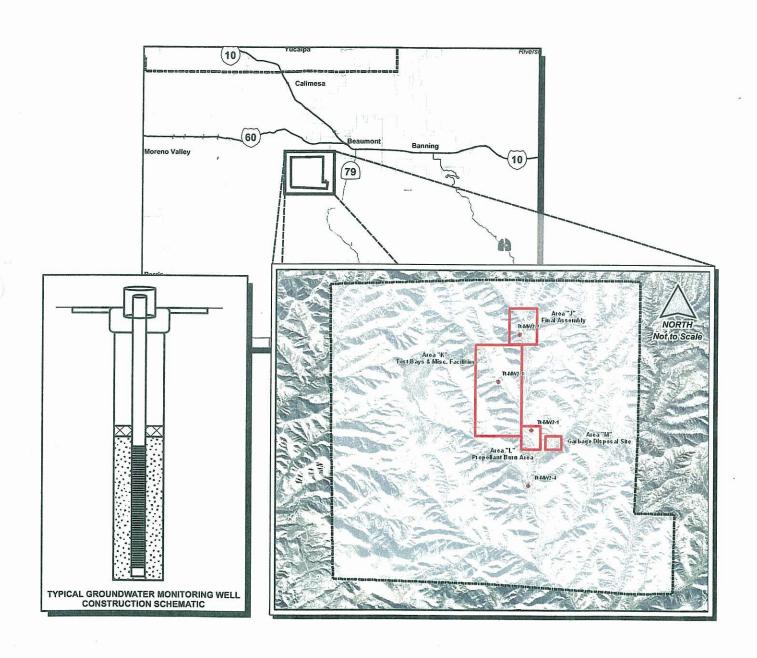
Lockheed Martin Beaumont Site 2 Groundwater Monitoring Well Installation Report Beaumont, California







Lockheed Martin Beaumont Site 2 Groundwater Monitoring Well Installation Report Beaumont, California

November 15, 2004 TC# 13505-02

Prepared for

Lockheed Martin Corporation Corporate Energy, Environmental Safety and Health Burbank, California

Prepared by

Tetra Tech, Inc. Pasadena, California

Neil Shukka

Burbank Program Manager

Jeffrey Brenner, R.G.

Senior Geologist

TETRA TECH, INC. 3475 East Foothill Blvd. Pasadena CA 91107 (626) 351-4664 FAX (626) 351-5291



TABLE OF CONTENTS

			Page
1.0	INTI	RODUCTION	1-1
2.0	SITE	HISTORY	2-1
	2.1	Site Description	
	2.2	Historical Operations and Chemical Usage	
	2.3	Geology and Hydrogeology	
		2.3.1 Regional Geology	
		2.3.2 Site Geology	
		2.3.3 Site Hydrogeology	2-5
	2.4	Previous Investigations	
		2.4.1 Preliminary Remedial Investigation (Radian, 1986)	2-6
		2.4.2 Hydrogeologic Investigation (Radian, 1992)	2-7
		2.4.3 Disposal Area Removal Action (Radian, 1993)	2-8
		2.4.4 Monitoring Well Destruction Report (LMC, 1995)	2-9
		2.4.5 Groundwater Sampling Results Former Production Well W2-3	
		(Tetra Tech, 2003a)	2-10
3.0	WEL	L DRILLING/INSTALLATION ACTIVITIES	3-1
	3.1	Project Approach and Description	
	3.2	Pre-Well Installation Activities	
		3.2.1 Well Permits	3-3
		3.2.2 Biological Survey	3-3
		3.2.3 Underground Utility and Geophysical Survey	3-4
	3.3	Well Installation	3-4
		3.3.1 Groundwater Well Drilling	3-5
		3.3.2 Groundwater Well Logging Methods	
		3.3.3 Groundwater Well Design	
		3.3.4 Well Installation/Construction	
		3.3.5 Well Development	
	3.4	Civil/Land Survey	
	3.5	Groundwater Sampling	3-14
4.0	SUM	MARY OF ANALYTICAL RESULTS	4-1
	4.1	Groundwater Occurrence and Flow	
	4.2	Analytical Sampling Results	
5.0	WAS	TE MANAGEMENT	5-1
6.0	SUM	MARY OF FINDINGS	6-1

TABLE OF CONTENTS (continued)

		Page
a per		~ .
7.0 REFI	ERENCES	/-1
	LIST OF FIGURES	
Figure 1-1	Site Location Map	1-3
Figure 2-1	Historical Operational Areas Map	2-2
Figure 3-1	Monitoring Well Locations	
Figure 4-1	Groundwater Elevation Contours	4-2
	LIST OF TABLES	
Table 3-1	Summary of Depth to Groundwater as Measured at Time of Drilling/	
14010 3 1	Installation	3-5
Table 3-2	Summary of Groundwater Monitoring Well Construction Details	
Table 3-3	Summary of Well Development Data	
Table 3-4	Summary of Final Water Quality Parameters at Completion of Well	
	Development Procedure	3-13
Table 3-5	Summary of Well Location Coordinates and Elevation Data –	
	Groundwater Monitoring Wells	3-14
Table 4-1	Summary of Groundwater Elevation Data from Recently Installed	
	Monitoring Wells	
Table 4-2	Summary of Volatile Organic Compound Results	
Table 4-3	Summary of Semi-Volatile Organic Compound Results	
Table 4-4	Summary of Title 22 Metals Results	
Table 4-5	Summary of Perchlorate Results	4-6
	LIST OF APPENDICES	
Appendix A	Well Permits	
Appendix B	Boring Logs	
Appendix C	Well Development/Purging Logs	
Appendix D	Laboratory Analytical Reports	

SECTION 1.0 INTRODUCTION

On behalf of Lockheed Martin Corporation (LMC), Tetra Tech, Inc. has prepared the following Groundwater Well Installation Report for LMC's Beaumont Site 2 (herein referred to as the Site) – see Figure 1-1. The Site (also known as the Laborde Canyon Site) consists of approximately 2,500 acres and is located approximately 70 miles east of Los Angeles, near the City of Beaumont, California. Historically, the Site was primarily used for small rocket motor assembly, testing, and minor disposal activities.

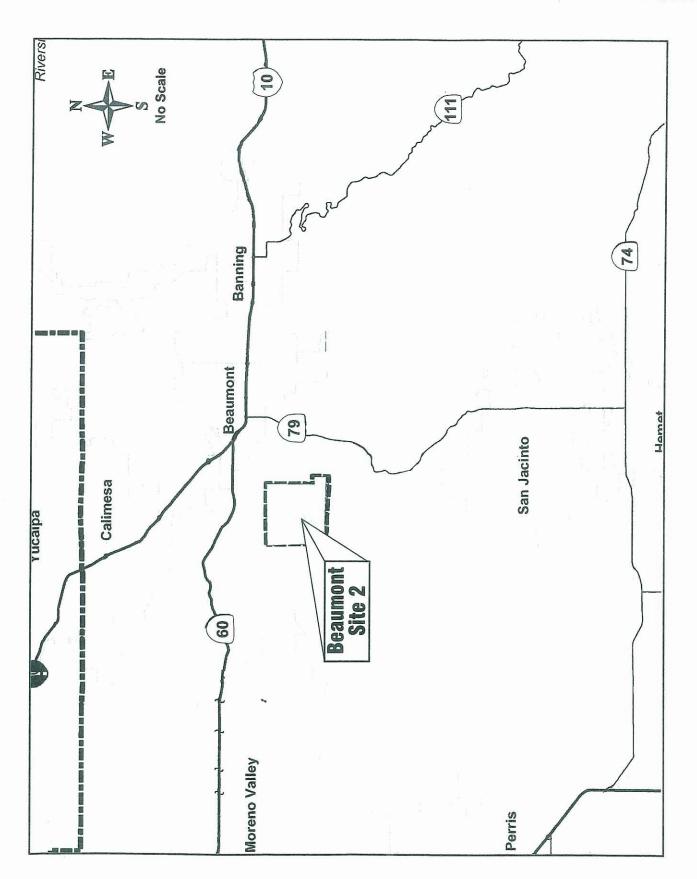
Based on recent regulatory interest in perchlorate and 1,4-dioxane, a groundwater sample was collected from a historical groundwater production well (identified as W2-3) at the Site in January 2003. The sample was analyzed for volatile organic compounds (VOCs), perchlorate, and 1,4-dioxane to determine the potential presence and concentration of the chemicals in groundwater. The analytical results indicated that VOCs and 1,4-dioxane were not present at or above their respective detection limits. However, perchlorate was reported at a concentration of 4,080 micrograms per liter (μ g/L), which exceeds the State of California recommended action level of 6 μ g/L for that compound.

As a result, a limited investigation with respect to the chemicals of potential concern (COPCs) in the groundwater at the Site was conducted in accordance with the Department of Toxic Substances Control (DTSC) approved Final LMC Beaumont Site 2 Groundwater Well Installation Work Plan (Tetra Tech, 2004). The objective of this groundwater well installation program was to determine the current groundwater conditions (i.e., groundwater gradient, COPCs, and extent of COPCs) at the Site. In order to accomplish the program objective, Tetra Tech installed four (4) groundwater monitoring wells, collected groundwater samples, and analyzed them for COPCs related to the historical operations at the Site.

This report presents a summary of the groundwater well installation and sampling activities performed at the Site, including the findings of the limited groundwater investigation. The report is organized into the following sections:

- <u>Section 2.0 Site History</u>: This section presents a brief description of the Site, historical
 operations and chemical usage, regional geology and hydrogeology, and a summary of
 previous environmental investigations conducted at the Site;
- <u>Section 3.0 Well Drilling/Installation Activities</u>: This section presents descriptions of all the field activities associated with drilling, installation, and sampling of the four (4) groundwater monitoring wells;
- <u>Section 4.0 Summary of Analytical Results</u>: This section provides a summary of the analytical results obtained during the initial groundwater sampling round of the newly installed wells, including a description of the general groundwater occurrence and flow patterns beneath the Site;
- <u>Section 5.0 Waste Management:</u> This section presents a summary of the management of wastes generated during the field efforts;
- <u>Section 6.0 Evaluation of Findings</u>: This section presents a summary of the findings of the limited groundwater investigation;
- Section 7.0 References: This section presents the list of documents cited in this report.

FIGURE 1-1 LOCATION MAP OF BEAUMONT SITE 2



SECTION 2.0 SITE HISTORY

2.1 SITE DESCRIPTION

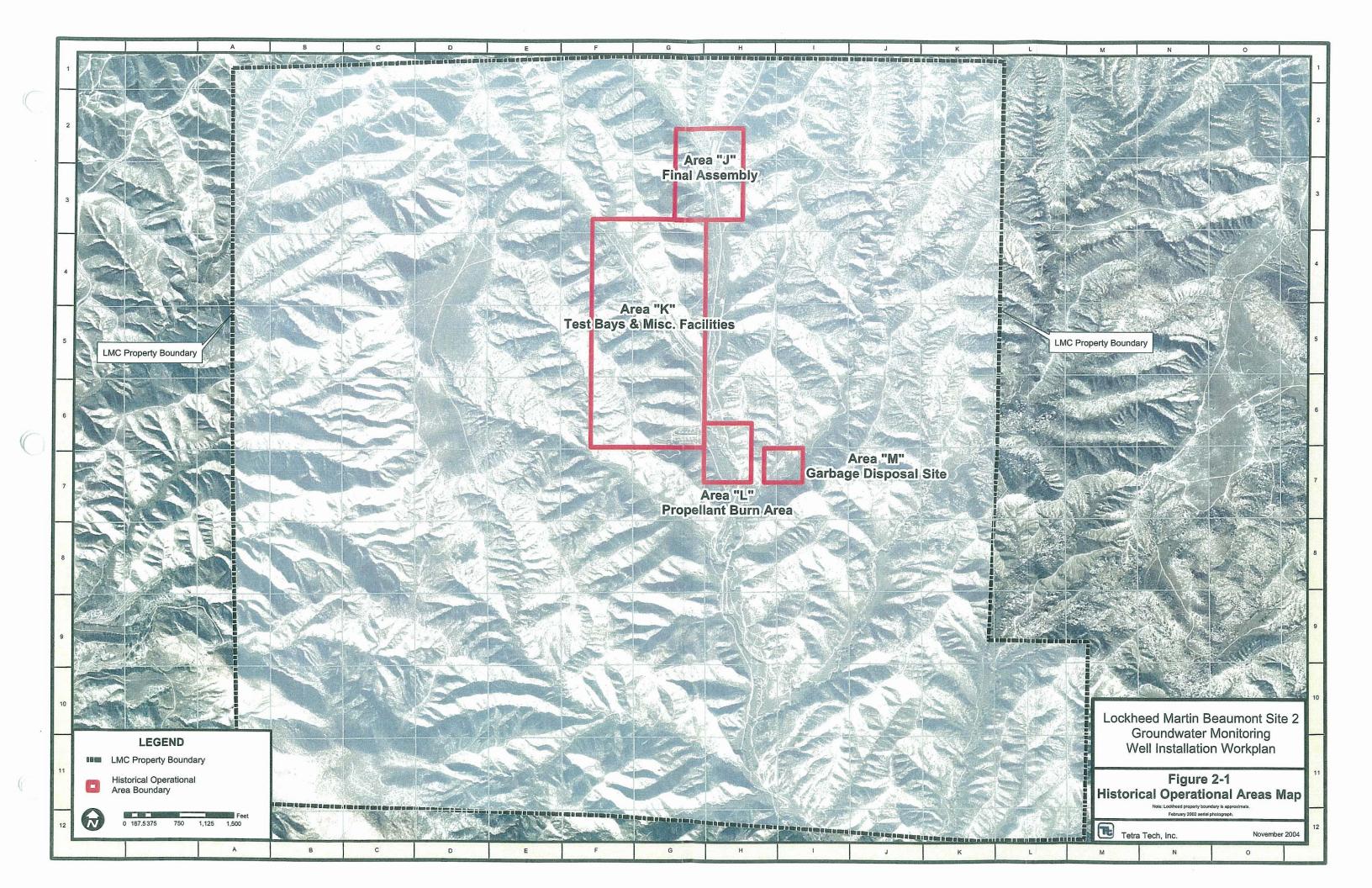
The Site consists of approximately 2,500 acre located south of Beaumont, California. The majority of the Site was owned by the Grand Central Rocket (GCR) Company who purchased the land from private owners in 1958. Lockheed Propulsion Corporation (LPC) acquired the Site parcels through the acquisition of GCR in 1963. The Site was primarily used by GCR and LPC for small rocket motor assembly and testing operations from 1960 to 1974 and has been vacant from 1974 to present.

2.2 HISTORICAL OPERATIONS AND CHEMICAL USAGE

The Site was used by GCR and LPC from 1960 to 1974 for small rocket motor assembly and testing operations. A summary of each historical operational area within the Site is presented in this section. The locations of the historical operational areas are presented on Figure 2-1.

The Site was made up of four primary historical operational areas. Each area was responsible for various activities associated with rocket motor assembly and testing. The historical operational areas at the Site with corresponding grid point locations in Figure 2-1 are presented below:

Operational Area	Historical Operation Name	Location (Grid Points)
J	Final Assembly	G2 through H2 and G3 through H3
K	Test Bays and Miscellaneous Facilities	F3 through H3 and F6 through H6
L	Propellant Burn Area	Actual Location Unknown (approximate area: H6 through H7)
М	Garbage Disposal Area	H7 through I7



Operational Area "J"- Final Assembly

Rocket motor casings with solid propellant were transported to Building 250 within the Site where final assembly of the rocket hardware was conducted. The building was used from 1970 to 1974 for final assembly and shipment of short range attack missile (SRAM) rocket motors. Rocket motor assembly operations included installation of the nozzle and headcap, pressure check of the motor, installation of electrical systems, and preparations for shipment. During the plant closure in 1974, all usable parts of this facility were dismantled, taken off site, and sold.

Operational Area "K" – Test Bays and Miscellaneous Facilities

A conditioning chamber and its associated bunker were located just north of the Surface Propellant Burn Area (Historical Operational Area L). The conditioning chamber was used to examine the effects of extreme temperatures on rocket motors and to meet specification requirements. A centrifuge was located in the western test bay, where rocket motors were centrifuged in order to see if the solid propellant would separate from its casing under increased gravitational forces (gforces). Four test bays were located at the Site. The initial testing activities had a history of explosions that destroyed complete test areas, especially during the period when Grand Central Rocket operated at the Site. As the technology became better understood, motor failures occurred less often. Following any motor failure, the hillsides were thoroughly policed to recover any unburned solid propellant.

Operational Area "L" - Burn Area

Large slabs of solid propellant were transported to the Site and set directly on the ground surface for burning. No pits or trenches were dug as part of the burning process. The solid propellant was saturated with diesel fuel to initiate combustion. Reportedly, the solid propellant would burn rapidly. There is no evidence or physical features that identifies the precise location of the burning activities.

Operational Area "M" - Garbage Disposal Site

A garbage disposal site was located adjacent to a small creek at the Site. Scrap metal, paper, wood, and concrete materials were disposed of at the disposal site by LPC. Hazardous materials, including explosives and propellants, were never disposed of at this disposal site by LPC (according to employee interviews). Ogden Labs, a company that tested valves and explosive items, also used this disposal site. Reportedly, Ogden Labs disposed hazardous waste at the garbage disposal site. In 1972, a Lockheed Safety Technician was exposed to toxic vapors of unsymmetrical dimethyl hydrazine (UDMH) from a pressurized gas container located within the disposal site. Based on potential exposure risks to occupants, Lockheed's safety group required Ogden Labs to take measures to remove any potentially hazardous materials at the disposal site. Shortly thereafter, a disposal company was contracted by Ogden Labs to clean up the disposal site.

2.3 GEOLOGY AND HYDROGEOLOGY

2.3.1 Regional Geology

The Site is located at the northern end of the Peninsular Range Geomorphic Province. In general, the Peninsular Range is a large block uplifted abruptly along its eastern edge and tilted westward. The province has a subtle northwest trend expressed by its higher mountains and longer valleys (Sharp, 1975). Major faults within the region include the San Jacinto Fault, and associated branch faults that have been mapped near the southern end of the Site. In addition, approximately 8 miles northeast of the Site, the Banning fault adjoins with the San Andreas Fault. The San Jacinto and San Andreas Fault zones have been active with moderate to major earthquakes occurring over the last 200 years.

The regional stratigraphy in the vicinity of the Site has been described and mapped by Dibblee (1981). Geologic units, from oldest to youngest, consist of: the basement complex of late Paleozoic to middle Mesozoic age meta-sedimentary rocks and Mesozoic granitic rocks; non-marine sedimentary rocks of the Tertiary Mount Eden Formation overlain by the non-marine Tertiary sandstones and siltstones of the San Timoteo Formation; and Quaternary alluvium

(Radian, 1990). A detailed description of site geology and hydrogeology is presented in the following subsections.

The Site is located in an area that is commonly referred to as the "Badlands," an area of relatively soft sedimentary sandstone and siltstone deeply incised into numerous canyons by runoff. The Site is bisected by Laborde Canyon, which traverses a north-south pathway through the area. Laborde Canyon forms the principal drainage course through the Site, and allows ephemeral storm water to drain to the San Jacinto Valley.

2.3.2 Site Geology

The Site is primarily located within the confines of the Laborde Canyon valley floor and is underlain by Quaternary alluvium and colluvium. These geologic materials were derived from the weathering of the hillsides directly adjacent to the canyon. The alluvial deposits consist of very fine- to fine-grained silty sands and fine- to medium-grained poorly graded sands. These sandy zones are typically interbedded with finer grained silts and, in some cases, with silty clays.

The San Timoteo Formation, as encountered in the subsurface and exposed on site, consists of very fine-grained siltstone and very fine- to medium-grained silty sandstone. Some coarse pebbles and fragments were encountered in the more coarse-grained, sandy portions of the formation. The rocks of the San Timeteo are generally poorly cemented, but are more indurated than the alluvial sediments that overlie the formation.

2.3.3 Site Hydrogeology

A large portion of the Site is located within Laborde Canyon, which bisects the site from north to south. The watershed area, including the canyon itself, is ephemeral in nature and remains dry when there is no rainfall.

Groundwater at the Site is found primarily in the siltstones of the San Timoteo Formation, although these deposits yield only small quantities of water to wells (Radian, 1986). However, at

the southern end of the Site, groundwater is present within the alluvium above the San Timoteo Formation. Based on the historical and most recent groundwater levels measured at the Site, the groundwater gradient and flow direction generally follows the southward slope of the canyon floor. Recharge to the groundwater aquifer through the shallow alluvium occurs from direct infiltration of rainfall and loss from surface drainage through the sides and bottoms of stream channels.

2.4 PREVIOUS INVESTIGATIONS

Reports and documentation regarding environmental activities (i.e., soil/groundwater investigations, excavations, regulatory agency correspondence, etc.) were reviewed to provide a comprehensive historical environmental evaluation of the Site. The review focused upon identifying activities conducted at the Site that would describe specific findings regarding chemical impacts to groundwater. The previous investigations reviewed included a preliminary remedial investigation (Radian, 1986), hydrogeologic investigation (Radian, 1992a), disposal area removal action report (Radian, 1993), monitoring well destruction report (LMC, 1995), and groundwater sampling results former production well W2-3 letter report (Tetra Tech, 2003a). These investigations are briefly summarized in the following subsections.

2.4.1 Preliminary Remedial Investigation (Radian, 1986)

In October 1986, Radian Corporation (Radian) conducted a remedial groundwater and geophysical investigation at the Site. The objective of the remedial investigation was to determine the potential presence and lateral extents of any possible contaminants in the groundwater beneath the Site. The remedial groundwater investigation was to include sampling the four (4) existing groundwater production wells (designated W2-1, W2-2, W2-3, and W2-5) on the current Site property and an existing groundwater production well (W2-4) located on the North Gate property (Radian, 1986). However, only well W2-3, which is located upgradient of the probable surface propellant burn area, was accessible during this investigation. A sample was collected from well W2-3 and analyzed for purgeable hydrocarbons using U.S. Environmental Protection Agency

(EPA) Method 601. Trichloroethylene (TCE) was reported at concentrations of 4.2 μ g/L in the sample.

