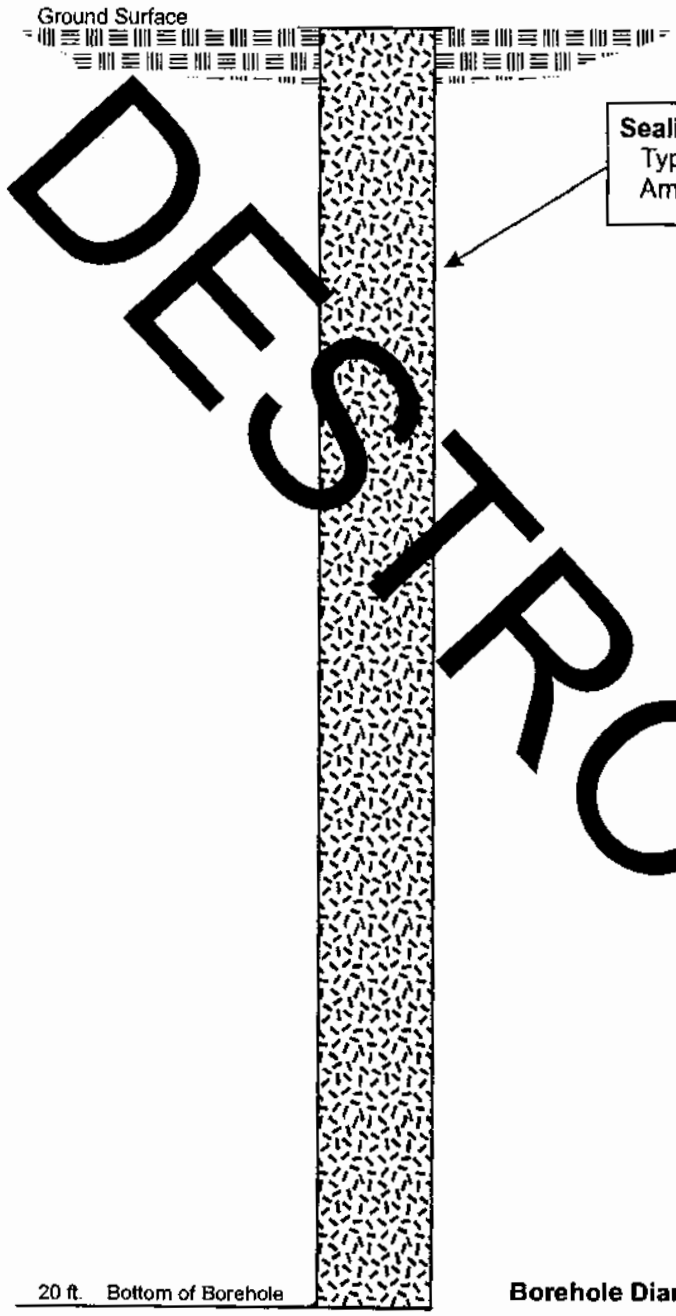
NOT TO SCALE

MCAS-FFMW03- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FF-MW-04	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration.	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/1/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 74.28 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 11.4 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 4" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 20 ft bgs
- Borehole backfilled with 11.4 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7348
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