Additionally, a geophysical survey was conducted in the area previously identified as the garbage disposal site. The objective of the survey was to determine the location and physically define the lateral extents of the former permitted garbage disposal area through the use of ground penetrating radar (GPR), terrain conductivity (TC) and magnetic locator (ML). The survey identified an area of approximately 250 feet wide by 450 feet long.

2.4.2 Hydrogeologic Investigation (Radian, 1992)

In 1992, Radian performed a hydrogeologic investigation at the Site in order to assess potential source areas and to characterize the subsurface soil and groundwater conditions. The investigation included performing a soil vapor survey, soil sampling, and groundwater well installation and sampling.

The soil vapor survey was performed at the disposal area, final assembly building, and propellant burn area. During the soil vapor survey, soil vapor samples were also collected at the southernmost portion of the test bay area (Historical Operational Area K). During the investigation, a total of 42 soil vapor samples (9 at the Garbage Disposal Area, 9 at the Final Assembly Building, 8 at the Propellant Burn Area, and 16 general area samples) were collected at a maximum depth of 5 feet below ground surface (bgs) and analyzed for VOCs. Analytical results from the soil vapor samples reported detectable concentrations of one or more of the following VOCs: 1,1,1-trichloroethane (1,1,1-TCA), 1,1-dichloroethane (1,1-DCA), TCE, and tetrachloroethene (PCE).

A total of four soil samples were collected from 5 to 6.5 feet bgs in four borings (designated as BH2-1, BH2-2, BH2-6, and BH2-7) at the Site. Two soil borings (BH2-1 and BH2-2) were drilled upgradient and downgradient of the disposal area. Soil boring BH2-7 was drilled adjacent to the Final Assembly Building and soil boring BH2-6 was drilled adjacent to well MW2-6,

approximately 1,000 feet south of the Final Assembly Building. The soil samples were analyzed for halogenated volatile organics, aromatic volatile organics, metals, and perchlorate. The report concluded that the laboratory results for the halogenated and aromatic volatile organics did not indicate any of the analytes above their detection limits. The results for the metals analyses were within the range of values expected for natural soil and were below their respective Total Threshold Limit Concentrations (TTLC).

During this investigation four (4) new groundwater monitoring wells (designated MW2-2, MW2-4, MW2-5, and MW2-6) were installed at the Site. MW2-2 is located approximately 400 feet southeast of the former propellant burn area and downgradient of the disposal area. MW2-4 is the furthest downgradient well and is located approximately 800 feet south of the former propellant burn area. MW2-5 and MW2-6 are located approximately 2,600 feet and 800 feet, respectively, south of the former assembly building area.

The four (4) new groundwater monitoring wells, along with three of the existing production wells (designated W2-3, W2-4, and W2-5), were sampled during this investigation and analyzed for halogenated volatile organics, aromatic volatile organics, semivolatile organic, metals, and perchlorate. The laboratory results from the halogenated and aromatic volatile organics analysis indicated that none were present in the groundwater above their respective detection limits. The inorganic analytical results were also less than the detection limits for all metals except zinc, which ranged from 2,100 to 1,600 μ g/L. Additionally, all seven samples were analyzed for perchlorate. Only one sample from well W2-3 reported perchlorate at a concentration of 3,300 μ g/L (detection limit 20 μ g/L).

2.4.3 Disposal Area Removal Action (Radian, 1993)

An electromagnetic survey was conducted to determine the location and boundary of the former Garbage Disposal Area. Subsurface anomalies were detected in the center portion of Historical Operational Area M in an area approximately 250 wide by 450 feet long. In order to visually confirm the presence of debris, a total of 12 hand-auger borings were drilled to depths ranging

from 3 to 5.5 feet bgs. Based on the hand-auger sampling activities, the subsurface debris coincides with the surface debris area. Subsequently, three (3) trenches were excavated (north, central, and south) to approximately 5 to 8 feet bgs across the debris area. A total of nine (9) soil samples were collected and analyzed for VOCs, semivolatile organic compounds (SVOCs), and metals. Neither VOCs nor SVOCs were reported above their respective detection limits. All metals results were below the 10 times Soluble Threshold Limit Concentration (STLC) guidelines. An excavation was performed to remove all debris, in which a total of 816 tons of debris was removed and disposed of off site (BKK landfill). Following the excavation, three (3) confirmation soil samples were collected from the perimeter and analyzed for VOCs, SVOCs, and metals. All results were below their respective guideline values. The excavation was then backfilled to surrounding grade. All excavation activities were performed under the supervision of Department of Toxic Substances Control (DTSC), which provided a Report of Completion of Removal Action dated May 4, 1993.

2.4.4 Monitoring Well Destruction Report (LMC, 1995)

Based on the DTSC's July 20, 1993 letter indicating that "the remediation activities at the Site have been completed and no further action is necessary," LMC abandoned the four (4) groundwater monitoring wells designated MW2-2, MW2-4, MW2-5, and MW2-6 in the southern parcel of Beaumont Site 2. Prior to abandonment activities in 1995, the four monitoring wells were sampled and analyzed for VOCs using EPA Methods 8010 and 8020. No VOCs were reported at or above their respective detection limits. All well abandonment activities were performed in accordance with the abandonment work plan approved by the California Regional Water Quality Control Board (CRWQCB), which involved using a neat cement/bentonite injection technique, cutting, capping, and removal of the top 5 feet of casing through excavation, and backfilling the excavation area with native clean soils. This pressure grouting technique satisfied all monitoring well abandonment requirements and guidelines set froth by the County of Riverside Department of Environmental Health Services (CRDEHS) and the California Department of Water Resources (Bulletin 74-90).

2.4.5 Groundwater Sampling Results Former Production Well W2-3 (Tetra Tech, 2003a)

In January 2003, Tetra Tech conducted groundwater sampling activities at the Site. The objective of the sampling was to confirm the historical detection of perchlorate in groundwater at the Site. Field activities included the location and identification of existing production wells, recording the physical condition of each well, and groundwater sampling and analysis.

Based on a file review of Unites States Geological Survey (USGS) topographic maps, Western Municipal District and Department of Water Resource (DWR) records and available Site reports, Tetra Tech identified four (4) production wells (W2-1, W2-2, W2-3 and W2-5) at the Site. Only wells W2-3 and W2-5 were visually identified at the Site. The depth to groundwater measured in well W2-3 was 45.65 feet below the top of the casing (BTOC) and the total depth of well W2-3 was 209.94 feet BTOC. Well W2-5 was dry with a total measured depth of 86.12 feet BTOC. However, based on historical documents, total well depth of W2-5 was reported to be 500 feet BTOC. A visual inspection with a mirror identified an obstruction in well W2-5, possibly consisting of dirt and debris. Therefore, only well W2-3 was sampled.

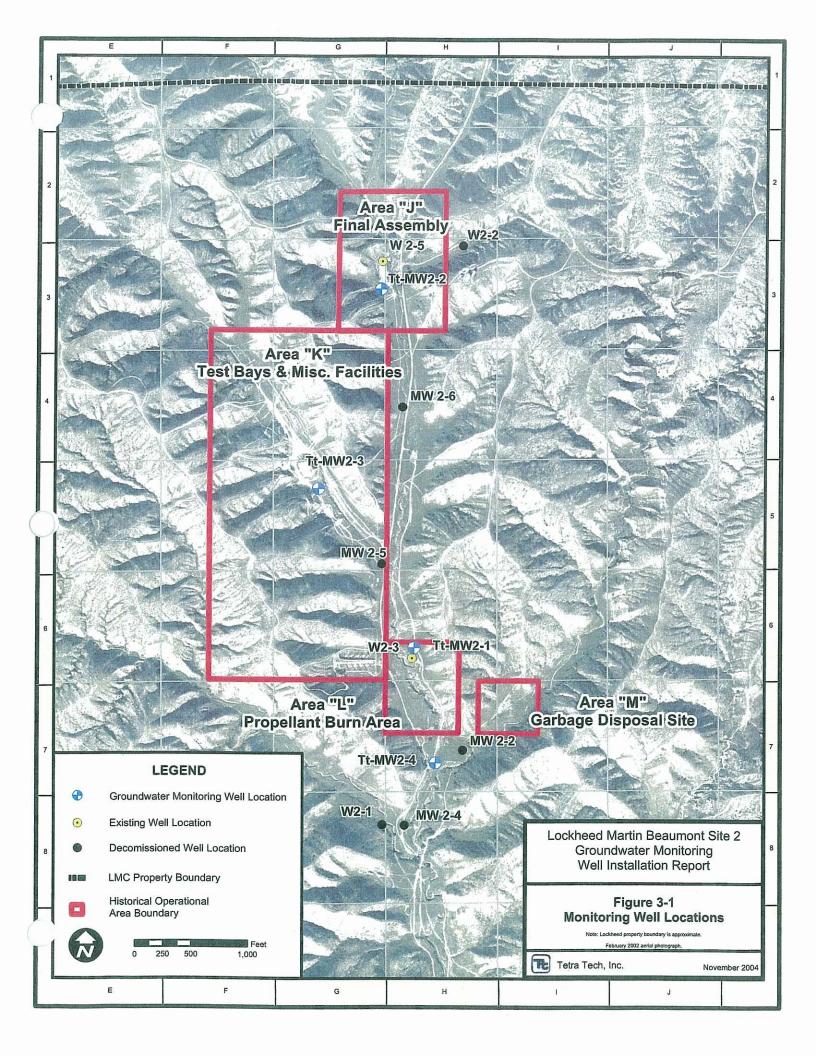
A groundwater sample was collected from W2-3 and analyzed for VOCs, perchlorate and 1,4-dioxane. Analytical results from the sample reported non-detectable concentrations for VOCs and 1,4-dioxane. Perchlorate was detected at 4,080 μ g/L in well W2-3.

SECTION 3.0 WELL DRILLING/INSTALLATION ACTIVITIES

3.1 PROJECT APPROACH AND DESCRIPTION

In order to delineate the lateral extent of perchlorate affected groundwater at the Site, Tetra Tech installed four (4) groundwater monitoring wells (designated Tt-MW2-1, Tt-MW2-2, Tt-MW2-3, and Tt-MW2-4) in August and September 2004. The locations of the four (4) groundwater monitoring wells were selected based on the rationale provided in Section 3.1 of the Final Groundwater Monitoring Well Installation Work Plan (Tetra Tech, 2004) – see Figure 3-1.

In general, the final locations for three of the wells, Tt-MW2-1 through Tt-MW2-3 remained unchanged from those proposed in the Work Plan. Due to deterioration of road conditions in the southern portion of the Site, the proposed location for well Tt-MW2-4 could not be accessed. Initially, Tt-MW2-4 was intended to be installed approximately 450 feet south of former well MW2-4, but was moved to the farthest downstream location to which the drill rig and support equipment could be safely deployed. As a result, the final location for Tt-MW2-4 was placed approximately 400 north of former well MW2-4 – see Figure 3-1.



3.2 PRE-WELL INSTALLATION ACTIVITIES

The following subsections provide detailed descriptions of the pre-well installation activities including the biological, underground utility, and geophysical surveys.

3.2.1 Well Permits

Prior to commencing any field activities, well permit applications for each groundwater monitoring well were submitted to the Riverside County Department of Environmental Health Services (DEHS). Copies of the approved permits are provided in Appendix A.

3.2.2 Biological Survey

Prior to initiating the field activities, a biological survey of the proposed groundwater monitoring well locations was performed by a Section 10A permitted or sub-permitted biologist to evaluate the potential for impacts to sensitive species / habitats (i.e., Stephen's Kangaroo Rat [SKR]) during the field activities. As part of the biological survey, the biologist identified and marked all potential or suspected SKR burrows that were located in the vicinity (i.e., several hundred feet around) of each well location to avoid the potential "take" (i.e., harm, harassment, and / or death) of SKRs. In order to avoid potential "take" of SKRs, the biologist also clearly marked the ingress and egress routes to each well location in an effort to minimize the overall footprint of the field activities and to prevent potential "take" of sensitive habitat.

Furthermore, all of the field activities, including the geophysical survey, well drilling, installation, development, sampling, and land survey activities, were performed under the direct supervision of the biologist who continuously monitored each work location, including ingress and egress pathways, to track daily changes in SKR habitat / burrow activity within the well installation areas. As a result, no impacts to SKR habitats occurred during the performance of the activities related to the installation and sampling of the groundwater wells.

3.2.3 Underground Utility and Geophysical Survey

Prior to the commencement of any intrusive activities, all the well locations were marked with wooden stakes for subsurface utility clearance. Although the Site is currently inactive, Underground Service Alert (USA) was contacted prior to the start of drilling activities to help identify any potential underground utility or service lines in the proposed well locations. Based on the size of the Site, two (2) separate ticket numbers were issued by USA; Ticket #A2321095 was issued for the southern half of the Site and Ticket #A2321099 was issued for the northern half.

In addition, to ensure that private underground utilities or subsurface structures were not encountered during drilling activities, a geophysical survey at each well location was performed by Geovision, a California-licensed geophysical subcontractor. The geophysical survey was performed at each proposed well location to determine the presence and lateral dimensions of any potential subsurface structures (e.g., underground utility lines) that were not identified by USA. In order to minimize the potential for encountering any subsurface anomalies near the proposed well location, a 10-foot by 10-foot area was surveyed using ground-penetrating radar (GPR) and electromagnetic (EM) techniques. All anomalies identified during the survey were clearly marked with paint. If a subsurface structure was identified beneath the proposed groundwater monitoring well location, the groundwater well location was moved to the nearest area where no subsurface anomalies were identified.

3.3 WELL INSTALLATION

A total of four (4) groundwater monitoring wells, Tt-MW2-1 through Tt-MW2-4, were drilled and installed at the Site between August 30, 2004 and September 7, 2004. All well drilling and installation activities were performed by West Hazmat Drilling Corporation, a California-licensed drilling subcontractor, under the direct supervision of a California-registered geologist. A summary of the drilling and installation activities are presented in the subsections below.

3.3.1 Groundwater Well Drilling

All boreholes were initiated by hand-augering and/or manually digging a pilot borehole to a depth of approximately 5 feet bgs, prior to drilling with the hollow-stem auger drill (HSA) rig. This step was taken as a final precaution to minimize the potential for breaching any underground utility or service lines that may not have been identified during the geophysical and utility surveys. No underground utility or service lines were encountered during the drilling of the monitoring wells.

Once the pilot borehole was successfully cleared to 5 feet bgs at each well location, a 12-inch-diameter borehole was advanced using a CME-95 HSA rig to the approximate depth at which first groundwater was encountered. Once first groundwater was encountered, its depth was measured and drilling was paused temporarily to allow the water to equilibrate to static levels. A summary of the depth to groundwater at each of the four borehole locations, as measured at the time of drilling, including the static depth to groundwater is provided in Table 3-1.

Table 3-1
Summary of Depth to Groundwater as Measured at Time of Drilling/Installation

Well Location	Date	Approximate Depth Groundwater First Encountered (in feet bgs)	Depth to Static Groundwater (in feet bgs)
Tt-MW2-1	9/2/2004	55	54.9
Tt-MW2-2	8/30/2004	105	69.7
Tt-MW2-3	9/1/2004	80	69.78
Tt-MW2-4	9/3/2004	65	51.5

3.3.2 Groundwater Well Logging Methods

During the drilling activities, undisturbed soil samples were collected at 5-foot intervals using a California split-spoon sampler. The samples were used for headspace analyses and lithologic logging purposes only and were not submitted to a laboratory for chemical analysis. All samples were described by the field geologist using the Unified Soil Classification System (USCS) and the Munsell Soil Color chart and were recorded on a boring log. Also included on the boring logs are

the results of the headspace (vapor) screening analyses for VOCs using a photo-ionization detector (PID) in the field. Copies of the boring logs are provided in Appendix B.

Groundwater well Tt-MW2-1 was drilled with continuous core from ground surface to approximately 10 feet bgs to determine the potential presence of subsurface burn material in the former surface burn pit area. Based on visual inspection of the continuous cores and field monitoring activities, no discoloration or elevated PID readings were observed.

3.3.3 Groundwater Well Design

At each location, the final well construction details, such as the total depth of the well and screen interval, were determined based on the relationship between the first-encountered groundwater and static groundwater levels. In general, once the static groundwater level was established, the borehole was advanced until the bottom of the saturated zone could be determined.

The general design for the four groundwater monitoring wells at the Site was provided in Section 3.2.2 of the Final Work Plan (Tetra Tech, 2004). However, based on direct field observation of subsurface soil and groundwater conditions, the actual well designs were modified to suit the conditions observed. The rationale for each well design is presented below. A summary of the final construction details for each well is provided in Table 3-2.

Table 3-2 Summary of Groundwater Monitoring Well Construction Details

Well I.D.	Casing	Diameter	Total Depth (in ft. bgs)	Screen Length (in ft.)	Screen Interval (in ft. bgs)	Screen Material	Slot-Size (in inches)
Tt-MW2-1	Sched. 40 PVC	4"	70	20'	50-70	Sched. 40 PVC	0.020
Tt-MW2-2	Sched. 40 PVC	4"	118.5	15'	103.5-118.5	Sched. 40 PVC	0.020
Tt-MW2-3	Sched. 40 PVC	4"	98	20'	78-98	Sched. 40 PVC	0.020
Tt-MW2-4 (Shallow)	Sched. 40 PVC	4"	70	10'	60-70	Sched. 40 PVC	0.020
Tt-MW2-4 (Deep)	Sched. 40 PVC	4"	95	10'	85-95	Sched. 40 PVC	0.020

Note: All screens were perforated by manufacturer (factory-slotted)

Tt-MW2-1:

At well location Tt-MW2-1, groundwater was first-encountered at approximately 55 feet bgs, and drilling was temporarily paused to allow water to infiltrate the augers/borehole. After several minutes, groundwater was measured at approximately 54.9 feet bgs and remained relatively stable thereafter.

Once static water level was achieved, drilling then resumed with the intent to either locate the bottom of the saturated zone or continue to approximately 10 to 15 feet below first-encountered water. Observations of soil samples and drill cuttings at Tt-MW2-1 indicated that a confining bed may be present below approximately 70 feet bgs (see boring log for Well Tt-MW2-1 in Appendix B). Between approximately 65 and 70 feet bgs, the lithology of the soil changed from relatively unconsolidated sands and silts to well-indurated sandstone and siltstone. This change at 65 feet bgs likely represents the contact between the recent alluvial deposits and the Tertiary San Timoteo Formation. Below the contact, the soil/rock samples recovered during drilling were typically dry or unsaturated.

Based on these observations, it was determined that a 20-foot screened interval would be appropriate for Tt-MW2-1, extending from 50 to 70 feet bgs. This design will provide access to the entire length of the saturated zone, but will not allow for cross-communication with any deeper, hydraulically distinct water-bearing zones that may potentially exist below the contact. The final construction details for Tt-MW2-1 are illustrated in Appendix B.

In addition to standard lithologic evaluations, the soil samples and cuttings recovered from the surface down to 10 feet bgs at Tt-MW2-1 were examined closely for any discolorations, foreign material, or other non-native materials that may be associated with activities that occurred in the former surface burn area. No foreign materials, discolorations, or unusual odors were observed in the soil between the surface and 10 feet bgs during the drilling of Tt-MW2-1.

Tt-MW2-2:

At well location Tt-MW2-2, first encountered groundwater was observed at approximately 105 feet bgs and drilling was temporarily paused to allow water to infiltrate the augers/borehole. After several minutes, groundwater appeared to be rising at a rate of approximately 2 to 3 feet per minute. Within 15 minutes, the groundwater level in well Tt-MW2-2 had stabilized at approximately 70 feet bgs.

Based on these observations, it was determined that the uppermost saturated zone at Tt-MW2-2 was under pressure and likely represents a confined or partly confined condition. Therefore, drilling was resumed beyond 105 feet bgs with the intent to locate the bottom of the saturated zone and top of the lower confining bed. Field observations of soil samples and drill cuttings indicated that a confining bed, comprised of hard sandstone with silt and clay, was present below approximately 120 feet bgs (see boring logs in Appendix B).

Evaluation of the soil samples and field logs indicated that the hard silty sandstone at approximately 99 feet bgs may serve as the uppermost confining layer for that hydrologic unit. Therefore, it was determined that a 15-foot screen interval extending from 103.5 to 118.5 feet bgs was appropriate for the saturated zone at Tt-MW2-2. This design provides a screen that extends nearly the entire length of the saturated zone, but does not allow for hydraulic communication between the zones above or below. The final construction details for Tt-MW2-2 are illustrated in Appendix B.

Additionally, observations of the soil samples indicates that the contact between the alluvial sediments and the harder rock types of the San Timoteo Formation lies at approximately 20 feet bgs at the Tt-MW2-2 location.

Tt-MW2-3:

Groundwater at Tt-MW2-3 was first encountered at approximately 80 feet bgs. After 30 minutes, the level remained static, and drilling was resumed. No impermeable or potential confining layers were encountered beneath the saturated zone until approximately 104 feet bgs. This depth also corresponds with the contact between the alluvial sediments and the San Timoteo Formation at this location. Based on these observations, it was determined that a 20-foot screen, extending from 78 to 98 feet, was appropriate for Tt-MW2-3. Details regarding the final construction of Tt-MW2-3 are illustrated in Appendix B.

Tt-MW2-4:

During drilling at Tt-MW2-4, the majority of the soil samples and drill cuttings recovered at the surface consisted of relatively fine-grained, well-indurated soil types and it was difficult to determine if water was entering into the borehole/augers. Furthermore, few, if any of the soil samples or cuttings were clearly saturated, which added to the difficulty in identifying the water bearing zone. Therefore, the advancement of the borehole continued until approximately 105 feet bgs, although it was still difficult to determine if water was entering the borehole.

The borehole was then allowed to sit over the weekend, with the augers in place, to serve as a temporary casing to protect the integrity of the borehole and prevent potential communication between discrete hydraulic zones within the borehole. Upon return, groundwater was measured at approximately 65 feet bgs in the augers. Additional review of the samples and field logs indicated that two separate water-bearing zones may have been encountered in the borehole, one from approximately 60 to 70 feet bgs, and the other from 85 to 95 feet bgs. Based on soil samples recovered during drilling, the contact between the alluvial sediments and the San Timoteo Formation was identified at approximately 43 feet bgs at this location, indicating that both zones were encountered within the rocks of the San Timoteo Formation.

Based on field observations and evaluation of the lighthology, it was determined that two separate well casings, each with a short 10-foot screen interval, would be appropriate for Tt-MW2-4. A deep screen was selected to extend from 85 to 95 feet bgs, and a shallow screen from 60 to 70 feet bgs. This design allows for samples to be collected from each of the individual water-bearing zones, but also ensures that there is no communication between them. Care was taken to ensure that an adequate seal was placed between the two screens and that no hydraulic communication between the zones would occur within the borehole. Details with respect to the final construction of Tt-MW2-4 are illustrated in Appendix B.

3.3.4 Well Installation/Construction

All four (4) groundwater monitoring wells were constructed under the supervision of a California Registered Geologist after evaluation of the lithology and groundwater conditions at each location. Each groundwater monitoring well was constructed with a 4-inch diameter 0.020-inch factory-slotted Schedule 40 polyvinyl chloride (PVC) screen and 4-inch-diameter Schedule 40 PVC riser casing.

Once the total depth at each location was reached, the screen and casing were assembled and placed within the borehole. The annular space around the screen was then backfilled with clean #3 RMC Monterey silica sand to serve as the filter pack. At each location, filter pack materials were installed to a minimum height of 1 foot or more above the top of the screen. Directly above the filter pack, a 5-foot thick layer of 3 /8-inch bentonite pellets were installed to form the well seal. The bentonite pellets were hydrated and allowed to set up prior to installing any additional backfill materials. The remaining annular space above the well seal was then backfilled with a bentonite grout that extended to approximately 1 foot bgs. All backfill materials were carefully added in lifts and measured periodically to avoid the potential for bridging within the annular space.

The selection of the #3 sand for the filter pack materials was based on previous experience installing groundwater monitoring wells at the Site and other locations where fine-grained sand and silt is present. Based on the fine-grained nature of the sediments encountered during drilling

at the Site, the #3 sand adequately provides a zone of higher permeability around the screen, relative to the surrounding formation material, while still being small enough in size to restrict suspended fines from entering the well.

In addition, 0.020-inch perforations were selected for the wells as this allows for the maximum permeability of the screens where the #3 sand is used for the filter pack materials. The use of these materials is appropriate for the subsurface soil conditions encountered at the Site and is consistent with standard design and construction materials used for groundwater monitoring wells at other locations where similar conditions have been documented.

At the surface, each well was completed with a steel outer monument casing that extends approximately 3 feet above grade. Each monument casing contains a locking well cap to provide protection against tampering or unauthorized access. The base of each monument is secured by a 2-foot by 2-foot concrete pad.

3.3.5 Well Development

After their completion, the four (4) groundwater monitoring wells were allowed to set for approximately 48 hours prior to being developed. The development was performed in a step-wise process as described below.

Initially, all well casings and screens were swabbed and bailed to settle the filter pack materials and draw fine-grained materials from the surrounding formation into the well. At each screen, swabbing was conducted in 5-foot increments for approximately 15 minutes per section, working from the bottom of the screen to the top. After swabbing, a bottom-bailer was used to remove any silty or fine-grained material from the bottom of each well. Once most of the fine-grained materials were removed, each screen was bailed again for approximately 5 to 10 minutes in order to remove any additional fine-grained materials. This cycle was repeated until only very small quantities of fine-grained materials were observed.

The final step in the development procedure consisted of purging water from each well using a portable submersible pump. During this purging phase, depth to water and water quality parameters such as temperature, conductivity, pH, and turbidity were measured at regular intervals. All field measurements and observations obtained during development were documented on well development logs. Copies of these logs are provided in Appendix C.

Based on the relatively fine-grained nature of the soil and rock types encountered during the drilling for the Site monitoring wells, continuous purging could not always be sustained at all well locations, even at low flow rates (less than 0.5 gpm). As a result, several of the wells, Tt-MW2-2, Tt-MW2-4 (shallow), and Tt-MW2-4 (deep), could not be continuously pumped without becoming dry. If a given well became dry, it would be allowed to recover for several hours or more, before purging was resumed.

During the recovery period, water levels were measured periodically to determine the rate at which the groundwater would return to the well. For wells Tt-MW2-1 and Tt-MW2-3, the surrounding formation/sediments were able to produce enough water to sustain continuous pumping at relatively low flow rates without causing the wells to become dry. Details regarding the purging process are provided in Appendix C. A summary of purge volumes, number of casing volumes purged, and recovery rates for each well is provided in Table 3-3.

Table 3-3
Summary of Well Development Data

Well I.D.	Total Volume Purged (in gallons)	Number of Casing Volumes Purged	Recovery Rate (in gallons per minute)	Comments
Tt-MW2-1	168	14.1	Not applicable	
Tt-MW2-2	210	6.7	0.08	Purged dry
Tt-MW2-3	290	14.1	Not applicable	
Tt-MW2-4 (shallow)	79	5.3	0.03	Purged dry
Tt-MW2-4 (deep)	107	5.7	0.11	Purged dry

The development process was considered complete when: (1) at least three consecutive measurements of temperature, conductivity, and pH were observed within 10% differences; and

(2) the water appeared relatively clean (i.e., no further sediment entered the casing or the turbidity remained below 10 NTU) or five well volumes of water were removed during the well development process. A summary of the final water quality parameters obtained during development is provided in Table 3-4.

Table 3-4
Summary of Final Water Quality Parameters at
Completion of Well Development Procedure

	Water Quality Parameter							
Well I.D.	Temperature (°C)	Electrical Conductivity (mS/cm)	рН	Tubidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)		
Tt-MW2-1	25.01	1.308	7.52	15.8	5.36	14.5		
Tt-MW2-2	24.59	0.496	8.86	98.7	3.74	-12.4		
Tt-MW2-3	25.80	0.972	7.43	47.2	7.30	-67.3		
Tt-MW2-4 (shallow)	25.72	0.405	8.97	602	5.93	-74.6		
Tt-MW2-4 (deep)	26.6	0.336	9.40	>1000	4.71	-95.6		

 $^{^{\}circ}$ C = degrees centigrade; mg/L = milligrams per liter; mS/cm = microsiemens per centimeter; mV = millivolt; NTU = nephelometric turbidity units; ORP = oxidation-reduction potential

3.4 CIVIL/LAND SURVEY

A survey of the well locations was performed by Hillwig-Goodrow, LLC., a California-certified land surveyor on October 28, 2004. Each well location was surveyed for vertical and horizontal coordinates based on the California State Plane Coordinate System, Zone 5, using NAGVD88 datum for vertical control and NAD83 datum for horizontal control. At each well location, a measuring or reference point was clearly marked on the top rim of the casing by cutting a small notch on the north side. Two elevations were then surveyed at each well location, one at the measuring point (notch in the casing rim) and the other at the ground surface adjacent to the well monument. The resulting horizontal, expressed as northings and eastings (in feet), and vertical (elevation in feet above mean sea level) coordinates for each well are provided in Table 3-5 below.

Table 3-5
Summary of Well Location Coordinates and Elevation Data Groundwater Monitoring Wells

Well I.D.	Northing	Easting	Elevation (ft.AMSL)		
Well I.D.	Troiting Easting		Ground Surface	Measuring Point	
Tt-MW2-1	2273430.33	6325373.78	2032.90	2035.21	
Tt-MW2-2	2276662.64	6325085.92	2135.73	2137.75	
Tt-MW2-3	2274876.52	6324520.74	2092.10	2094.66	
Tt-MW2-4 (shallow)	2272392.82	6325561.45	1984.56	1986.94	
Tt-MW2-4 (deep)	2272392.82	6325561.45	1984.56	1987.16	

AMSL = above mean sea level

3.5 GROUNDWATER SAMPLING

Once the well development activities were completed, the wells were allowed to remain undisturbed for approximately 72 hours. All of the samples were collected in accordance with the procedures outlined in the Final Work Plan (Tetra Tech, 2004) and were submitted to Calscience Environmental Laboratories, Inc. for the following analyses: VOCs by EPA Method 8260B, Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270C, 1,4-Dioxane by EPA Method 8270C, n-nitrosodimethylamine (NDMA) by EPA Method 8270C, Title 22 metals by EPA Method 6000/7000, and perchlorate by EPA Method 314.0. A summary of the analytical results from the groundwater sampling activities are presented in Section 4.0.

During sampling, continuous purging could only be sustained at wells Tt-MW2-1 and Tt-MW2-3. At these wells, three (3) casing volumes of groundwater were purged prior to collecting a sample. Due to the relatively poor recovery rates at wells Tt-MW2-2, Tt-MW2-4 (shallow), and Tt-MW2-4 (deep) continuous purging could not be sustained (see Section 3.3.5) and the wells were pumped dry before three (3) casing volumes could be achieved. Once dry, the wells were allowed to recover for several hours prior to collecting a sample.

SECTION 4.0 SUMMARY OF ANALYTICAL RESULTS

4.1 GROUNDWATER OCCURRENCE AND FLOW

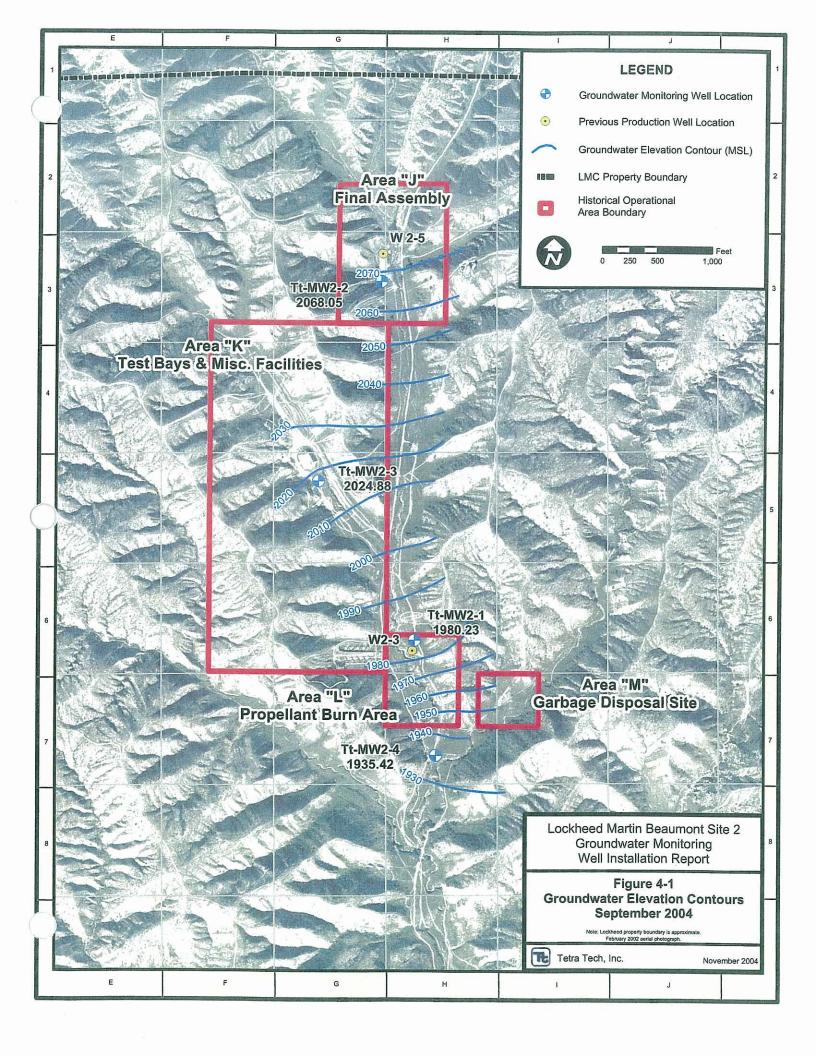
Groundwater level measurements were recorded from the four (4) new wells on September 27, 2004. Based on the results of these measurements, groundwater elevations were calculated for each well. A summary of the depth to water and groundwater elevations is presented in Table 4-1. Figure 4-1 presents the groundwater elevations beneath the Site.

Table 4-1
Summary of Groundwater Elevation Data from Recently Installed Monitoring Wells

Well Location	Date	Measured Depth to Groundwater (in feet bgs)	Groundwater Elevation (in feet AMSL)
Tt-MW2-1	9/27/04	54.98	1980.23
Tt-MW2-2	9/27/04	69.70	2068.05
Tt-MW2-3	9/27/04	69.78	2024.88
Tt-MW2-4 (shallow)	9/27/04	51.52	1935.42
Tt-MW2-4 (deep)	9/27/04	77.58	1909.58

AMSL = above mean sea level bgs = below ground surface

Based on the elevations presented in Table 4-1 and on Figure 4-1, groundwater flow beneath the Site generally follows the southward sloping topography of Laborde Canyon. This pattern is consistent with that observed in a previous hydrogeologic study of the area (Radian, 1992b). However, it is unclear if this pattern is truly representative of actual hydraulic conditions, as there is some indication that a more complex or multi-layered hydrogeologic system exists beneath the Site.



4.2 ANALYTICAL SAMPLING RESULTS

During the limited groundwater investigation, a total of five (5) samples were collected and analyzed for VOCs, SVOCs (including 1,4-dioxane and NDMA), Title 22 metals, and perchlorate. A summary of these analytical results is presented in Table 4-2. Copies of the laboratory analytical reports, including the results of quality control protocols, are provided in Appendix D.

Based on the analytical results, TCE was the only VOC detected in one of the samples, designated Tt-MW2-3, collected during the limited groundwater investigation. TCE was reported at a concentration of 1.6 μ g/L (located within Historical Operational Area "K"), which is below its reporting limit of 1 μ g/L but above the detection limit. The reported concentration is also below the maximum contaminant level (MCL) of 5 μ g/L. TCE was not reported in the samples collected from any of the other wells.

No other VOCs were reported at or above their respective reporting limits in the other samples collected during this sampling event, including the duplicate sample collected from Tt-MW2-1. A summary of the analytical results for VOCs is presented in Table 4-2.

Table 4-2
Summary of Volatile Organic Compound Results

Sample Location	Sample Date	VOCs (μg/L)
Tt-MW2-1	09/27/04	ND*
Tt-MW2-1 (DUP.)	09/27/04	ND*
Tt-MW2-2	09/27/04	ND*
Tt-MW2-3	09/27/04	Trichloroethene = 1.6
Tt-MW2-4 (shallow)	09/27/04	ND*
Tt-MW2-4 (deep)	09/27/04	ND*
Equipment Blank	09/27/04	ND*
Trip Blank	09/27/04	ND*
Reporting Lin	1.0	
(1)Maximum Contamii	5.0	

Notes: (1) - Based on U.S.EPA Drinking Water Standards and Health Advisories Table (June

1998), unless otherwise indicated

μg/L - micrograms per liter

DUP. - duplicate sample

N/A - not analyzed

ND - compound not detected at or above its respective reporting limits

VOC - volatile organic compound

 None of the VOCs analyzed under EPA Method 8260B were detected at or above their respective reporting limits

All four (4) wells were sampled for SVOCs including 1,4-dioxane and NDMA. Only one SVOC, bis(2-ethylhexl)phthalate, was reported above its reporting limit of 1 μ g/L in groundwater well Tt-MW2-3 at a concentration of 22μ g/L, which exceeds its MCL of 6 μ g/L. No other SVOCs (including 1,4-dioxane and NDMA) were reported at or above their respective reporting limits from any of the wells. A summary of the analytical results for SVOCs is presented in Table 4-3.

Table 4-3
Summary of Semi-Volatile Organic Compound Results

Sample Location	Sample Date	1,4-Dioxane (µg/L)	NDMA (μg/L)	SVOCs (µg/L)
Tt-MW2-1	09/27/04	ND	ND	ND*
Tt-MW2-1 (DUP.)	09/27/04	ND	ND	ND*
Tt-MW2-2	09/27/04	ND	ND	ND*
Tt-MW2-3	09/27/04	ND	ND	Bis(2-Ehtylhexl) Phthalate = 22
Tt-MW2-4 (shallow)	09/27/04	ND	ND	ND*
Tt-MW2-4 (deep)	09/27/04	ND	ND	ND*
Equipment Blank	09/27/04	ND	ND	ND*
Trip Blank	09/27/04	N/A	N/A	N/A
Reporting Lir	1.0	2.0	1.0	
(1)Maximum Contami	5.0	NE	6.0	

Note:

(1) - Based on U.S.EPA Drinking Water Standards and Health Advisories Table (June 1998), unless otherwise indicated

bold - at or above maximum contaminant level/Action Level

 μ g/L – micrograms per liter

DUP. - duplicate sample

NDMA - N-Nitrosodimethylamine

N/A - not analyzed

NE - not established

ND - compound not detected at or above its respective reporting limits

SVOC -semivolatile organic compound

Based on the results of the Title 22 metals analyses, concentrations of arsenic, antimony, barium, beryllium, cadmium, chromium(total), cobalt, copper, and lead were detected in the groundwater samples. However, all reported concentrations were below their respective drinking water MCLs for each of the individual metals. A summary of the analytical results for the Title 22 metals is presented in Table 4-4.

^{*}None of the SVOCs analyzed under EPA Method 8270C were detected at or above their respective reporting limits

Table 4-4
Summary of Title 22 Metals Results

Sample Location	Sample				Т	itle 22 Meta (mg/L)	ıls							
Tt-MW2-1 Tt-MW2-1 (DUP.)	Date	Antimony	Arsenic	Barium	Beryllium	Cadmium	Chromium (Total)	Cobalt	Copper	Lead				
Tt-MW2-1	09/27/04	ND	ND	0.22	ND	ND	0.0172	0.00591	0.0129	ND				
Tt-MW2-1 (DUP.)	09/27/04	ND	ND	0.228	ND	ND	0.017	0.00661	0.014	ND				
Tt-MW2-2	09/27/04	ND	ND	0.299	ND	ND	ND	ND	ND	ND				
Tt-MW2-3	09/27/04	ND	ND	0.112	ND	ND	0.00656	ND	0.00501	ND				
Tt-MW2-4 (shallow)	09/27/04	0.0177	0.0598	0.256	0.0023	ND	0.0573	0.0194	0.0427	0.0188				
Tt-MW2-4 (deep)	09/27/04	ND	0.0833	0.0532	ND	ND	0.0115	ND	0.00882	ND				
Equipment Blank	09/27/04	ND	ND	ND	ND	ND	ND	ND	ND	ND				
Trip Blank	09/27/04	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A				
Reporting Limit (µg/L)		0.015	0.015	0.01	0.001	0.005	0.005	0.005	0.005	0.01				
(1)Maximum Contaminant	0.006	0.05	2.0	0.004	0.005	0.1	NE	1.0	NE					

Notes:

(1) - Based on U.S.EPA Drinking Water Standards and Health Advisories Table (June 1998), unless otherwise indicated

μg/L – micrograms per liter DUP. – duplicate sample

N/A - not analyzed

ND – compound not detected at or above its respective reporting limits

NE - not established

During the limited groundwater investigation, perchlorate was not detected in any of the samples collected from Tt-MW2-2, Tt-MW2-4 shallow, or Tt-MW2-4 deep. However, perchlorate was detected at concentrations of 3,500 μ g/L and 1,300 μ g/L in the samples collected from wells Tt-MW2-1 and Tt-MW2-3, respectively. A concentration of 3,700 μ g/L of perchlorate was also reported from the duplicate sample collected from well Tt-MW2-1. A summary of the analytical results for perchlorate is presented in Table 4-5, and brief discussion of these results is provided in Section 6.0.

Table 4-5 **Summary of Perchlorate Results**

Sample Location	Sample Date	Perchlorate (μg/L)
Tt-MW2-1	09/27/04	3500
Tt-MW2-1 (DUP.)	09/27/04	3700
Tt-MW2-2	09/27/04	ND
Tt-MW2-3	09/27/04	1300
Tt-MW2-4 (shallow)	09/27/04	ND
Tt-MW2-4 (deep)	09/27/04	ND
Equipment Blank	09/27/04	ND
Trip Blank	09/27/04	N/A
Reporting Li	mit (μg/L)	2.0
(1)Maximum Contami	inant Level (μg/L)	6.0(1)

Note: (1) - Current State of California Public Health Goal
bold – at or above maximum contaminant level/Action Level

µg/L – micrograms per liter

DUP. – duplicate sample

N/A - not analyzed

ND – compound not detected at or above its respective reporting limits

SECTION 5.0 WASTE MANAGEMENT

All of the soil cuttings and purge water generated during the drilling, development, and initial sampling of the monitoring wells were placed in 55-gallon Department of Transportation (DOT) approved drums and placed in a temporary storage area in Historical Operational Area J of the Site. All of the drums were properly labeled with the location, date, and potential disposition pending the results of analytical sampling.

In order to properly characterize/profile the investigation-derived waste (IDW), the following sampling protocols were applied, as required by the recycling facility:

- 1. For each 55-gallon drum containing decontamination water/purged groundwater: one grab sample was collected per drum.
- 2. For 55-gallon drums containing the soil cuttings: one representative composite sample was collected at each boring location. A composite was created by mixing soil from a minimum of three separate drums from a given well location.

Each of the samples were analyzed for VOCs, SVOCs, perchlorate, and Title 22 metals. The analytical results were used to determine the proper disposal of all IDW. All wastes will be removed from the Site within 90 days of their accumulation.