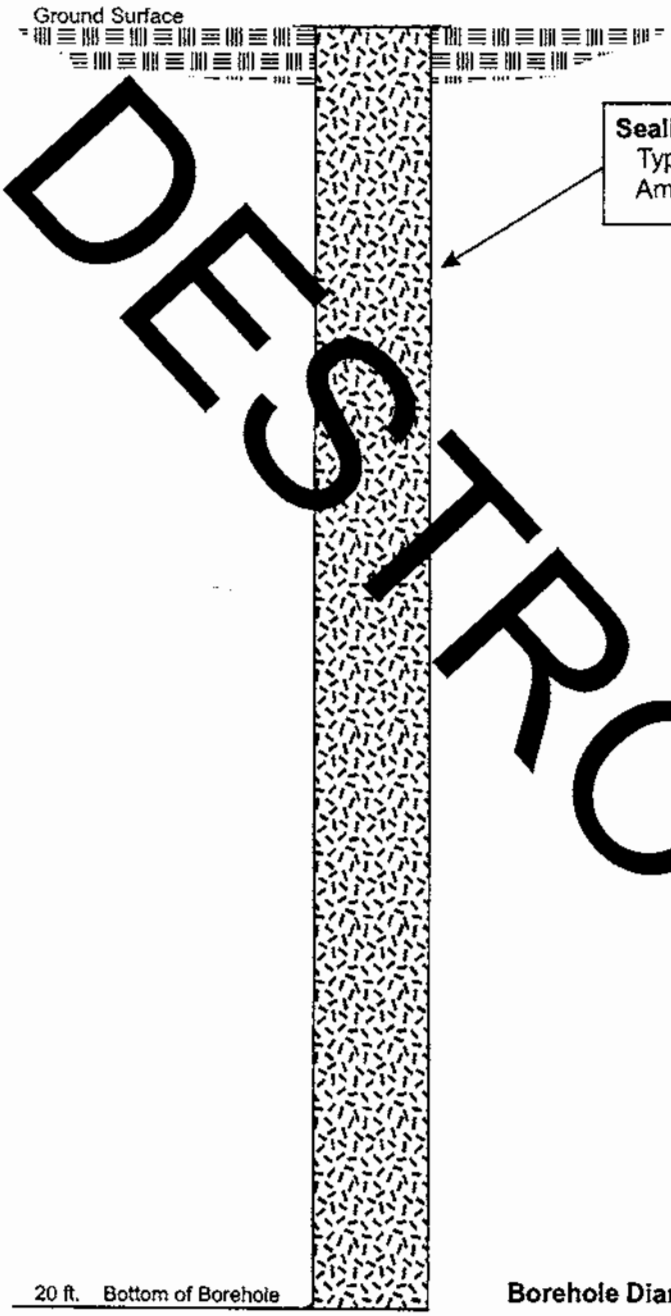
NOT TO SCALE

MCAS-FFMW04- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FF-MW-06	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/2/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 75.50 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 11.4 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 4" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 20 ft bgs
- Borehole backfilled with 11.4 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7348
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

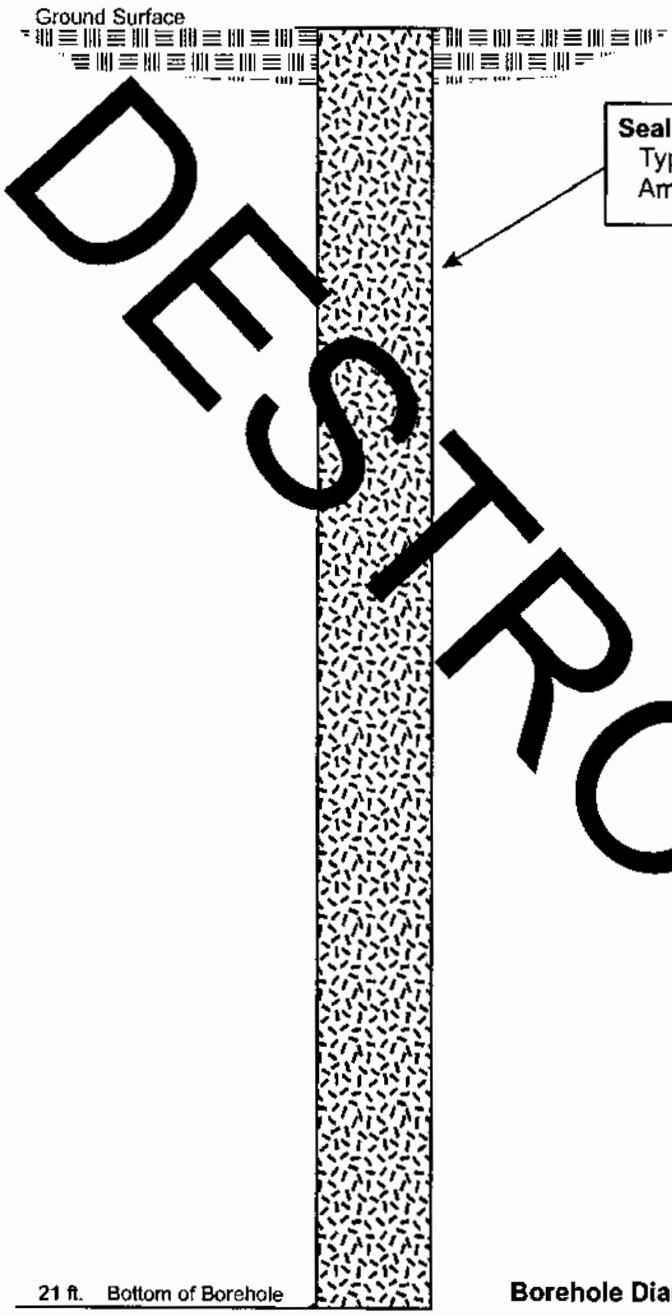
NOT TO SCALE

MCAS-FFMW06- DSTRD.cdr

Battelle

MCB CAMP PENDLETON
WELL DESTRUCTION DIAGRAM

Permit #: LMON103561 EHS Case #: H05939-092	Site: Area 23, MCAS	Well #: FF-MW-07	Northing (NAD 83): NA
Drilling Contractor: Baja Exploration Co.	Rig Type / Drilling Method: CME 75 / HSA	Date: 12/1/05	Easting (NAD 83): NA
Reviewed by: R. Janosy	Driller: Wayne Eves	Geologist: R. Janosy	Surface Elevation (NAVD 88): 75.81 ft



Sealing Material:
Type: Bentonite Grout
Amount: approx. 12 ft^3

Well Destruction Procedure:
- Wellbox and surface completion broken up
- 4" PVC well casing & screen pulled from borehole
- Borehole overdrilled to 21 ft bgs
- Borehole backfilled with 12 ft^3 bentonite grout

PROFESSIONAL GEOLOGIST
ROBERT J. JANOSY
No. 7348
Expires 5/07
STATE OF CALIFORNIA

DESTROYED

Borehole Diameter: 10.25 in.