SECTION 6.0 SUMMARY OF FINDINGS

As part of the Site characterization groundwater program, Tetra Tech has conducted a limited groundwater investigation to evaluate the current groundwater conditions and to verify the presence of COPCs (i.e., VOCs, SVOCs, 1,4-dioxane, NDMA, Title 22 Metals, and Perchlorate) within the groundwater beneath the Site. During the limited groundwater investigation program, Tetra Tech installed and sampled four (4) groundwater monitoring wells, designated Tt-MW2-1 though Tt-MW2-4, to confirm the presence and lateral extent of any COPCs. In addition, groundwater elevations from the four (4) new wells were measured to determine the current groundwater flow direction.

Based on the groundwater elevations presented in Subsection 4.1, groundwater flow beneath the Site generally follows the southward sloping topography of Laborde Canyon. This pattern is consistent with that observed in a previous hydrogeologic study of the area (Radian, 1992b).

Based on the analytical results, only samples collected from groundwater monitoring wells Tt-MW2-1 and Tt-MW2-3 reported concentrations of SVOCs (e.g., Bis(2-Ehtylhexl) Phthalate) and perchlorate above their respective MCL or recommended action level (RAL). No other COPCs were reported at or above their respective action levels (e.g., MCL or RAL) in the samples from the other wells.

SECTION 7.0 REFERENCES

1.	Dibblee, T. W., 1981. Geologic Map of Banning, 15-Minute Quadrangle, California, South Coast Geological Society, 1981.
2.	Lockheed Martin Corporation, 1995. Monitoring Well Destruction Report, Former Lockheed Propulsion Company, Beaumont No. 2 Facility, Beaumont, California, November 15, 1995.
3.	Radian, 1986. Preliminary Remedial Investigation, Lockheed Propulsion Company Beaumont Test Facilities, December 1986.
4.	, 1990. Source and Hydrogeologic Investigation – Final, Lockheed Propulsion Company Beaumont Test Facilities, February 19, 1990.
5.	, 1992a. Hydrogeologic Investigation and Landfill Investigation Workplan, Lockheed Propulsion Company Beaumont No. 2 Facility, July 1992.
6.	, 1992b. Hydrogeologic Study, Lockheed Propulsion Company Beaumont Test Facilities, December 1992.
7.	, 1993. Disposal Area Removal Action, Lockheed Propulsion Company, Beaumont No. 2 Site, June 1993.
3.	Sharp, R. P., 1975. Geology Field Guide to Southern California, Kendall/Hunt Geology Field Guide Series, Second Edition, 1975.
9.	Tetra Tech, Inc., 2004. Final Groundwater Monitoring Well Installation Work Plan, Beaumont Site 2, January 23, 2004.
	, 2003a. Groundwater Sampling Results, Former Production Well W2-3, Beaumont Site 2, February 5, 2003.
l 1.	, 2003b. Lockheed Martin Beaumont Site 1 and Site 2 Soil Investigation Work Plan, Beaumont, California, October 31, 2003.

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT FROM RIVERSIDE COUNTY DEPT. OF BUILDING AND SAFETY.	Date
	Fee \$138.04 (non-refundable)
This permit is granted on condition that the person named in the permit vergulations that are now or may hereafter be in force.	vill comply with the laws, ordinances and
LOCATION OF PROPOSED WELLSW1/4SE1/4; Sec:	.8; T3S; R1W
APN: 421-080-001-6 Laborde Canyon (Site 2)	nunity <u>Beaumont</u> TE-MW-2-1 St Hazmat Drilling Corp.
MUNICIPAL ADDRESS OFFO 17 17 17 17 17 17 17 17	6 East Katella Avenue heim, Ca. 92805
CITY & STATE Burbank, Ca. 91505 By Charle	rue Palder
DEH-SAN-025 (Rev 10/02) Charlen Distribution: WHITE—Environmental Health Department; Y	LE Robbins FELLOW—Owner, PINK—Well Driller, GOLDENROD—Flood Control

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH WELL PERMIT APPLICATION (For Construction, Reconstruction & Destruction)

Market Los Aumes - Membras CA 20253 - 0009 800-180 Market Plant	4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 9250 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000	1) mt / Mb 1 T + - Mb 2 - 1
NOTE: Any abandoned wells on the property must be properly destroyed belong an application for property destroyed belong as property destroyed belong and agree to comply with all passes guideling to be property destroyed by property as property destroyed by property destroyed by property as property destroyed by property destroyed	39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180	
Please Print HIDNO 397 Expiration D.26-04	NOTE: Any shandaned wells on the property must be	FOR DEPARTMENT USE ONLY
Please Print HIDNO 397 Expiration D.26-04	properly destroyed before an application for	Permit No
1. OWNER: Name Lockberted Hartin Corporation Mailing Address 2550 NJ Hollywood Libry 3rd Floor City Lordon K. State C.A. In Conductor Diam. In Con	processed.	Expiration /3·25-οΨ
Mailing Address 2550 N. Hollywood Livy 3 rd 700 Pepth 30 ft. Zp. 91505 Phone No. (\$121) \$2477-0897 Zp. DATE OF WORK (approximate): Start 6/21/04 Complete 6/30/04 3 WELL CRILLER Riv. Co. Registration No. 100 Pepth		O 6 ANNHA SEAL
Borehole Diam.	Mailing	33
2. DATE OF WORK (approximate): Start6/21/04		
2. DATE OF WORK (approximate): Ster6/21/04	Zip 91505 Phone No. (818) 847-0899	Conductor Diam.
Statu 6/21/04 Complete 6/30/04 3. WELL DRILLER Riv. Co. Registration No. December 6/50/04-013 C-57 License No. 5-73-3-3-55213542 4. WELL CHECK (check)	DATE OF WORK (approximate):	7"
Riv. Co. Registration Not 10 204 05 04 013 C-57 License No. 57128 7373 6528 19548 4. WELL CHECK (check) Gammunity	Start 6/21/04 Complete 6/30/04	Sealing Material Bent Slure (/ rountle
Riv. Co. Registration Not 10 204 05 04 013 C-57 License No. 57128 7373 6528 19548 4. WELL CHECK (check) Gammunity	3. WELL DRILLER DAY Has Hazaret Drilling	7. DEPTH OF WELL (feet)
8. PRODUCTION WELL CASING INSTALLED: 4. WELL CHECK (check)	Name Williams was Wells	Proposed 65 Existing
WELL CHECK (check)	Riv. Co. Registration No. 100 04-051 04-013	DIAMETER OF BORE (in.) 10 " WENTE
Community Monitoring Industrial From (tt) To (tt) Da. (nt) Wal (Gago)	C-57 License No. <u>C57283326652819548</u>	8. PRODUCTION WELL CASING INSTALLED:
Individual	4. WELL CHECK (check) (FL-MW2-)	☐ Steel ☑ Plastic ☐ Other
Agricultural Horizontal GRAVEL PACK: Yes No From 33 to 65 ft.	☐ Community Monitoring ☐ Industrial	(3030)
SA. FOR MONITORING WELL: (Name of Consultant) Name	☐ Individual ☐ Cathodic ☐ Other	1 Scho. 10
Type of rig Type of rig Start Start Start Type of rig Start St		
5. TYPE OF WORK (check) New Reconstruction Destruction	= (444)	
Seconstruction Destruction Destruction Seconstruction Destruction Seconstruction Destruction Seconstruction	Name Tetra Tech Phone 381-1674	
5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan. 11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: I certify that In the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California. Driller's Signature		- 26 (5
on reverse side of attached Plot Plan. From		
11A. The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: I certify that in the performance of the work for which this permit is issuance unless the applicant signs the following certificate: I certify that in the performance of the work for which this permit is issuance unless the applicant signs the following certificate: I certify that in the performance of the work for which this permit is issuance unless the application. Driller's Signature Date 11B. I have read this application and agree to comply with all law equivaling the type of work being performed. Driller's Signature Date 12 I declare under regality of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application. Property Owner's Signature DISPOSITION OF PERMIT Approved subject to the following: FOR DEPARTMENT USE ONLY A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.	 If reconstruction or destruction, please describe method on reverse side of attached Plot Plan. 	F
employ any person in any manner so as to become subject to the Workers Compensation Insurance laws of California. Driller's Signature	11A. The California Labor code requires Worker's Compensation	Incurance as a prorequisite to possit insurance at the
Driller's Signature 11B. I have read this application and agree to comply with all law equitating the type of work being performed. Driller's Signature 12. I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application. (Property Owner's Signature Disposition OF PERMIT Approved subject to the following: A. Notify the Department, forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said		
11B. I have read this application and agree to comply with all law equitating the type of work being performed. Driller's Signature 12 I declare under revality of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application. Property Owner's Signature DISPOSITION OF PERMIT Approved subject to the following: A. Notify the Department, forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (50) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.		. //
Driller's Signature 12. I declare under grenalty of gerjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application. Property Owner's Signature DISPOSITION OF PERMIT Approved subject to the following: A Notify the Department, forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said	11B. I have read this application and agree to comply with all li	20/1/1
County Ordinances in connection with the approval of this application. (Property Owner's Signature) DISPOSITION OF PERMIT Approved subject to the following: A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said	Driller's Signature	27
County Ordinances in connection with the approval of this application. (Property Owner's Signature) DISPOSITION OF PERMIT Approved subject to the following: A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said	12. I declare under penalty of perjury under the laws of the	State of California that the information furnished as part of this
Approved subject to the following: A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said	County Ordinances in connection with the approval of this	application.
Approved subject to the following: A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.	(Property Owner's Signature Tude (Out	ter Lozkheed Date 6/11/04
A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations: Prior to sealing of the annular space or filling of the conductor casing. Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.		N OF PERMIT
Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.	NAME OF THE STREET OF THE STRE	FOR DEPARTMENT USE ONLY
During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: 06-14-04A11:56 0420 Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.	Prior to sealing of the annular space or filling of the cor	nductor casing.
During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. C. Submit to the Department within thirty (60) days after completion of work, a copy of: 06-14-04A11:56 0420 Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.	☐ Verify the depth of the conductor (outer) casing prior to	further drilling and installation of the inner casing.
C. Submit to the Department within thirty (60) days after completion of work, a copy of: 06-14-04A11:56 0420 Water Well Driller's Report (DWR 188). NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.	During destruction of wells, prior to pouring the sealing	material.
NOTE: Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said District.	B. Approved Plot Plan.	·
	C. Submit to the Department within thirty (60) days after comp. Water Well Driller's Report (DWR 188).	oletion of work, a copy of: 06-14-04A11:56 0420
D. Other:	NOTE: Property located within the Rancho California Water District.	strict may be subject to an existing Agency Agreement with said
	D. Other:	

29132

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUM	IBING, MECHANICAL, AND STRUCTURAL	Date
REPAIRS AND INSTALLA	ATIONS SHALL BE DONE UNDER PERMIT NTY DEPT. OF BUILDING AND SAFETY.	Expiration Date 12-25-04
÷		Fee\$64.96 (non-refundable)
This permit is granted or regulations that are now	n condition that the person named in the permit or may hereafter be in force.	will comply with the laws, ordinances and
LOCATION OF PROPOS	ED WELLSW1/4SE _1/4; Sec	18 ; T 3S ; R 1W
APN: 421-080-001-6	Laborde Canyon (Site 2)	nmunity <u>Beaumont</u> #TE-MW-2-2 est Hazmat Drilling Corp.
MAILING ADDRESS 25	EA 37 77-77 1 **	016 East Katella Avenue naheim, Ca. 92805
CITY & STATE	rbank, Ca. 91505	erlexe Kablus
DEH-SAN-025 (Rev 10/02)	Charle	ene Robbins t; YELLOW—Owner; PINK—Well Driller; GOLDENROD—Flood Control

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH WELL PERMIT APPLICATION (For Construction, Reconstruction & Destruction)

4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 62675 Hwy. 111. CAC - Indio, CA 92201 - (760) 863-7000 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180	1909) 955-89(0) DOII) ALCHU \$ 332 1772-MW2-2 FOR DEPARTMENT USE ONLY
PLEASE REPLY TO ADDRESS CHECKED ABOVE	The state of the s
NOTE: Any abandoned wells on the property must be	OH DEPARTMENT USE ONLY
properly destroyed before an application for construction or reconstruction can be processed.	Permit No. 29132
Please Print (E) W0Y039)	Expiration
1. OWNER: Name Lockbeed Months Corporation	
Mailing Address 2550 N. Holly wood Way 3rd Flor	
City Buchank State (A	12
Zip <u>91505</u> Phone No. (818) 847-0899	Borehole Diamin.
2. DATE OF WORK (approximate):	Conductor Diam in. Annular Thickness 3 11
Stan_6/21/04 Complete 6/30/04	Annular Thickness 3 in. Sealing Material Bornt Slurry / August 16
3. WELL DRILLER Test America Drilling DBA, West Hazmot Drilling Name TODE Exploration + Wells	7. DEPTH OF WELL (feet) Proposed 65 Existing
Riv. Co. Registration New 15-104-013	1011
C-57 License No. <u>C 57283334</u> C57819548	
	nlow)
4. WELL CHECK (check) Community Monitoring Industriel	Quality Gentle
☐ Individual ☐ Cathodic ☐ Other	From (ft.) To (ft.) Dia. (in.) Wall (Gage)
Agricultural Horizontal	GRAVEL PACK: Yes No
4A. FOR MONITORING WELL: (Name of Consultant)	From 331 to 65' ft.
Name Tetra Tech Phone 38+1674	Type of rig
5. TYPE OF WORK (check)	9. PERFORATIONS (if applicable):
New Reconstruction Destruction	From 35 to 65 tt.
5A. If reconstruction or destruction, please describe method	10. SEALED ZONES (if applicable):
on reverse side of attached Plot Plan.	Fromtoft.
11A. The California Labor code requires Worker's Compensation I signs the following certificate: I certify that in the perform	nsurance as a prerequisite to permit issuance unless the applicant nance of the work for which this permit is issued, I shall not
1	nance of the work for which this permit is issued, I shall not ect to the Workers Compensation Insurance laws of California.
Driller's Signature	Date
11B. I have read this application and agree to comply with all have	
Driller's Signature	There Half Date -6/8/04
application is true and correct. I also understand that I am leg	tate of California that the information furnished as part of this gally obligated to obey all requirements of state law and Riverside
County Ordinances in connection with the approval of this a	politation.
000111	Dectread Date 6 11 04
Approved subject to me following:	
A. Notify the Department, , forty-eight (48) hours in advance to	FOR DEPARTMENT USE ONLY
The condition of the condition space of filling of the condition	uctor casing
Verify the depth of the conductor (outer) casing prior to fundamental After installation of the surface protective slab and pumping	orther drilling and installation of the inner casing.
During destruction of wells, prior to pouring the sealing m	aterial.
B. Approved Plot Plan.	11
C. Submit to the Department within thirty (60) days after comple Water Well Driller's Report (DWR 188).	tion of work, a copy of: 06-14-04A11:56
NOTE: Property located within the Rancho California Water District.	ict may be subject to an existing Agency Agreement with said
D. Other:	.

DEH-SAN-185A (Rev 5/02)

WELL DRILLING PERMIT

ALL ELECTRICAL, PLUMBING, MECHANICAL, AND STRUCTURAL	
REPAIRS AND INSTALLATIONS SHALL BE DONE UNDER PERMIT Expiration Date 12-25-04	
Fee _ \$64.96 (non-refundable)	
This permit is granted on condition that the person named in the permit will comply with the laws, ordinances regulations that are now or may hereafter be in force.	and
LOCATION OF PROPOSED WELL SW 1/4 SE 1/4; Sec. 18 ; T 3S ; R 11/4	I
PHYSICAL ADDRESS OF WELL 36251 Highway 60 Community Beaumont APN: 421-080-001-6 Laborde Canyon (Site 2) #TE-MW-2-3 NAME Lockheed Martin Corporation DRILLER West Hazmat Drilling Corp.	
MAILING ADDRESS 2550 N. Hollywood Way, 3rd Flr. 1016 East Katella Avenue Anaheim, Ca. 92805	
CITY & STATE Burbank, Ca. 91505	
By Charlene Calilian	
DEH-SAN-025 (Rev 10/02) Charlene Robbins Distribution: WHITE—Environmental Health Department; YELLOW—Owner, PINK—Well Driller, GOLDENROD—Flood (Control

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH WELL PERMIT APPLICATION (For Construction, Reconstruction & Destruction)

4080 Lemon Street, 2nd Floor / RO. Box 1206 - Riverside, CA 92502 - 82675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000	1909) 855-89804 DBIT 925 172-MW2-3 FOR DEPARTMENT USE ONLY
39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180	NSUBLE TZ-MW2-3
	FOR DEPARTMENT USE ONLY
NOTE: Any abandoned wells on the property must be properly destroyed before an application for	Permit No
construction or reconstruction can be processed.	Expiration 12-25-64
Please Print (±#tw0Y0397)	
1. OWNER: Name Lockheed Martin Corporation	6. ANNUAL SEAL:
Address 2550 N. Hollywood Way 3rd Floo	Depth_30ft.
city Burbank State CA	Borehole Diam in.
Zip 91505 Phone No. (818) 847-0899	Conductor Diarn in.
2. DATE OF WORK (approximate):	Annular Thickness 3 in.
Start 6 2104 Complete 6 30 04	Sealing Material Bent. Slurry
3. WELL DRILLER Drilling DBA West Hazman Drilling	7. DEPTH OF WELL (feet)
Name WIC EXPORTING & WELL	Proposed 65 Existing
Riv. Co. Registration No. 154-05-104-013	DIAMETER OF BORE (In.)
C-57 License No. C5728 33 20 C57819548	8. PRODUCTION WELL CASING INSTALLED:
4. WELL CHECK (check) TE-MW2-3	☐ Steel (M Plastic ☐ Other
Community Monitoring Industrial	From (ft.) To (ft.) Dia. (ir.) Wall (Gage)
☐ Individual ☐ Cathodic ☐ Other	. 0 (05' 4" 5ched 40) GRAVEL PACK: Ø Yes □ No
Agricultural Horizontal	221 /EI
A. FOR MONITORING WELL: (Name of Consultant)	From
Name Tetra Tech Phone 38 + 1674	
5. TYPE OF WORK (check)	9. PERFORATIONS (if applicable): From 35 to 65 ft.
New Reconstruction Destruction	
5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan.	10. SEALED ZONES (if applicable): From
signs the following certificate: I certify that in the perform	Insurance as a prerequisite to permit issuance unless the applicant mance of the work for which this permit is issued, I shall not
Driller's Signature \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	ect to the Workers Compensation Insurance laws of California.
	Date
11B. I have read this application and agree to comply with all land	Slew Hall Date - 1704
7/	State of California that the information furnished as part of this
application is true and correct. (also understand that I am le County Ordinances in connection with the approval of this	egally obligated to obey all requirements of state law and Riverside
Property: Owner's Signature Ind. (relle	Charthard para 6/1/14
OL MILIU	Dais TATO
Approved subject to the following:	FOR DEPARTMENT USE ONLY
A. Notify the Department, , forty-eight (48) hours in advance to	make an inspection of the following operations:
Prior to sealing of the annular space or filling of the condition. Verify the depth of the conductor (outer) casing prior to	ductor dasing.
After installation of the surface protective slab and pump	ing equipment.
During destruction of wells, prior to pouring the sealing in	material.
B. Approved Plot Plan.	
C. Submit to the Department within thirty (60) days after completive Water Well Driller's Report (DWR 188).	etion of work, a copy of: 06-14-04A11:56 .0418
NOTE: Property located within the Rancho California Water Dis District.	trict may be subject to an existing Agency Agreement with said
D. Other:	

WELL DRILLING PERMIT

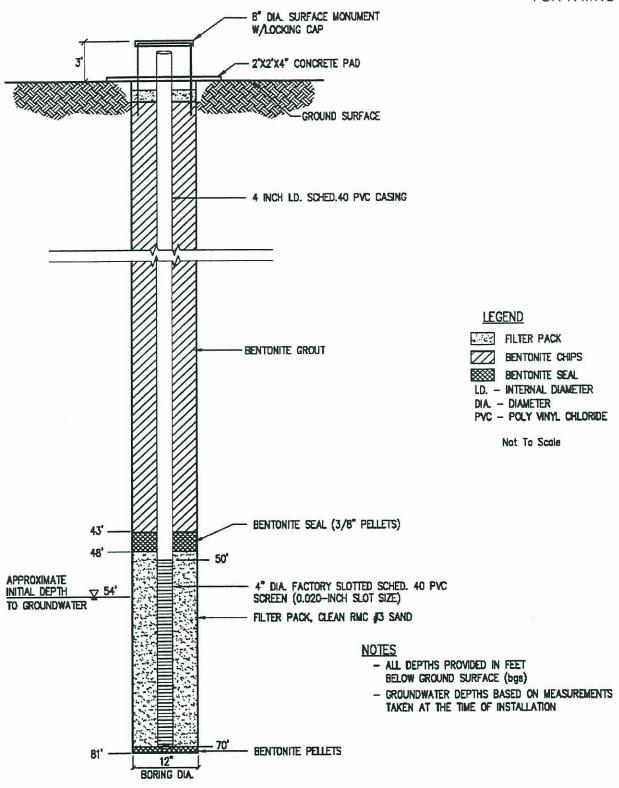
ALL ELECTRICAL, P	LUMBING, MECHANICAL, AND STRUCTURAL	Date	_ June	29, 2004	
REPAIRS AND INSTA	ALLATIONS SHALL BE DONE UNDER PERMIT OUNTY DEPT. OF BUILDING AND SAFETY.	Expira	ation Date	2 12-25-04	
		Fee _	\$64.96 (no	n-refundable))
This permit is granted regulations that are re	d on condition that the person named in the permit w now or may hereafter be in force.	vill com	nply with t	he laws, ordi	inances and
LOCATION OF PROF	POSED WELL NW 1/4 SE 1/4; Sec. 1	L9	; T	3S ; F	3 <u>1W</u>
APN: 421-190-00	1-6 Laborde Canyon (Site 2) #	TE-MV		ont lling Cor	n.
MAILING ADDRESS	101	6 Eas		la Avenue	
CITY & STATE	Burbank, Ca. 91505	A .	1	c 1	
	Charl	Me	lat	eleci	
DEH-SAN-025 (Rev 10/02)	Distribution: WHITE—Environmental Health Department; Y	.еπом—с теше ј	Robbins Owner; PINK—W	/ell Driller; GOLDENR	OD—Flood Control

WELL PERMIT APPLICATION (For Construction, Reconstruction & Destruction) 4080 Lemon Street, 2nd Floor / P.O. Box 1206 - Riverside, CA 92502 - (909) 955-8980 B2675 Hwy. 111, CAC - Indio, CA 92201 - (760) 863-7000 39493 Los Alamos - Murrieta, CA 92563 - (909) 600-6180 PLEASE REPLY TO ADDRESS CHECKED ABOVE FOR DEPARTMENT USE ONLY NOTE: Any abandoned wells on the property must be Permit No. properly destroyed before an application for construction or reponstruction can be processed. Expiration Please Print OWNER: Name ANNUAL SEAL: Address Depth_3 Borehole Diam. Phone No. (818) Conductor Diam. DATE OF WORK (approximate): Annular Thickness Start 62 Complete Sealing Material DEPTH OF WELL (feet) Proposed Existing DIAMETER OF BORE (in.) C-57 License No. PRODUCTION WELL CASING INSTALLED: WELL CHECK (check) ☐ Steel Plastic Other □ Community Monitoring From (ft.) To (fL) Dia. (in.) Individual ☐ Cathodic Other GRAVEL PACK: X Yes O No · Agricultural Horizontal 4A. FOR MONITORING WELL: (Name of Consultant) Type of rig PERFORATIONS (if applicable): TYPE OF WORK (check) From New New Reconstruction Destruction 10. SEALED ZONES (if applicable): 5A. If reconstruction or destruction, please describe method on reverse side of attached Plot Plan. From The California Labor code requires Worker's Compensation Insurance as a prerequisite to permit issuance unless the applicant signs the following certificate: I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Workers Compensation insurance laws of California. Driller's Signature 11B. I have read this application and agree to comply ting the type, of work being performed. Driller's Signature I declare under penalty of perjury under the laws of the State of California that the information furnished as part of this application is true and correct. I also understand that I am legally obligated to obey all requirements of state law and Riverside County Ordinances in connection with the approval of this application. Property Owner's Signature DISPOSITION OF PERMIT Approved subject to the following: FOR DEPARTMENT USE ONLY A. Notify the Department, , forty-eight (48) hours in advance to make an inspection of the following operations: $oldsymbol{ abla}^{\!f}$ Prior to sealing of the annular space or filling of the conductor casing. (d) Verify the depth of the conductor (outer) casing prior to further drilling and installation of the inner casing. M After installation of the surface protective slab and pumping equipment. During destruction of wells, prior to pouring the sealing material. B. Approved Plot Plan. 06-14-04A11:56 041 Submit to the Department within thirty (60) days after completion of work, a copy of: Water Well Driller's Report (DWR 188). Property located within the Rancho California Water District may be subject to an existing Agency Agreement with said NOTE: D. Other:

DEH-SAN-185A (Rev 5/02)

COUNTY OF RIVERSIDE COMMUNITY HEALTH AGENCY DEPARTMENT OF ENVIRONMENTAL HEALTH

FIGURE 3-2 CONSTRUCTION DETAILS FOR GROUNDWATER MONITORING WELL FOR Tt-MW2-1



LOG OF BORING Tt-MW-2-1

(Sheet 1 of 5)

									(0.1000 1.010)				
Client: Lockheed-Martin Corporation								Drilling Company: West Hazmat					
Projec	t: Bea	aumont Si	te 2					Drilling Method: Hollow-stem auger					
Projec	Project Number: 13505-02								pling Method: Split Spoon				
Location	on: Be	eaumont,	CA					Bore	hole Diameter: 12 in.				
Geolog	Geologist: Steve Hruby							North	ning: 2,273,430.33 Feet				
Date S	Started	i: Septem	ber 1,	2004				Easti	ing: 6,325,373.90 Feet				
Date C	Comple	eted: Sep	tembe	r 1, 2004				Grou	nd Surface Elevation: 2,032.90 Feet AMSL, NAVD 88				
Total C	Depth:	81.0 Fee	et bgs					Тор	of Casing Elevation: 2,035.21 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
-							ML		0 to 3 ft. SILT WITH SAND: Loose, (2.5Y 6/1) Gray, Predominantly Silt with Fine Sand, Subrounded Grains, Dry, No Odor.	34			
5—		9 10 13			0.2	BZ 0.3	SW-SM		3 to 9 ft. WELL GRADED SAND WITH SILT: Loose, (2.5Y 6/2) Light Brownish Gray, Mostly Fine Well Graded Sand with Silt, Trace Gravel, Granitic, Subangular Grains, Dry. No Foreign Material, Discolorations, or Odors Observed between 0-10 ft. bgs.	2030			
10-	D)	10 10 12			0	BZ 0.3	ML		9 to 13 ft. SILT WITH SAND: Loose, (2.5Y 6/1) Gray, Fine to Medium Grained Sand, Trace Coarse Grained Sand, Subrounded Grains, Dry.	2025 -			
15-		7 11 15			1.6	BZ 0.3			13 to 21.5 ft. POORLY GRADED SAND WITH SILT: Loose, (2.5Y 6/2) Light Brownish Gray, Fine to Medium Grained Sand, Trace Coarse Grained Sand, Subangular to Subrounded Grains, Dry.	2020			
-		11 13 21	\boxtimes		1.6	BZ 0.3	SP-SM			2015			

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level NA = not applicable

SOIL LOG TT-MW-2_1-4.GPJ FSTRW_SA.GDT 11/4/04

LOG OF BORING Tt-MW-2-1

									(Sheet 2 of 5)				
Clie	nt: Loc	kheed-Ma	rtin Co	rporation			Drilling Company: West Hazmat						
Proj	ject: Be	aumont S	ite 2					Drilling Method: Hollow-stem auger					
Proj	ject Nun	nber: 135	05-02					Sam	pling Method: Split Spoon				
Loca	Location: Beaumont, CA								hole Diameter: 12 in.				
Geo	ologist:	Steve Hru	by					North	ning: 2,273,430.33 Feet				
Date	e Starte	d: Septen	nber 1,	2004				Easti	ing: 6,325,373.90 Feet				
Date	e Compl	leted: Sep	otembe	r 1, 2004				Grou	and Surface Elevation: 2,032.90 Feet AMSL, NAVD 88				
Tota	al Depth	: 81.0 Fee	et bgs					Top o	of Casing Elevation: 2,035.21 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
-			M				SP-SM		AS ABOVE				
- - 25—		10 15 16			1.9	BZ 0.2			21.5 to 32.5 ft. SILT WITH SAND: Firm, (2.5Y 4/2) Dark Grayish Brown, Predominantly Silt with Fine to Medium Grained Subrounded Sand, Some Coarse Grained Sand, Trace Gravel, Granitic Mineralogy, Moist.	- 2010- - -			
30-		13 19 21			2.1	BZ 0.2	ML			2005			
35—		14 17 22			2.8	BZ 0.2	SW-SM.		32.5 to 48 ft. WELL GRADED SAND WITH SILT AND GRAVEL: Moderately Dense, (5Y 6/2) Light Olive Gray, Well Graded Sand with Some Silt and Gravel, Subrounded to Rounded Grains, Granitic, Moist.	2000-			
-		13 19 20			2.1	BZ 0.3			1	995-			

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

LOG OF BORING Tt-MW-2-1

									(Sheet 3 of 5)				
Clie	nt: Locl	kheed-Mai	tin Cor	poration				Drilling Company: West Hazmat					
Proj	ect: Be	aumont Si	te 2					Drilli	ng Method: Hollow-stem auger				
Proj	ect Nun	nber: 1350	05-02					Sam	pling Method: Split Spoon				
Loca	ation: B	eaumont,	CA					Borehole Diameter: 12 in.					
Geo	logist:	Steve Hrul	ру					Northing: 2,273,430.33 Feet					
Date	ate Started: September 1, 2004							Easti	ng: 6,325,373.90 Feet				
Date	Compl	eted: Sep	tembe	r 1, 2004				Grou	nd Surface Elevation: 2,032.90 Feet AMSL, NAVD 88				
Tota	Total Depth: 81.0 Feet bgs								of Casing Elevation: 2,035.21 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
45-		16 22 25 17 18 28			1.6	BZ 0.3	SW-SM			1990_ - - - 1985_ - -			
55-		21 25 50 27 31 50			1.7	BZ 0.3	SP-SM		POORLY GRADED SAND WITH SILT: Dense, (2.5Y 5/2) Grayish Brown, Fine Sand with Silt, Trace Gravel, Subrounded, Saturated.	1980. - - - - 1975.			

Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

LOG OF BORING Tt-MW-2-1

(Sheet 4 of 5)

Clie	nt: Lock	theed-Mar	tin Co	poration				Drilling Company: West Hazmat						
Pro	ect: Bea	aumont Si	te 2					Drilling Method: Hollow-stem auger						
Pro	ject Num	ber: 1350	05-02					Samp	oling Method: Split Spoon					
Loc	ation: B	eaumont,	CA					Borel	nole Diameter: 12 in.					
Geo	logist: S	Steve Hrub	ру					Northing: 2,273,430.33 Feet						
Dat	e Started	: Septem	ber 1,	2004				Eastin	ng: 6,325,373.90 Feet					
Dat	e Comple	eted: Sep	tembe	r 1, 2004		12		Grou	nd Surface Elevation: 2,032.90 Feet AMSL, NAVD 88					
Tota	al Depth:	81.0 Fee	t bgs					Top of Casing Elevation: 2,035.21 Feet AMSL, NAVD 88						
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID ₹ Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
65— 70— 75—		22 35 50 26 39 41 27 39 50			1.9	BZ 0.3 BZ 0.3	SP-SM SS (ML)		POORLY GRADED SAND WITH SILT: Dense, (2.5Y 5/2) Grayish Brown, Fine Sand with Silt, No Gravel, Subrounded, Saturated. 65 to 81 ft. SILTSTONE: Very Dense, (7.5YR 6/2) Pinkish Gray, Predominantly Silt with Fine Grained Sand, Some Gypsum, Moist. Change in Lithology from Unconsolidated Sediments to Indurated Sandstone and Siltstone at 65 ft. bgs. Contact between Alluvial Sediments and San Timoteo Formation. SILTSTONE: Hard, (2.5Y 6/1) Gray, Predominantly Silt with Very Fine Grained Sand, Trace Coarse Grained Sand, Trace Gravel Inclusions, Subrounded Grains, Moist.	1970- 1965- 1960- 1955-				
								×××						

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

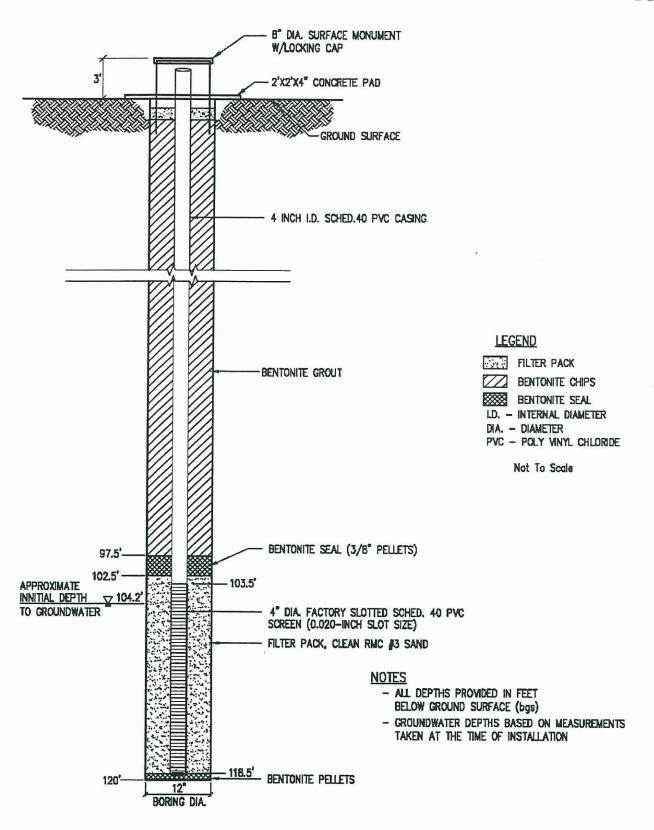
bgs = below ground surface AMSL = above mean sea level NA = not applicable

LOG OF BORING Tt-MW-2-1

Client: Lockheed-N											
	lartin Cor	rporation				Drilling Company: West Hazmat					
Project: Beaumont	Site 2						ng Method: Hollow-stem auger				
Project Number: 1	3505-02					Samp	pling Method: Split Spoon	C-CIU-CIO			
Location: Beaumo	it, CA					Borehole Diameter: 12 in.					
Geologist: Steve H	ruby					North	ning: 2,273,430.33 Feet				
Date Started: Sept	ember 1,	2004				Easti	ng: 6,325,373.90 Feet	-			
Date Completed: S	eptember	r 1, 2004				Grou	nd Surface Elevation: 2,032.90 Feet AMSL, NAVD 88				
Total Depth: 81.0 F	eet bgs					Тор	of Casing Elevation: 2,035.21 Feet AMSL, NAVD 88				
Depth (ft.) Time Blow Counts		am	्र ₹ Readings	Ö	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
50 - - 85— - - - 90— - - - - -	50			BZ 0.3	SS (ML)			1950. 1945. 1940. 			

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level



LOG OF BORING **Tt-MW-2-2**

									(Sheet 1 of 7)					
Clien	t: Lock	kheed-Ma	rtin Co	rporation				Drilling Company: West Hazmat						
Proje	ct: Be	aumont S	ite 2					Drillin	ng Method: Hollow-stem auger					
Proje	ct Num	ber: 135	05-02					Samı	oling Method: Split Spoon					
Locat	tion: B	eaumont,	CA					Borel	nole Diameter: 12 in.					
Geolo	ogist: S	Steve Hru	by					North	Northing: 2,276,662.64 Feet					
Date	Started	d: August	30, 20	04				Easti	ng: 6,325,085.92 Feet					
Date	Compl	eted: Aug	gust 30	, 2004				Grou	nd Surface Elevation: 2,135.73 Feet AMSL, NAVD 88					
Total	Total Depth: 121.0 Feet bgs							Top	of Casing Elevation: 2,137.75 Feet AMSL, NAVD 88					
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID ≥ Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
-		7 10 11			0.3	BZ 0.0			0 to 0.5 ft. Asphalt 0.5 to 5 ft. Non-Native Fill Material to Approximately 5 Feet bgs.	2135_				
5-								****	5 to 15 ft. SILT WITH SAND, Firm, (7.5YR 5/2) Brown, Predominantly Silt with Fine to Medium Grained Sand, Trace Coarse Sand, Trace Gypsum, Quartz, Feldspar, Subrounded Grains, Dry.	2130				
10-		8 12 16			1	BZ 0.0	ML		Some Gypsum (10%) at 10 ft. bgs.	2125_				
15-		12 16 17			1.7	BZ 0.0			AS ABOVE 15 to 20 ft. POORLY GRADED SAND: Firm to Hard, (2.5Y 7/2) Light Gray, Mostly Fine Grained Sand, Partially Cemented Gypsum in Fractures, Subrounded Grains,	2120				
		11 21 22			1.7	BZ 0.1	SP		Dry.	-				

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

SOIL LOG TT-MW-2_1-4.GPJ FSTRW_SA.GDT 11/4/04

LOG OF BORING Tt-MW-2-2

									(Sheet 2 of 7)					
Clie	nt: Lock	kheed-Mar	tin Co	rporation				Drilling Company: West Hazmat						
Proj	ect: Be	aumont Si	te 2					Drillin	g Method: Hollow-stem auger					
Proj	ect Num	nber: 1350	05-02					Samp	oling Method: Split Spoon					
Loca	ation: B	eaumont,	CA					Borel	nole Diameter: 12 in.					
Geo	logist: \$	Steve Hrut	ру					North	ing: 2,276,662.64 Feet					
Date	Started	d: August	30, 20	04				Eastin	ng: 6,325,085.92 Feet					
Date	Compl	eted: Aug	ust 30	, 2004				Groun	nd Surface Elevation: 2,135.73 Feet AMSL, NAVD 88					
Tota	I Depth	: 121.0 Fe	et bgs					Торс	of Casing Elevation: 2,137.75 Feet AMSL, NAVD 88					
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	NSCS	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
-			M						20 to 35 ft. SANDSTONE: Hard, (1GLEY 7/104) Light Greenish Gray, Predominantly Fine Grained Sand, Iron Oxide Staining (7.5YR 4/8) Red, Mineralogy: Quartz, Feldspar, Subrounded Grains, Dry.	2115_				
25—		21 27 50			1.9	BZ 0.2	SS		SANDSTONE: Very Hard, (2.5Y 7/1) Light Gray, Fine Grained Sand, Quartz, Feldspar, Partially Weathered to Silt and Clay Fragments, Trace Coarse Grained Sand, Well Rounded Grains, Dry.	- - 2110_				
30-		19 21 27			1.8	BZ 0.2	SS (CL)		SANDSTONE: Hard, (1GLEY 5/104) Greenish Gray, Dry, Fine Grained Sand mottled with Clay, (5Y 6/2) Light Olive Gray, Dry.	2105				
35-		20 27 41			1.7	BZ 1.0	SS (SP-SM)	× × × × × × × × × × × × × × × × × × ×	35 to 60 ft. SANDSTONE: Hard, (5Y 5/2) Olive Gray, Fine Grained Sand with Silt and Clay, Biotite, Trace Gypsum, Well Rounded Grains, Dry.	2100_				
		26 31 42	X			BZ 0.2		× × × × × × × × × × × × × × × × × × ×						

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

LOG OF BORING Tt-MW-2-2

(Sheet 3 of 7)

_								(55)				
Clie	nt: Lock	kheed-Ma	rtin Cor	poration				Drilling Company: West Hazmat				
Proj	ect: Be	aumont S	ite 2					Drillir	ng Method: Hollow-stem auger			
Proj	ect Num	nber: 135	05-02					Samp	oling Method: Split Spoon			
Loca	ation: B	eaumont,	CA					Borel	hole Diameter: 12 in.			
Geo	logist: S	Steve Hru	by					North	ing: 2,276,662.64 Feet			
Date	Started	d: August	30, 200	04				Easti	ng: 6,325,085.92 Feet			
Date	Compl	eted: Aug	just 30,	2004				Groui	nd Surface Elevation: 2,135.73 Feet AMSL, NAVD 88			
Tota	I Depth:	121.0 Fe	eet bgs					Торс	of Casing Elevation: 2,137.75 Feet AMSL, NAVD 88	V/14.533		
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID ₹ Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)		
								× × × × × × × × × × × × × × × × × × ×	SANDSTONE: (5Y 7/2) Light Gray, Fine Grained Sand with Silt and Clay, Trace Quartz Inclusions, Angular (1mm), Dry.	2095_		
45-		27 33 50			2.4	BZ 0.3		× × × × × × × × × × × × × × × × × × ×	SANDSTONE: Hard, (10YR 5/3) Brown, Fine Grained Sand with Silt and Trace Clay, Trace Medium Grained Sand, Quartz, Biotite, Well Rounded Grains, Dry.	_ 		
50-		27 31 50			3.8	BZ 0.3	SS (SP-SM)	× × × × × × × × × × × × × × ×	SANDSTONE: Hard, (5YR 5/3) Reddish Brown, Fine Grained Sand mottled with (5YR 7/1) Light Gray Silt,	2085		
-		26 35 40			2.6	BZ 0.3		× × × × × × × × × × × × × × × × × × ×	Quartz, Biotite, Well Rounded Grains, Dry.	-		
55— - -								× × × × × × × × × × × × × × × × × × ×	SANDSTONE: Hard, (2.5Y 6/2) Light Brownish Gray, Fine Grained Sand with Silt and Clay, Some Biotite, Well Rounded Grains, Dry.	_ 2080_ -		
		26 34 50			4.8	BZ 0.5		× × × × × × × × ×	-	-		

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level NA = not applicable

LOG OF BORING Tt-MW-2-2

									(Sheet 4 of 7)					
Clie	nt: Loc	kheed-Ma	rtin Co	rporation				Drilling Company: West Hazmat						
Proj	ject: Be	aumont S	ite 2					Drilli	ng Method: Hollow-stem auger					
Proj	ect Nur	nber: 135	05-02					Sam	pling Method: Split Spoon					
Loca	ation: E	Beaumont,	CA					Bore	hole Diameter: 12 in.					
Geo	logist:	Steve Hru	by					Northing: 2,276,662.64 Feet						
Date	e Starte	d: August	30, 20	004				Easti	ing: 6,325,085.92 Feet					
Date	e Comp	leted: Aug	gust 30	, 2004				Grou	nd Surface Elevation: 2,135.73 Feet AMSL, NAVD 88					
Tota	al Depth	: 121.0 Fe	eet bgs					Тор	of Casing Elevation: 2,137.75 Feet AMSL, NAVD 88					
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
-		26 34 50			2.4	BZ 0.5			60 to 74 ft. SANDSTONE: Hard, (2.5Y 5/2) Grayish Brown, Mostly Fine Grained Sand with Some Clay, Trace Inclusions of Very Hard Sandstone, Well Rounded, Dry.	2075_				
65-		2					SS (CL)			2070				
70— - -		27 39 50			2.3	BZ 0.4		*	SANDSTONE: Loose, (5Y 5/2) Olive Gray, Fine Grained Sand with Grayish Brown Clay, Interbedded with Sandy Clay, Moist.	2065_				
75—		29 33 49			2.7	BZ 0.8	SP		74 to 75 ft. POORLY GRADED SAND WITH SILT: Loose, (5Y 1/1) Dark Grey, Fine Grained Poorly Graded Sand with Silt, Moist. 75 to 78 ft. CLAY WITH SILT: (5Y 5/2) Olive Gray, Hard, Trace Fine Sand, Friable, Dry. (Silt Stone)	2060_				
		25 33 50	\boxtimes		2.6	BZ 0.6	SS		78 to 81 ft. SANDSTONE: Hard, (5Y 5/1) Gray, Fine Grained Sand, Well Rounded Grains, Moist.					