NOT TO SCALE

MCAS-FFMW07- DSTRD.cdr

Well Permit

PERMIT #LMON103561
A.P.N. #101-520-14-00
EST #H05939-092

COUNTY OF SAN DIEGO
DEPARTMENT OF ENVIRONMENTAL HEALTH
LAND AND WATER QUALITY DIVISION
MONITORING WELL PROGRAM

MONITORING WELL DESTRUCTION PERMIT

SITE NAME: MCAS CAMP PENDLETON FORMER FUEL FARM

SITE ADDRESS: AREA 23, FORMER FUEL FARM, MARINE CORPS BASE, CAMP PENDLETON, CA 92055

PERMIT TO: **DESTROY 14 GROUNDWATER MONITORING WELLS**

PERMIT APPROVAL DATE: NOVEMBER 29, 2005

PERMIT EXPIRES ON: MARCH 29, 2006

RESPONSIBLE PARTY: MCB CAMP PENDLETON

PERMIT CONDITIONS:

1. **A variance is approved to pressure grout FL-05 and FL-06 as proposed (without cutting the stainless steel screened interval) as long as the volume of grout forced in is adequate to fully disrupt the filter pack and reestablish contact with the formational materials.**

2. **All material within the original borehole, which includes the casing, filterpack and annular seal, must be removed. The borehole must be completely filled with an approved sealing material as specified in Department of Water Resources Bulletin 74-90.**

3. Contact the Regional Water Quality Control Board for their comments and concerns regarding the proposed activities.

4. All water and soil resulting from the activities covered by this permit must be managed, stored and disposed of as specified in the SAM Manual in Section 5, II, E- 4. (**http://www.sdcounty.ca.gov/deh/lwq/sam/manual_guidelines.html**). In addition, drill cuttings must be properly handled and disposed in compliance with the Stormwater Best Management Practices of the local jurisdiction.

5. Within 60 days of completing work, submit a well destruction report, including description of the method of destruction, type and volume of materials used (in cubic feet) to the Monitoring Well Permit Desk. This report must include all items required by the SAM Manual, Section 5, Pages 5-7.

6. This office must be given 48-hour notice of any drilling activity on this site and advanced notification of drilling cancellation. Please contact the Well Permit Desk at 619) 338-2339.

APPROVED BY: Carol Spangenberg DATE: 11/29/2005
CAROL SPANGENBERG

NOTIFIED: 11/29/05 Fax copy

DEH:SAM-9075 (3/05)

Well Abandonment

Waste Manifest

NON-HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. C A 2 1 7 0 0 2 3 5 3 3 | Manifest Document No. 2 5 1 1 4 | 2. Page 1 of 1

3. Generator's Name and Mailing Address USMC AC/S ENVIRO. SEC.
PO Box 555008
CAMP PENDLETON, CA

4. Generator's Phone (760) 725 ~~4321~~ 4375 CONTACT: MARGO WILLIAMS

5. Transporter 1 Company Name EPR ENVIRONMENTAL SERVICES, INC. | 6. US EPA ID Number C A R 0 0 0 0 1 1 2 0 5 | A. Transporter's Phone 619-722-6781

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

9. Designated Facility Name and Site Address DOME ROCK INDUSTRIES, INC.
3125 W. DOME ROCK ROAD
QUARTZSITE, AZ 85346 | 10. US EPA ID Number A Z R 0 0 0 0 3 5 9 1 5 | C. Facility's Phone 928-927-7688

11. Waste Shipping Name and Description	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol
a. NON-HAZARDOUS WASTE SOLID	002	D.M.	0.500	P
b.				
c.				
d.				

D. Additional Descriptions for Materials Listed Above
IIA. 43215C285 (SOIL)
SITE: FORMER FUEL FARM

E. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information
ALWAYS WEAR APPROPRIATE P.P.E. AND USE SAFE HANDLING METHODS.
24 HOUR EMERGENCY NUMBER 1-800-424-9300 *CHEMTREC*

EC# (760) 725-4321

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

Printed/Typed Name	Signature	Month	Day	Year
GERALD O. TUCKER		02	17	06

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year
Octavio Quintero		02	17	06

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name	Signature	Month	Day	Year

19. Discrepancy Indication Space

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

Printed/Typed Name	Signature	Month	Day	Year

GENERATOR

TRANSPORTER

FACILITY