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level NA = not applicable

LOG OF BORING Tt-MW-2-2

(Sheet 5 of 7)

									(Sileet 5 of 7)				
Clie	Client: Lockheed-Martin Corporation							Drillin	Drilling Company: West Hazmat				
Proj	ect: Be	aumont S	ite 2					Drilling Method: Hollow-stem auger					
Proj	ect Nun	nber: 135	05-02					Samı	Sampling Method: Split Spoon				
Loca	ation: B	eaumont,	CA					Borel	hole Diameter: 12 in.				
Geo	logist:	Steve Hru	by	4				North	ning: 2,276,662.64 Feet				
Date	Starte	d: August	30, 20	04				Easti	ng: 6,325,085.92 Feet				
Date	Comp	leted: Aug	gust 30,	2004				Grou	nd Surface Elevation: 2,135.73 Feet AMSL, NAVD 88				
Tota	Total Depth: 121.0 Feet bgs							Top	of Casing Elevation: 2,137.75 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID ▼ Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
							SS		AS ABOVE	2055			
85-		23 37 50			3	BZ 1.0	SP-SM		81 to 86 ft. POORLY GRADED SAND WITH SILT: Moderately Dense, (5Y 5/2) Olive Gray, Fine Grained Sand with Silt, Trace Medium Grained Sand, Quartz, Mica, Subangular Grains, Moist. Note: Vertical Sedimentation Bedding 86 to 121 ft. SANDSTONE: Hard, (10R 5/2) Red, Fine	- - - - 2050_			
90-		27 32 50			2.9	BZ 0.3		× × × × × × × × × × × × × × × × × × ×	Grained Sand with Silt, Well Rounded Grains, Dry. SANDSTONE/SILTSTONE: Hard, (10YR 7/1) Light Gray, Fine to Medium Grained Sand with Silt, Quartz, Well Rounded Grains, Dry.	- - - 2045_			
95-		28 37 50			0.8	BZ 0.8	SS SP-SM	x x x x x x x x x x x x x x x x x x x	SANDSTONE: Hard, (10YR 5/1) Gray, Moist, Fine Grained Sand, Trace to Some Silt, Subrounded Grains, Moist.	- - 2040_			
-	4	26 35 50			1.2	BZ 0.8		× × × × × × × × × ×					

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

SOIL LOG TT-MW-2_1-4.GPJ FSTRW_SA.GDT 11/4/04

LOG OF BORING Tt-MW-2-2

1									(Sheet 6 of 7)				
Clie	ent: Loc	kheed-Mar	tin Co	poration				Drilling Company: West Hazmat					
Pro	ject: Be	aumont Si	te 2					Drillin	ng Method: Hollow-stem auger				
Pro	ject Nun	nber: 1350)5-02					Samp	oling Method: Split Spoon				
Loc	ation: B	eaumont,	CA					Boreh	nole Diameter: 12 in.				
Geo	ologist:	Steve Hrub	ру		W-100-00	N. Carlotte		Northing: 2,276,662.64 Feet					
Dat	e Starte	d: August	30, 20	04				Eastir	Easting: 6,325,085.92 Feet				
Dat	e Compl	eted: Aug	ust 30	, 2004				Groun	nd Surface Elevation: 2,135.73 Feet AMSL, NAVD 88				
Tota	al Depth	: 121.0 Fe	et bgs					Торо	of Casing Elevation: 2,137.75 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
-			M					× × × × × × × ×	SANDSTONE: Hard, (10YR 5/1) Gray, Fine Grained Sand with Silt, Well Rounded Grains, Moist.	2035_			
- 105 — -		21 33 50			1.9	BZ 0.8		× × × × × × × × × × × × × × × × × × ×	SANDSTONE: Hard, (5Y 6/1) Gray, Fine Grained Sand with Silt, Well Rounded Grains, Moist.	- - 2030_			
110-		20 31 43			2.6	BZ 0.7	SS (SP-SM)	× × × × × × × × × × × × × × × × × × ×	SANDSTONE: Hard, (5Y 6/2) Light Olive Gray, Moist, Fine Grained Sand with Silt, Well Rounded Grains, Moist.	2025			
115—		20 32 41			1.7	BZ 0.7		× × × × × × × × × × × × × × × × × × ×	SANDSTONE: Hard, (5Y 6/2) Light Olive Gray, Fine Grained Sand with Silt, Smaller Percentage of Silt, Well Rounded Grains, Moist.	- - 2020_ -			
-								× × ×					

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

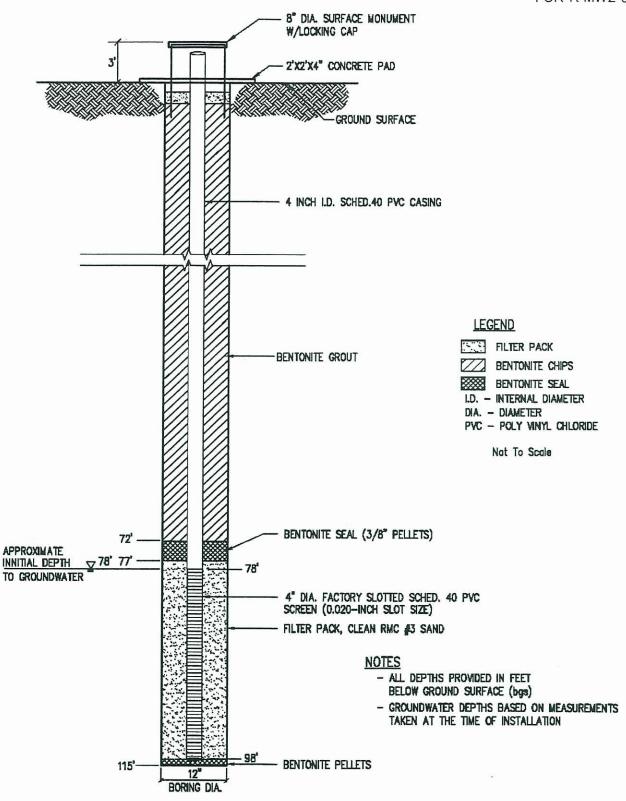
NA = not applicable

SOIL LOG TT-MW-2_1-4.GPJ FSTRW_SA.GDT 11/4/04

LOG OF BORING Tt-MW-2-2

							(Sheet 7 of 7)					
Client: Lo	ckheed-Ma	rtin Cor	poration				Drilling Company: West Hazmat					
Project: B	eaumont S	ite 2					Drillir	ng Method: Hollow-stem auger				
Project Nu	mber: 135	05-02					Samı	oling Method: Split Spoon				
Location:	Beaumont,	CA	-				Borehole Diameter: 12 in.					
Geologist:	Steve Hru	by					North	ning: 2,276,662.64 Feet				
Date Starte	ed: August	30, 200	04				Easti	ng: 6,325,085.92 Feet				
Date Comp	oleted: Aug	gust 30,	2004				Ground Surface Elevation: 2,135.73 Feet AMSL, NAVD 88					
Total Dept	h: 121.0 Fe	eet bgs					Top of Casing Elevation: 2,137.75 Feet AMSL, NAVD 88					
Depth (ft.) Time	Blow	Samples	Sample ID	PID ₹ Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
-						SS (SP-SM		Basal Confining Layer at 120 Feet bgs: Sand with Clay and Silt, Friable, Hard, (10YR 5/3) Brown, Very Fine Grained Sand, Siltstone, Dry. Boring Terminated at TD of 121 Feet bgs.	201			
30-									2010			
35 —									2000			
-												

FIGURE 3-4 CONSTRUCTION DETAILS FOR GROUNDWATER MONITORING WELL FOR Tt-MW2-3



LOG OF BORING Tt-MW-2-3

(Sheet 1 of 6)

									(
Client: Lo	ckheed-Ma	rtin Co	rporation				Drilling Company: West Hazmat						
Project: E	Beaumont Si	te 2					D	rillir	ng Method: Hollow-stem auger				
Project Nu	ımber: 135	05-02					S	amp	oling Method: Split Spoon				
Location:	Beaumont,	CA					В	orel	nole Diameter: 12 in.				
Geologist:	Steve Hru	by					Northing: 2,274,876.52 Feet						
Date Start	ed: August	31, 20	04				E	asti	ng: 6,324,520.74 Feet	1			
Date Com	ate Completed: August 31, 2004							rou	nd Surface Elevation: 2,092.10 Feet AMSL, NAVD 88				
Total Dept	Total Depth: 115.0 Feet bgs						Т	op c	of Casing Elevation: 2,094.66 Feet AMSL, NAVD 88				
Depth (ft.) Time	Blow	Samples	Sample ID	PID ≥ Readings	Comments	nscs	1 1 1 1 1	Grapnic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
-	12 16 17	M		0 0.3	BZ 0.0	ML			0 to 5 ft. SILT WITH SAND AND GRAVEL: Loose, Predominantly Silt with Well Graded Sand and Gravel, Subangular Grains, Dry.	- 2090 - -			
5	9 10 14			0.5	BZ 0.3				5 to 25.5 ft. SILT WITH SAND: Firm to Hard, (5Y 5/2) Olive Gray, Predominantly Silt with Fine to Medium Grained Sand with Some Gypsum, Subangular Grains, Dry.	2085			
- - - - 15—	10 13 18			0.5	BZ 0.3	ML			SILT WITH SAND: Firm, (5Y 6/2) Light Olive Gray,	2080 - - - -			
-	12 13 21			0.5	BZ 0.3				Predominantly Silt with Fine Grained Sand, Some Gypsum Nodules (5mm-8mm), Well Rounded Grains, Dry.	- 2075 - -			

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level NA = not applicable

LOG OF BORING Tt-MW-2-3

	(Si	heet 2 of 6)
Client: Lockheed-Martin Corporation	Drilling Company: West Haz	mat
Project: Beaumont Site 2	Drilling Method: Hollow-stem	n auger
Project Number: 13505-02	Sampling Method: Split Spo	on
Location: Beaumont, CA	Borehole Diameter: 12 in.	
Geologist: Steve Hruby	Northing: 2,274,876.52 Feet	
Date Started: August 31, 2004	Easting: 6,324,520.74 Feet	
Date Completed: August 31, 2004	Ground Surface Elevation: 2	,092.10 Feet AMSL, NAVD 88
Total Depth: 115.0 Feet bgs	Top of Casing Elevation: 2,0	94.66 Feet AMSL, NAVD 88
Depth (ft.) Time Blow Counts Samples Sample ID Sample ID	Oraphic Logic DE	NOITHINDS:
11 16 20 0.5 BZ 0	Light Olive Gray, Predo Sand and Some Clay, S (5mm-8mm), Well Rour	CLAY: Firm to Hard, (5Y 6/2) minantly Silt with Fine Grained Some Gypsum Nodules nded Grains, Dry. 2070
13 19 22 0.3 BZ 0	25.5 to 30 ft. POORLY Dense, (1GLEY 7/10Y) Grained to Fine Grained	ne as Above, Trace Clay. GRADED SAND: Moderately Light Greenish Grey, Very Fine- d Sand, Trace to Few Silt, Trace ned Sand, Subangular Grains, 2065
30-	Medium Dense, (5Y 6/3 Graded Sand with Silt, 7	RADED SAND WITH SILT:) Pale Olive, Fine Grained Poorly Frace Medium Grained Sand, , Subrounded Grains, Dry.
35— 35— 1.4 BZ 0	SP-SM POORLY GRADED SAME Pale Olive, Fine to Medi with Silt, Subangular Grant State of the stat	ND WITH SILT: Dense, (5Y 6/3) um Grained Poorly Graded Sand ains, Dry. 2055
36 50 50		

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

LOG OF BORING Tt-MW-2-3

									(Sheet 3 of 6)				
Clie	nt: Loc	kheed-Ma	rtin Co	rporation			Drilling Company: West Hazmat						
Proj	Project: Beaumont Site 2								Drilling Method: Hollow-stem auger				
Proj	Project Number: 13505-02								Sampling Method: Split Spoon				
Loca	ation: B	eaumont,	CA				Bore	hole Diameter: 12 in.					
Geo	logist:	Steve Hru	by					Nort	hing: 2,274,876.52 Feet				
Date	Starte	d: August	31, 20	04				East	ing: 6,324,520.74 Feet				
Date	Comp	leted: Aug	gust 31	, 2004				Grou	and Surface Elevation: 2,092.10 Feet AMSL, NAVD 88				
Tota	I Depth	: 115.0 Fe	eet bgs	1				Тор	of Casing Elevation: 2,094.66 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings		nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
45—		29 31 50 27 29 41			2.2	BZ 0.3	SP-SM		POORLY GRADED SAND WITH SILT: Dense, (5Y 7/3) Pale Yellow, Fine Grained Sand with Silt, Trace Gypsum, Dry.	- 2050 - - - - 2045 -			
55—		25 32 47					ML		50 to 55 ft. SILT WITH SAND: Hard, (5Y 6/3) Pale Olive, Predominantly Silt with Very Fine Grained Sand, Horizontal Interbedding of Sand and Silt, Subrounded Grains, Dry.	- 2040 - -			
55		41 50			12.2	BZ 0.3	SP-SM		55 to 68.5 ft. POORLY GRADED SAND WITH SILT: Dense, (5Y 6/1) Gray, Fine Grained Poorly Graded Sand with Silt, Trace Medium Grained Sand, Subangular Grains, Dry.	- 2035 - -			

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

SOIL LOG TT-MW-2_1-4.GPJ FSTRW_SA.GDT 11/4/04

LOG OF BORING **Tt-MW-2-3**

(Sheet 4 of 6)

									(Sheet 4 of 6)				
С	ient: Loc	kheed-Mai	tin Cor	poration				Drillin	ng Company: West Hazmat				
Pi	Project: Beaumont Site 2								Drilling Method: Hollow-stem auger				
Pr	oject Nur	nber: 1350	05-02				Sampling Method: Split Spoon						
Lo	cation: E	Beaumont,	CA				Borehole Diameter: 12 in.						
G	eologist:	Steve Hru	эу				North	hing: 2,274,876.52 Feet					
D	ate Starte	d: August	31, 20	04			Easting: 6,324,520.74 Feet						
Da	ate Comp	leted: Aug	ust 31	2004				Ground Surface Elevation: 2,092.10 Feet AMSL, NAVD 88					
To	tal Depth	: 115.0 Fe	et bgs			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Top o	of Casing Elevation: 2,094.66 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow	Samples	Sample ID	PID ₹ Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
									POORLY GRADED SAND WITH SILT: Dense, (5Y 6/1) Gray, Fine Grained Poorly Graded Sand with Silt, Trace Medium Grained Sand, SubangularGrains, Slightly Moist.	30			
65		39 50			2.2	BZ 0.3	SP-SM		POORLY GRADED SAND WITH SILT: Same as Above, (5Y 5/2) Olive Gray.)25			
70-		31 41 50			1.9	BZ 0.3			68.5 to 76.5 ft. SILT WITH SAND: Hard, (5Y 5/3) Olive, Moist, Predominantly Silt with Fine Grained Sand, Interbedded (Trace) Iron Oxide Horizontal Stringers Approximately 1mm Thick, Trace Coarse Grained Sand, Subangular, Quartz, Plagioclase Feldspar, Moist.	_			
75-	-	26 29 39			1.8	BZ 0.4	ML		SILT WITH SAND: Hard, (5Y 5/2) Olive Gray, Predominantly Silt with Fine Grained Sand, Trace Coarse Grained Sand, Subrounded Grains, Moist.	20			
							SW :		76.5 to 77 ft. WELL GRADED SAND: Interbedded, (10R				
							ML		5/4) Red, Quartz, Feldspar, Mica, Subrounded to Rounded Grains, Slightly Moist. 77 to 78.5 ft. SILT WITH SAND: Hard, (5Y 5/2) Olive Gray, Predominantly Silt with Fine Grained Sand, Trace	15			
		27 37 49	X		1.9	BZ 0.3	SP		Coarse Grained Sand, Subrounded Grains, Moist. 78.5 to 83 ft. POORLY GRADED SAND WITH SILT: Dense, (5Y 6/2) Light Olive Gray, Fine to Medium	_			

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

LOG OF BORING Tt-MW-2-3

(Sheet 5 of 6)

Clie	Client: Lockheed-Martin Corporation							Drilling Company: West Hazmat					
Proj	Project: Beaumont Site 2								Drilling Method: Hollow-stem auger				
Project Number: 13505-02								Sampling Method: Split Spoon					
Loca	Location: Beaumont, CA								Borehole Diameter: 12 in.				
Geó	Geólogist: Steve Hruby								Northing: 2,274,876.52 Feet				
Date	Starte	d: August	31, 20	004				Easti	ng: 6,324,520.74 Feet				
Date	Compl	eted: Aug	gust 31	, 2004				Grou	nd Surface Elevation: 2,092.10 Feet AMSL, NAVD 88				
Tota	I Depth	: 115.0 Fe	eet bgs	i				Тор	Top of Casing Elevation: 2,094.66 Feet AMSL, NAVD 88				
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)			
-									Grained Poorly Graded Sand with Silt, Subangular Grains, Moist.				
_						E.	SP			2010			
							i e			2010			
85—		37 50		1			SP-SM		83 to 88 ft. POORLY GRADED SAND WITH SILT: Dense, (5Y 5/2) Olive Gray, Fine Grained Poorly Graded Sand with Silt, Trace Medium Grained Sand, Subangular Grains, Moist.	2005			
		27 20 50				D7.0.7			88 to 98 ft. POORLY GRADED SAND: Dense, (5Y 5/3) Olive, Fine Grained Sand, Trace Medium Grained Sand,				
1		37 39 50	\square		1.7	BZ 0.7			Subangular Grains, Moist.	1			
90-					$ \Delta $		\triangle					5	
-							0.5			2000			
95-		21 31 50			1.9	BZ 0.3	SP						
-	-	31 39 50			1 1 1 1	BZ 0.3			98 to 104 ft. SILT WITH SAND: Hard, (5Y 5/3) Olive,	1995			
						Second Control	ML		Predominantly Silt with Fine Grained Sand, Subangular Grains, Moist.	-			

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level NA = not applicable

SOIL LOG TT-MW-2_14.GPJ FSTRW_SA.GDT 11/4/04

LOG OF BORING Tt-MW-2-3

								(Sheet 6 of 6)			
Client: Lockhe	eed-Mart	in Corp	ooration			Drilling Company: West Hazmat					
Project: Beaumont Site 2								Drilling Method: Hollow-stem auger			
Project Number: 13505-02								Sampling Method: Split Spoon			
Location: Beaumont, CA								hole Diameter: 12 in.			
Geologist: Ste	eve Hrub	у					North	ning: 2,274,876.52 Feet			
Date Started:	August 3	31, 200	14				Easti	ng: 6,324,520.74 Feet			
Date Complete	ed: Augu	ıst 31,	2004				Grou	nd Surface Elevation: 2,092.10 Feet AMSL, NAVD 88			
Total Depth: 1	15.0 Fee	et bgs					Тор с	of Casing Elevation: 2,094.66 Feet AMSL, NAVD 88			
Depth (ft.) Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)		
-	-					ML		AS ABOVE	1990		
105—	50			19.2	BZ 0.3	SS (ML)	× × × × × × × × × × × × × × × × × × ×	104 to 109 ft. SILTSTONE: Very Hard, (5Y 4/1) Dark Gray, Predominantly Silt with Very Fine Grained Sand, Trace Fine Grained Sand, Friable with Horizontal Fracturing, Slightly Moist.	- - 1985		
-						SS	× × ×	109 to 110 ft. POTENTIAL CONFINING LAYER:			
110—	50				BZ 0.3	(ML)	× × ×	Undetermined Thickness of Siltstone. 110 to 115 ft. POORLY GRADED SAND: Dense, (5Y 5/2) Olive Grey, Fine Grained Sand, Subrounded Grains, Moist. Boring Terminated at TD of 115 Feet bgs.	1980		
-									1975 - -		

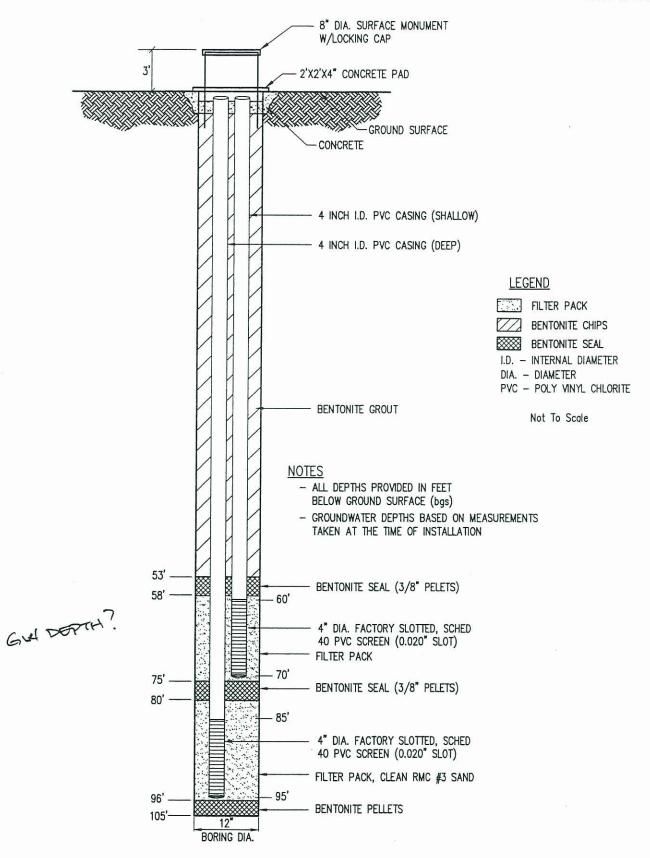
Notes: Boring Log Reviewed By: J. Brenner 10/20/04

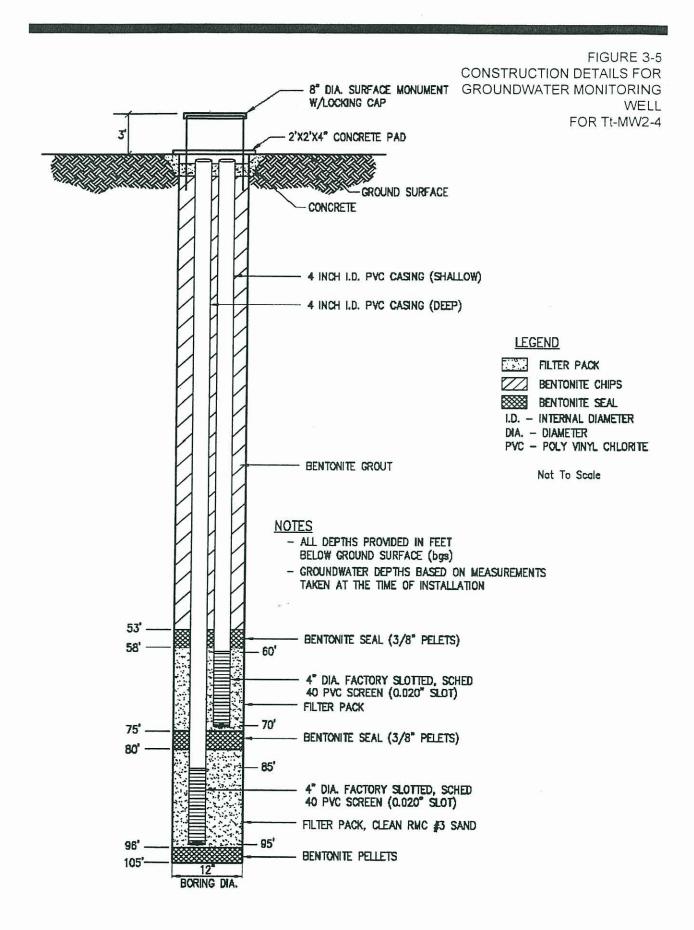
bgs = below ground surface AMSL = above mean sea level

NA = not applicable

SOIL LOG TT-MW-2_1-4.GPJ FSTRW_SA.GDT 11/4/04

FIGURE 3-5 CONSTRUCTION DETAILS FOR GROUNDWATER MONITORING WELL FOR Tt-MW2-4





LOG OF BORING Tt-MW-2-4

							#1		(Sheet 2 of 6)					
Clie	nt: Loc	kheed-Ma	artin Co	rporation				Drilli	ng Company: West Hazmat					
Proj	ject: Be	aumont S	Site 2					Drilli	ng Method: Hollow-stem auger					
Proj	ect Nun	nber: 135	05-02					Sam	pling Method: Split Spoon					
Loc	ation: B	eaumont	CA					Borehole Diameter: 12 in.						
Geo	logist:	Steve Hru	ıby					Norti	ning: 2,272,392.82 Feet					
Date	e Starte	d: Septer	nber 3,	2004				Easting: 6,325,561.45 Feet						
Date	e Comp	leted: Se	ptembe	er 7, 2004				Grou	nd Surface Elevation: 1,984.56 Feet AMSL, NAVD 88					
Tota	al Depth	: 105.0 F	eet bgs					Тор	of Casing Elevation: 1986.94(s) 1987.16(d) Feet AMSL					
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
-							SP-SM		POORLY GRADED SAND WITH SILT: Same as Above, Moist.					
25—		11 16 17		,	2.2	BZ 0.3			23 to 43 ft. SILT WITH SAND: Firm, (5Y 5/2) Olive Gray, Predominantly Silt with Mostly Fine to Medium Grained Sand, Trace Coarse Sand, Trace Gypsum, Subangular Grains, Moist.	- 960 - -				
30-		13 17 23			1.9	BZ 0.3	ML		SILT WITH SAND: Same as Above, Some Gypsum Nodules (4mm).	955				
35-						-			19	950 -				
		17 21 27	X						19	945				
			, in							\exists				

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

LOG OF BORING Tt-MW-2-4

						(Sheet 3 of 6)					
Client: Lockheed-Ma	rtin Corporation				Drillin	ng Company: West Hazmat					
Project: Beaumont S	ite 2				Drillin	ng Method: Hollow-stem auger					
Project Number: 135	05-02				Samp	oling Method: Split Spoon					
Location: Beaumont,	CA ·				Borehole Diameter: 12 in.						
Geologist: Steve Hru	by				Northing: 2,272,392.82 Feet						
Date Started: Septen	nber 3, 2004				Easti	ng: 6,325,561.45 Feet					
Date Completed: Sep	otember 7, 2004				Grou	nd Surface Elevation: 1,984.56 Feet AMSL, NAVD 88					
Total Depth: 105.0 Fe	eet bgs		y		Top c	of Casing Elevation: 1986.94(s) 1987.16(d) Feet AMSL					
Depth (ft.) Time Blow Counts	Samples Sample ID	ਦੂ PID ≅ Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
				ML		SILT WITH SAND: Hard, (2.5Y 4/3) Olive Brown, Predominantly Silt with Fine Grained Sand, Trace Medium to Coarse Sand, Trace Gravel, Subangular Grains, Moist.					
32 50		1.9	BZ 0.3	SS (ML)	× × × × × × × × × × × × × × × × × × ×	43 to 49 ft. SILTSTONE: Very Hard, (5Y 7/2) Light Gray, Predominantly Silt with Very Fine Grained Sand, Some Clay, Moderate to Strong Cementation, Dry. Contact between Alluvial Sediments and San Timoteo Formation at Approximately 43 ft. bgs.	1940				
- - 50-		1.9	BZ 0.3		× × × × × × × × × × × × × × × × × × ×	49 to 60 ft. SANDSTONE: Very Dense, (5Y 5/2) Olive Gray, Fine to Medium Grained Poorly Graded Sand with Silt, Moderate Cementation, Subangular Grains, Dry.	1935				
37 43 50 55—		2.1	BZ 0.3	SS (SP-SM)		SANDSTONE: Very Dense, (7.5YR 5/4) Brown, Fine to Medium Grained Poorly Graded Sand with Silt, Subangular Grains, Dry.	1930				
39 46 50			BZ 0.3				1925				

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

LOG OF BORING Tt-MW-2-4

								(Sheet 4 of 6)						
Clie	nt: Loc	kheed-Ma	artin Co	rporation			August 11	Drilling Company: West Hazmat						
Proj	ect: Be	eaumont S	Site 2					Drilli	ng Method: Hollow-stem auger					
Proj	ect Nur	mber: 135	505-02					Sam	pling Method: Split Spoon					
Loca	ation: E	Beaumont,	, CA					Borehole Diameter: 12 in.						
Geo	logist:	Steve Hru	ıby					Northing: 2,272,392.82 Feet						
Date	Starte	d: Septer	mber 3,	2004				Easti	ing: 6,325,561.45 Feet					
Date	Comp	leted: Se	ptembe	er 7, 2004				Grou	nd Surface Elevation: 1,984.56 Feet AMSL, NAVD 88					
Tota	I Depth	: 105.0 F	eet bgs	5	-			Тор	of Casing Elevation: 1986.94(s) 1987.16(d) Feet AMSL					
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
-							SS	× × × × × × × × ×	60 to 64 ft. SILTSTONE: Predominantly Silt with Sand, Strongly Cemented.	-				
		30 31 50				BZ 0.3		× × × × × ×						
65-									64 to 84 ft. SANDSTONE: Weathered, Lesser Cementation, Dense, (5Y 7/2) Light Gray, Fine Grained Sand, Interbedded Layers of Silt/Clay (3mm Thick), Trace Gravel, Subrounded Grains, Moist.	1920				
70-		30 32 50				BZ 0.3	SS		SANDSTONE: Dense (5Y 7/2) Light Gray, Moist, Very Fine Grained Sand with Silt, Increased Cementation, Moist.	1915				
75—		32 39 50				BZ 0.3	(SP-SM		AS ABOVE	1910				
		42 49 50	X.			BZ 0.3				1905				

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

SOIL LOG TT-MW-2_14.GPJ FSTRW_SA.GDT 11/4/04

LOG OF BORING Tt-MW-2-4

				(Sheet 5 of 6)										
Clie	nt: Loc	kheed-M	artin Co	poration				Drilling Company: West Hazmat						
Proj	ect: Be	aumont 9	Site 2					Drilling Method: Hollow-stem auger						
Proj	ect Nun	nber: 13	505-02					Sampling Method: Split Spoon						
Loca	ation: B	eaumont	, CA					Borehole Diameter: 12 in.						
Geo	logist:	Steve Hr	uby					Northing: 2,272,392.82 Feet						
Date	e Starte	d: Septe	mber 3,	2004				Easti	ing: 6,325,561.45 Feet					
Date	e Compl	eted: Se	ptembe	r 7, 2004				Grou	nd Surface Elevation: 1,984.56 Feet AMSL, NAVD 88					
Tota	I Depth	: 105.0 F	eet bgs					Тор	of Casing Elevation: 1986.94(s) 1987.16(d) Feet AMSL					
Depth (ft.)	Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	SOSI	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)				
-							SS (SP-SN		AS ABOVE	-				
85-		49 50			1.9	BZ 0.3	SS (ML)	× × × × × × × × × × × × × × × × × × ×	84 to 90 ft. SILTSTONE: Dense, (5Y 7/2) Light Gray, Predominantly Silt with Fine to Medium Grained Sand, Subangular Grains, Dry. Slightly Moist at 86 ft. bgs.	1900				
90-		50			1.8	BZ 0.3	SS (SP-SM		90 to 95 ft. SANDSTONE: Dense (5Y 6/2) Light Olive Gray, Moist, Fine to Medium Grained Sand with Silt, Lesser Degree of Cementation, Well Rounded Grains, Moist, Crushes Somewhat Easily in Hand.	1895				
95-		50	\boxtimes		2.1	BZ 0.3	SS (ML)	× × × × × × × × × × × × × × × × × × ×	95 to 105 ft. SILTSTONE: Very Hard, (2.5Y 7/2) Light Gray, Predominantly Silt with Very Fine Grained Sand, Trace Gravel Inclusions, Subangular to Subrounded Grains, Dry.	1890				
								× × × × × × × × × × × × × × × × × × ×		1885				

SOIL LOG TT-MW-2_1-4.GPJ FSTRW_SA.GDT 11/4/04

Notes: Boring Log Reviewed By: J. Brenner 10/20/04

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

LOG OF BORING Tt-MW-2-4

							(Sheet 6 of 6)							
nt: Lock	heed-Ma	rtin Cor	poration				Drillin	g Company: West Hazmat						
ect: Bea	aumont S	ite 2					Drillin	ng Method: Hollow-stem auger						
ect Num	ber: 135	05-02					Samp	oling Method: Split Spoon						
ition: Be	eaumont,	CA					Borehole Diameter: 12 in.							
logist: S	Steve Hru	by				-20 5 5	Northing: 2,272,392.82 Feet							
Started	l: Septen	nber 3,	2004				Eastin	ng: 6,325,561.45 Feet						
Comple	eted: Sep	tembe	7, 2004				Groui	nd Surface Elevation: 1,984.56 Feet AMSL, NAVD 88						
Depth:	105.0 Fe	et bgs				***************************************	Top of Casing Elevation: 1986.94(s) 1987.16(d) Feet AMSL							
Time	Blow Counts	Samples	Sample ID	PID Readings	Comments	nscs	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation (ft.)					
	50	\boxtimes						AS ABOVE						
							× × × × × ×		-					
									1					
						(ML)	× × × × × ×		<u>=</u>					
	SPHANO						× × ×		1880					
	50	\boxtimes			BZ 0.3	SS	×. ×. ×	105 to 106 ft. SANDSTONE: Dense, (5Y 5/3) Olive,	1 -					
								Boring Terminated at TD of 106 Feet bgs.	-					
									-					
									_					
									1875					
									-					
									-					
									_					
1									1870					
		1							1070					
									-					
	j								-					
									1865					
									A STATE OF THE STA					
	ect: Beact Num ation: Bo logist: S Started Comple I Depth:	ect: Beaumont Siect Number: 1356 ation: Beaumont, logist: Steve Hru Started: Septem Completed: Septem Depth: 105.0 Fe	ect: Beaumont Site 2 ect Number: 13505-02 ation: Beaumont, CA logist: Steve Hruby Started: September 3, Completed: September I Depth: 105.0 Feet bgs Solution	ect Number: 13505-02 ation: Beaumont, CA logist: Steve Hruby Started: September 3, 2004 Completed: September 7, 2004 Depth: 105.0 Feet bgs	ect: Beaumont Site 2 ect Number: 13505-02 ation: Beaumont, CA logist: Steve Hruby e Started: September 3, 2004 Completed: September 7, 2004 I Depth: 105.0 Feet bgs Building S Building	ect: Beaumont Site 2 ect Number: 13505-02 ation: Beaumont, CA logist: Steve Hruby Started: September 3, 2004 Completed: September 7, 2004 I Depth: 105.0 Feet bgs Solution: Beaumont, CA I Depth: 105.0 Feet bgs Solution: September 7, 2004 Solut	ect: Beaumont Site 2 ect Number: 13505-02 ation: Beaumont, CA logist: Steve Hruby e Started: September 3, 2004 e Completed: September 7, 2004 I Depth: 105.0 Feet bgs Solution	pect: Beaumont Site 2 Drilling pect Number: 13505-02 Sampation: Beaumont, CA Rogist: Steve Hruby Started: September 3, 2004 Completed: September 7, 2004 Depth: 105.0 Feet bgs Top of September 3, 2004 September 3, 2004 Formula Period September 3, 2004 September 7, 2004 September 7, 2004 September 7, 2004 September 7, 2004 September 3, 2004 September 7, 2004 September 3, 2004 September 7, 2004 September 3, 2004	Drilling Company: West Hazmat Drilling Company: West Hazmat Drilling Method: Hollow-stem auger Sampling Method: Split Spoon Sampling Method: Split Spoon Borehole Diameter: 12 in. Northing: 2,272,392.82 Feet Started: September 3, 2004 Completed: September 7, 2004 Depth: 105.0 Feet bgs Top of Casing Elevation: 1,984.56 Feet AMSL, NAVD 88 Top of Casing Elevation: 1986.94(s) 1987.16(d) Feet AMSL LITHOLOGIC DESCRIPTION BZ 0.3 Drilling Company: West Hazmat Drilling Method: Hollow-stem auger Sampling Method: Split Spoon Borehole Diameter: 12 in. Northing: 2,272,392.82 Feet Easting: 6,325,561.45 Feet Ground Surface Elevation: 1,984.56 Feet AMSL, NAVD 88 Top of Casing Elevation: 1986.94(s) 1987.16(d) Feet AMSL LITHOLOGIC DESCRIPTION AS ABOVE **** *** SS* Moist, Fine Grained Sand with Silt, Subrounded, Dry.					

bgs = below ground surface AMSL = above mean sea level

NA = not applicable

П

K rage + DI

(i)

THE COUNTY OF THE TANK OF THE CASE OF THE PARTY OF THE PA T. PURGING FIELD DATA LOGS

(initial) (initial) PURGING DEVICE 3'55 bail OVA: FID | PID | P IN BREATHING ZONE (ppm) SAMPLING DEVICE SIMISh TOTAL WELL DEPTH (feet) 2 1-mw2-8 DUPLICATE I.D. _ SITE NUMBER Boe-mort

FINAL PUMP DEPTH (feet) SAMPLER'S SIGNATURE

(vented to) (vented to) 2

	Ra (mlp
·	Bore Hole Volumes
	Volume Purged
\ <u></u>	Color
	ORP
	Dissolved Oxygen
	pH Turbidity
v (gais)	Hd
	EC (µmhos/cm)
	Temp Meg.
	Pump Depth
	Water
WELL/PUMP VOLUME (V) (gals)	Activity
WELL/PUMP	E

CASING/TUBING DIAMETER (in/ft) __

54.88

STATIC WATER LEVEL (n btoc)

SAMPLE I.D.

WATER COLUMN (feet)

MONITORING WELL IDENTIFICATION

PROGRAM NAME LOCK LOO

DATE -

.].	
-	F
À	1
Ì	
	F
l	
i	L
(gals)	
3 V	ŀ
	F
	1

Time Activity Water Pump Temp (Thos) CVP) x Time Pump (Thos) CVP) x Time Pump (Thos) CVP) x Time Pump (Tro) Time Pump (Flow	Rate mIPM / GPM)]								A	/	الد			
Activity Lives Depth One (inthosorm) pH Turbidity Oxygen ORP (inthosorm) pH Turbidity Oxygen Oxygen Oxygen ORP (inthosorm) pH Turbidity Oxygen Oxy	٠.														. *	Ä
Activity Water Depth Temp (imhos/cm) pH Turbidity Oxygen ORP (inhoc) C/F) x Start bas Scisco (TD-73.23) Start bas Scisco (TD-73.23) Start bas Scisco (TD-73.23) Start bas Scisco (TD-73.24) Start bas Scisco (TD-73.25) Start bas Scisco (TD-73.25	-		S. C.	2:0		20	R		1	² S	40		8,8	45	99	
Start bay Sign Pump Temp EC (unhos/cm) pH Turbidity Oxygen Level Depth (note) (1 bioc) (1 bio		Color									-					_
Activity Water Pump Temp (umhos/cm) pH Turbidity (nebe) (it bice) C/F) x (nebe) (it bice) C/F) x (not) pH Turbidity (nebe) S4.88 (nebe) C/F) x (not) pH Turbidity (nebe) S5.89 (TTD-73.2.3) for bla to Scuele Leal das to bracklind ic Statement S5.89 (TTD-73.2.3) statement S6.75 (TTD-73.2.5) for bla to S6.85		ORP (mV)							1	1	1	•				
Activity Water Pump Temp EC (umhos/cm) pH Turbidity (it bioe) (it		Dissolved Oxygen (mg/L)			ask					,			lestre	•		
Start bad Several Pump Temp (in hos/cm) pH (in boc) (in boc) C/F) x (in boc) C		Turbidity (NTU)			7,		•			·	1		Mars	X :		
Start bas Style (it bioc)		- A		23.	Mad	(4)	5				27		ma			
Start bas Screek Cit bioc) Start bas Screek Leed Start bas Screek		EC (µmhos/cm) x		-73.	1 of								1			
Start bay School (fibico) Start bay School (fibico) end bay School Led start bay School Led start bay School end scans end scans end scans end scans start bay School start bay School start bay School start bay end bay		Temp (Deg. C/F)		10	مهم	(7	1	-			OF		Je lei			
Slort bad end bad start bad bard shart band bard start band start s		Pump Depth (ft btoc)			Lan			.1.	1	1	Ĭ.		,			
start bas start		Water Level (ft btoc)	54.88	5590	Scrab	55.4	5711						choo			
11:05 11		Activity	1	1	1			Statens	end grant	14 44	I well but o	Salar Salar	00000			CHA CA
		Time	11.05	1:35	() 10	2:10	7:2	7:25				6.63	07.0	3.0	6.6	3.5

PARAMETERS YOR WATER QUALITY STABILIZATION Turbidity S5 NITUs Conductivity ±5% Temperature 1°C(1.8°F) Taken from first bailer, immediately before sampling. .

Fe+2 (ppm)

20' SCrOON

Comments:

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

	FIELD DATA	FIELD DATA L	Τ,
FIELD D.	FIELD D.	FIELD D.	ATA
FIELD	FIELD	FIELD	Q
FIEL	FIEL	FIEL	Q
			FIEL

N

SITE NUMBER

000

Sa red. Slot

rage to

Darelopor 'ET - PURGING

PURGING DEVICE

SAMPLING DEVICE

(vented to) (vented to) (initial)

(initial)

FINAL PUMP DEPTH (feet)

TOTAL WELL DEPTH (feet) 73.1

STATIC WATER LEVEL (A bloc) 54.9

SAMPLE I.D.

WELL/PUMP VOLUME (V) (gals)

WATER COLUMN (feet)

DUPLICATE I.D.

T- $m\omega_2$

Bernst

PROGRAM NAME LOCK has MONITORING WELL IDENTIFICATION

DATE _

OVA: FID | PID | OVA: FID | DAY

IN BREATHING ZONE (ppm)

	Ø
SAMPLER'S SIGNATURE	•
CASING/TUBING DIAMETER (in/R)	18.34×0.65: 11.92 3V(gals)

							The second second					
Flow Rate (mIPM / GPM)	2.0	2-0	0.5	0.5		1.0	1.0	0.8	ı	6.1	1.0	中
Volume Bore Hole Purged Volumes (gals) Purged	5.03	80 6.7/	7.38 0.5	7.80 0.5		93 7.80	8.64	113 9.48	117 9.82	9.85	10.65 1.0	135 11.33 10
Volume Purged (gals)	60	80	مل	93		93	103	113	117	117	127	135
Color	-	Dr. S	bry	bry]	15rn/cleudy 103 8.64	ני יי	h 71			
ORP (mV)	i	1	1	1				ı		1		
Dissolved Oxygen (mg/L)				1		1		-)				
Turbidity (NTU)	,	41000	+1000	4 000	0		41000	4 1000	4 1000		44000	35
Hd .		4	4	-	30		1	-				
EC (umhos/cm) *					Car voo							
Temp (Deg. C/F)	1	}	1	١	0	1	-	,		,		-2
Pump Depth (ft btoc)	73	73	73	73	at Own	71	7.1	71	iden	7[7[don
Water Level (ft btoc)	54.91	67.85 73	7225	73.40	Decimo	Ó	43.8	6885	period	@.0°	66.78	. 200
Activity	9:36 staton 54.91 73	6	9:50 Hunsepingodo 7225 73		5hut 08\$	10116 students	-		well	Statourn 60.00	P	well ourse
Time	9:36	9416	9:50	10:00	1	91101	10,5%	10:36	Qh: 01	10:55	11:08	51:11

Taken from first bailer, immediately before sampling. Fe+2 (ppm)

368

7

62.8

stert pruse

1:25

2:3

PARAMETERS FOR WATER QUALITY STABILIZATION Conductivity ±5% Turbidity ≤5 NTUs Temperature ±i° C (1.8°F) +0.1 Hd

V:\graphics/ip/BGMP-AFRC/BGMP coreldrawfigs/purgetable.cdr

3

35

0.0

11.58

30

Comments:

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

FIELD DATA LOG ? ET - PURGING

PURGING DEVICE Gund Sos reds Slot OVA: FID | PID | In Casing (ppm) IN BREATHING ZONE (ppm) FINAL PUMP DEPTH (feet) SAMPLER'S SIGNATURE SAMPLING DEVICE __ 73.25 3 V (gals) CASING/TUBING DIAMETER (in/ft) 5, 162 TOTAL WELL DEPTH (feet) 11.92 MONITORING WELL IDENTIFICATION TT - MLJ 2-DUPLICATE I.D. SITE NUMBER Bound PROGRAM NAME LOCK LOCK WELL/PUMP VOLUME (V) (gals) STATIC WATER LEVEL (ft btoc) _ WATER COLUMN (feet)

SAMPLE I.D.

DATE __

(vented to) (vented to) (Initial) (initial) AD

							table.cd	sa/purgo	واطدعسان	nos ¶Mi	FRC/BC	IV-9MD	B/qri/zo	iAqstg/:V
Rate (mIPM / GPM)	0.5							_				>)		
Bore Hole Volumes Purged	11.74	11.95	12.16	12:42	1258	12.84	1300	13.26	13.42	13.67	13.84	15 OF		
Volume Purged (gals)	140	143	145	148	150	153	155	158	160	163	16.5	168		
Color	cludy	- 11		2		11	clour	10		1.	2	J		7
ORP (mV)	1					1	1		1			-1		
Dissolved Oxygen (mg/L)		1	1	1		1	1	J	\ 		1	1		
Turbidity (NTU)	339	329	89	7-1-4	44.8	52.0	25.2	3,96	14.5	13.4	16.3	15.8		
Нd	1		_					L			\	1		
np EC g. (µmhos/cm) F) x														
Temp (Deg. C/F)	1	1		1		,		1	1	-		J		
Pump Depth (ft btoc)	1/	17	7.1	71	17	12	71	71	ĨΖ	71	7.1	12		
Water Level (ft btoc)	64.69	65.02	65:29	65.50	65.65	577	65.58	65.95	10,02	11.99	66.15	10,621		
Activity											2			
Tíme	1:35	1:40	11:45	1:50	1:55	12100	2:05	01:2	2:15	2:20	2,25	2:30		

PARAMETERS FOR WATER QUALITY STABILIZATION Turbidity S 5 NTUs Conductivity ±5% Temperature ±1°C(1.8°F) pH ± 0.1 Taken from first bailer, immediately before sampling. Fe+2 (ppm)

Comments:

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook..

GKUUIYU WALER IYUUY 'ULULU TELL FIELD DATA LOG SH

- PURCINE Development

Page 1 of

53 bails PURGING DEVICE 3.

OVA: FID | PID | OVA: FID | PID | PI SAMPLING DEVICE

Roumont - Sile

SITE NUMBER

アとのダー

MONITORING WELL IDENTIFICATION

PROGRAM NAME LOCK

DATE -

N

5 こく (initial) (initial)

(vented to) (vented to)

(

IN BREATHING ZONE (ppm)

FINAL PUMP DEPTH (feet)

TOTAL WELL DEPTH (feet) 117.25 CASING/TUBING DIAMETER (in/ft)

STATIC WATER LEVEL (ft bloc) 68.35

SAMPLE I.D.

WATER COLUMN (feet) 429

DUPLICATE I.D.

٠,	
	Flow
	Bore Hole
	Volume
\star	
7	
	Dissolved
1	. DI
V (gals)	,
14 3	EC
3.	Temp
0.65	Pump
47.6x	Water
WELL'PUMP VOLUME (V) (gals)	
WELL/PUMP	

SAMPLER'S SIGNATURE

	d	7	(
		J	
		J	

Flow Rate (mIPM / GPM)	i	1	1		1	は	Mg.	1		0.85	0.80	,		ş
Bore Hole Volumes Purged	B	0.16	0/8年		0.16	0.64	6.64	0.46		0.96	1.22	1.48	54 1.73	1.99
Volume Purged (gals)	Ø	h	る事		6	20	20	95		30	38	2) /2	5 4	29
Color									Saye II.	000	cludy		• 1	N
ORP (mV)								120.25	SHARL		1	1	1	
Dissolved Oxygen (mg/L)						•		21 0	04			١	1)
Turbidity (NTU)								\$	O WY		41000	+1000	4[00)¢	579
hф				,				moh	à		1			
EC (µmhos/cm) x							-	mals	14h a van	20.14				
Temp (Deg. C/F)								Sunc	(W	7 - 0				
Pump Depth (ft btoc)	1							0	Side	CTO	120	120-	120	150
Water Level (ft btoc)	69.35		74.98	2	73.43	89.08	84.03	0300	of my	76.41	81.30	91.20	100.72	- 021 65.301
Activity	Statbail	_	sted such 74.98	end such	Statbail 73.43	l'ad bus	Statowno 89.03	end pur	well notin	start pung 70.4				
Time	8:00	8:15	8:25	4:10	9:15	9:35	07:6	9:50		7:10	7:20	7:30	7:40	7:66

Taken from first bailer, immediately before sampling. Fe+2 (ppm)

Comments:

PARAMETERS FOR WATER QUALITY STABILIZATION Turbidity S5 NTUs Conductivity ± 5% Temperature ±1°C (1.8°F) pH ±0.1

V:\graphicz\inp\BCMP-AFRCBGMP coxcldrawfigs/purgerable.cdr

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

T. PHROHNO FIELD DATA LOG SF GNOUTH TITLE ALL LACE

Development

PURGING DEVICE 9 mind Sus red: 510 I

K

SITE NUMBER

DATE 9/1 PROGRAM NAME

Bournent

OVA: FID | PID | In Casing (ppm) SAMPLING DEVICE

(initial)

50

(vented to) (vented to)

(initial)

IN BREATHING ZONE (ppm)

FINAL PUMP DEPTH (feet)

120.14

TOTAL WELL DEPTH (feet)

70.5

STATIC WATER LEVEL (R btoc) _

SAMPLE I.D.

49.73

WATER COLUMN (feet)

WELL/PUMP VOLUME (V) (gals)

DUPLICATE I.D.

MONITORING WELL IDENTIFICATION TT- MW2- 2

CASING/TUBING DIAMETER (in/ft)

SAMPLER'S SIGNATURE

IPM / PM)

တ

N

5 b

.95 294 0.5

500

Sook

10min

rechorde

10 m

4

94.90

2:30

8:45

8:48

ourses

1938 118

Statpon

7:02

116-42 120 24-98 0.9 B.W + 1000 2.85 -39.0

32, 3 3V (gals) 49.73 x 0.652

PARAMETERS FOR WATER QUALITY STABILIZATION Conductivity ±5% 4.52 4.33 387 07 125 971 114.09 orn /clady 7 Cardy 37.5

115-0

200(+

dry

enell pomed

3

112-65 118

61

106.10 27.68

7:22

7:32

7112

702 788

V:\graphicstip/BCMP-AFRC/BCMP coreldrawfigs/purgetable.cdr

b

2.94 त्त

93

110

10001

239

Fe+2 (ppm) - /20.17 40 07/6 Comments:

2 2

198

80.0

(Cohoce

116,01

とん

Turbidity s 5 NTUs Temperature ±1°C(1.8°F) pH ± 0.1 Taken from first bailer, immediately before sampling.

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook..

rage 10 - 18er

FIELD DATA LOG RET - PURCHIG

	PATE 9/	7/23/04		SITE NUMBER	IBER	7			PURGING DEVICE	.	a mal Ess	- 1	molyslast		- 1
	PROGRAM NAME	NAME LOCK LA	A POB	Remis	4				SAMPLING DEVICE		5	1	1		1
	MONITORI	MONITORING WELL IDENTIFICATION	H	T-mw	25-	2		3	OVA: FID	OVA: FID PID (A) (ppm)		(initial)	(venicd to)	(0	- 1
	SAMPLE 1.D.			_ DUPLIC	DUPLICATE I.D.				IN BREATHIN	IN BREATHING ZONE (ppm)		(initial)	(vented to)	(0	- 1
	STATIC WAT	STATIC WATER LEVEL (A bloc) 69	9.75	TOTAL WELL	WELL DEPT	DEPTH (feet) 120.08	20.0		FINAL PUMP	FINAL PUMP DEPTH (feet)					1
	WATER COL	WATER COLUMN (feet)	50.33	CASIN	G/TUBING I	CASING/TUBING DIAMETER (in/ft)	3		SAMPLER'S SIGNATURE	SIGNATURE	0				
	WELL/PUM	WELL'PUMP VOLUME (V) (gals)	S.D.3	SD. 33x 0, 65.		32.7	3 V (gals)				A)				
	Тіте	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C/F)	EC (µmhos/cm) x	нд	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	me Bore Hole Volumes	le Rate s (mIPM / GPM)	3,000
	8:33	stations 6975	69.75	611								0	8	2.0	
	3145		den								-	92	,9		
	9:12	_	832	511											1
	36,6		98.15	200	2 8	hot de	Cesty					52	~		1
	60	dis 420%	40	955:84	1 +8	491	_	Ca/\							- 1
"CL	7:4	Starbour	70:42		T					1		,	8	0,73	
•	242	-	77.25	١١٤				ഷ	·			325	بم	0.50	- 1
	7:50		79.90	311				379				52'9	7	0.23	1
	7:55		83.28	811				162			ē	7.50	۵	1	1
	8.8		8-4-98 118	777	2409	0.504	5.15	152	45.77	0.9	C larch	6.75	8	4	
	8		860	>11	24.76	24.760.5068.19	8.69	130	3.86	6-4-	4	6-00	0	-	- 1
	8:10		87.98	118	24.51	0.499 8.78,08.3	81.8	108.3	3.72	7.8.	4	4.25	8	1	- 1
	8:15		90.3	811	24.50	3212898660	789	32)	3,76	P-6-	4	10.50	p	4	1
	6:20		93.12	811	54.5	0.496 8.86	8.8g	186	3.74	-04	¥ _	11.75	8	7	
	Comments	į		Fe+2 (ppm)	<u>E</u>	Take	n from fir	rst bailer, imm	Taken from first bailer, immediately before sampling.	c sampling.		5 FOR WATER (±1° C (1.8°F)	QUALITY ST. Conducti	CITY STABILIZATION	Z
	Collusions											± 0.1	Turbidit	Turbidity S5 NTUs	

V:\graphics/im\BGMP-AFRC\BGMP coreldrawfigs/purgetable.cdr

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

GINCOLLE ITELEMENTATION LINEAU CONTRA FIELD DATA LOG SI

De colonal T. PHIRCING

OVA: FID PID N In Casing (ppm) SAMPLING DEVICE PURGING DEVICE

(initial)

(initial) _

(vented to) (vented to)

IN BREATHING ZONE (ppm)

A-2-TNAL PUMP DEPTH (Rect)

TOTAL WELL DEPTH (feet)

STATIC WATER LEVEL (A bloc) 69.55

SAMPLE I.D.

22.19

WATER COLUMN (feet)

DUPLICATE I.D.

MONITORING WELL IDENTIFICATION TT- MW2

SITE NUMBER

Bauman

PROGRAM NAME

DATE -

CASING/TUBING DIAMETER (in/ft)

SAMPLER'S SIGNATURE

	Bore Hole Volumes
	Volume Purged
A	Color
	•
	ORP
	Dissolved Oxygen
	Turbidity
V (gals)	,,,,
1	EC (µmhos/cm)
65-14	Temp (Deg.
9 X B	Pump Depth
22.19	Water
PUMP VOLUME (V) (gals)	Activity
WELL/PUMF	Time

Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C/F)	EC (µmhos/сm) x	Нd	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	ø	Color
-	1000									
15-15t Do.	07:50		,							
	1		4	10.	1					
6.70 Day	17.73	1	9	シャーロン・M	3					

8:0 11:30

ORP (mV)	i
Dissolved Oxygen (mg/L)	
Turbidity (NTU)	
Нd	
EC hos/cm)	

(mIPM/ GPM) Rate Flow

Purged

Purged (gals)	Ø	33		3	8	33
Color						. E
ORP (mV)			١			
Oxygen (mg/L)			٦ . ٨	28		
urbidity (NTU)		-1	7	<u> </u>		

2.08

2.08

2.08

2.08

Ž	77.75		400	- (TB+101.33)	33	1		1	1
			-			-	7		
CAR		0	0	DOWN NOT WORK GAR	Ø7 *	3	XX		
2	2.17 Jane	s E		.			.	•	
1			*1					٠	
7-									
9	PO.01								
	73.93		一十	(FE-10107)	8	Ē.	8 5)		
-									

1			\dashv	-	+	
×1.168)		. .			+10001+
10 mm	a .			(TD101-33)	1	
)	s P	5 G			95	.98
	_		10.01	73.93	69.62	78.65 98
ころのよれ	23.17 James 4 24 05	2 end send	15 eft to 1.000	15 end Del 73.93	30 statum 69.62 95	
6	3	0	1	立	2	3

	1	24	1	1	,	
		80.57 9.9 tunos pump	. (.]	10:36 punp shut of / got restrict
	•	ton	.	1		4
-	86	26	101	101	101	90
	78.65 98	80.57	77.12	79.35/10/	19.87 101	7 05
			10.05 restet penso 77.12 101		堂	D shu
			rest			mna
-	9:45	0.0	10.05	16:20	10.35	10:36

V:\graphics\inp\BGMP-AFRC\BGMP coreldrawfigs/purgerable.cdr

湖 6,75

115

シング

+ 1000 400

000/4

ans

29

365 3.47

73

20

SS

95 6.8

500 5,1

Or I

Taken from first bailer, immediately before sampling. Fe+2 (ppm)

Comments:

38:01

Parameters for water quality stabilization Turbidity S5 NTUs Conductivity ±5% Temperature ±1°C(1.8°F) pH ±0.1

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing and sampling activities and recorded in the logbook.

T. PHILOTEC FIELD DATA LOGS

	Speed pmy	777
	2	0
)	0	
i	2	
)	2	L
•	S	1
)	4	
•		ì
4		2
1		č
	-	
)		
)		
1		

SAMPLING DEVICE PURGING DEVICE

OVA: FID | PID | In Casing (ppm) N BREATHING ZONE (ppm)

(inivial)

SAMPLER'S SIGNATURE

FINAL PUMP DEPTH (feet)

3 V (gals)

70.61

31.71 40.65=

WELL/PUMP VOLUME (V) (gals)

CASING/TUBING DIAMETER (in/ft)

TOTAL WELL DEPTH (feet)

69.62

STATIC WATER LEVEL (ft bloc) ___

SAMPLE I.D.

31.7

WATER COLUMN (feet)

DUPLICATE 1.D.

-mw2-3

MONITORING WELL IDENTIFICATION PROGRAM NAME LOCK NOOC

SITE NUMBER

Boumon

Dissolved

ORP (mV) Oxygen (mg/L)

Turbidity (NTU)

 $^{\mathrm{pH}}$

EC (mmhoo/cm)

Temp (Deg. C/F)

Pump Depth (ft btoc)

Water Level (ft btoc)

Activity

Time

700

110

clady

Color

Purged Purged (gals)

7.28

80

Volumes

(mIPM/

GPM)

h.

Bore Hole

Flow Rate

Volume

(vented to)

(vented to)

Ó

(initial)

al Sas redista I

1 rage 01

PARAMETERS FOR WATER QUALITY STABILIZATION

Conductivity ±5% Turbidity ≤5 NTUs

±1°C(1.8°F) ±0.1

Hd

Temperature

Taken from first bailer, immediately before sampling.

Fe+2 (ppm)

Comments:

V:\graphics\inp\BCMP-AFRC\BCMP coreldrawfigs\purgetable.cdr

2.0

245 11.89

brn

12.86 13.34

265

brn

-28.8

7.43 +1000 6.62

41000

S

end purp PRINCIPAL CONTROL

12:05

M

17:30

275

b, k

220 10.68

200 9.71

500 brn

-262 2

5,07 S.20

24.89 1,236 7.50 + 1000

28

-355 -362

5.08

747 \$100D

2462 1.252

8

89.13

5.11

7.48 +1000

1251

24.74

98 90

126-18 gmogeta

8:1

二路 1:28

कराः। वान्त

830 63.65

Dry

-33.0

7.50 41600

9.32

177 8.59

-305 -31.2

5.35

1.50/125.7 7.50 451

24.52 1.220

98

81.67

0::

11:15 8.2

24.55 1.212 2464 1.277

98

81.68

81.18 81.68

5.3

5.41

280

7,53

2452 1.237

90

000/+ 1/5

2473 1.215

9

80.68 81.18

0.30

\$:=

170 8.25

20.00

185 192

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook..

7 PURGING DEVICE G MANAGES 1001856 IT (vented to) (vented to) (initial) (i nitial) OVA: FID PID (In Casing (ppm) IN BREATHING ZONE (ppm) FINAL PUMP DEPTH (feet) SAMPLER'S SIGNATURE FIELD DATA LOGS TET - PURGINE SAMPLING DEVICE TOTAL WELL DEPTH (feet) 101.33 CASING/TUBING DIAMETER (in/ft) 1 DUPLICATE 1.D. - MW 2 Bannet SITE NUMBER, STATIC WATER LEVEL (ft bloc) 69.82 MONITORING WELL IDENTIFICATION WATER COLUMN (feet) DATE 9/23 PROGRAM NAME _ SAMPLE I.D.

ł	× 1, 2, 0	Ţ.	· T.		1	T			r) bnußer	zanwert	P corelo	CBGM	MP-AFI	Davqii	phics
	Flow Rate (mIPM /	0			-	\-\ <u>\</u>	0								
	Bore Hole Volumes Purged	B					8								
	Volume Purged (gals)	ø	6	0/	¥	~	8	2.3	5.5	7.5	0.07	17.5	(55)		
	Color		clade			1		cludy	, "	,	۲,	•	٠		
	ORP (mV)							-50.7	-619	4.49-	6.99-	7.79-	-673		
	Dissolved Oxygen (mg/L)							7.07	7.25		••		7,30		
	Turbidity (NTU)		43/	553	551	dsh		972 7.18 305	1.301	63.5	59.1	1.8%	992 7.43 49.2		
3 V (gals)	н							7.78	7.60	7.55	7.49	7,44	2.43		
1	EC (µmhos/cm) x		(a)					0.972	0.952 7.60 108.1	0.947 7.55 63.5	25.70 0.975 7.4 59	0 987 7.44 48.1			
	Temp (Deg. C/F)						-	25.35	25.56	25.66 0	25.7D	25.73 0	25.80 B.		
	Pump Depth (ft btoc)	85	88	53	80	Jh Vo	8	65	53	85	82	25	5		
	Water Level (ft btoc)	2.59	72.28	72.64	72.72	72.81	69.73	72.63	72.95	73,23	73.33	73,36	73.37		
WELL/PUMP VOLUME (V) (gals)	Activity	12:15 Shubpung 69.2	3			12:55 end outo						(4)			
WELL/PUMI	Time	12:15	12:25	12:35	57:21	55:21	10:15	10.20	52.50	05:00	10:35	10.90	10:45		

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the Initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

PARAMETERS FOR WATER QUALITY STABILIZATION

Taken from first bailer, immediately before sampling.

Fe+2 (ppm) -

Temperature ±1°C(1.8°F) pH ±0.1

Conductivity ±5% Turbidity ≤5 NTUs

Comments:

ì	SIS
)	PURC
i	Į.
)	TE
!	
•	(Z)
,	Ŏ,
1	DATAL
:	AT
j	U.
ì	L
) · · · · · · · · · · · · · · · · · · ·	FIELD DATA LOGS

CLOS DOPLICATE LD. 50.55 TOTAL WELL DEPTH (I. 1.15 ZZ.1e CASINOTUBING PILA) 19.15 ZZ.1e CASINOTUBING PILA 19.16 ZZ.1e CASINOTUBING PILA 19.16 ZZ.1e CASINOTUBING PILA 19.16 ZZ.1e CASINOTUBING PILA 19.17 ZZ.1e CASINOTUBING PILA 19.18 ZZ.1e CASINOTUBING PILA 19.19 ZZ.1e CASINOTUBING PILA 19.10 ZZ.1e CASINOTU	DATE	9/14/04		SITE NUMBER	MBER	(1)	(s. 19. 19. 19. 19. 19. 19. 19. 19. 19. 19	x	PURGING DEVICE		3"55 bollu	(Swg)	150		
### SPEATHON TOWN FOR A Shallow OW. FD PROBLOG FOR INCHANGE ON PRICE OF PROBLEM ON	RAMI	7	Charal	Boun	Hem-	- 5:5	22		SAMPLING	DEVICE					
ER LEVEL (18 bico) \$\infty\$ \overline{\text{Colore}} \overline{\text{First Party}} \overline{\text{Colore}} \overline{\text{First Party}} \text{Fi	TORIL	NG WELL IDENTIFICA	NOLLA	w-	3	-45	hallo	B	OVA: FID			(le	a	nted to) _	
ER LEVEL (R boo) SOSS TOTAL WELL DEPTH (Led) 19.13 19.13 19.13 FINAL PUMP DEPTH (Red) 19.16 X O.S.S. TOTAL WELL DEPTH (Led) 2.12 1 3 V (gals)	PLE I.D				CATE I.D.	1		-	IN BREATH	IING ZONE (p		<u>ع</u> اً	ق ا	nted to)	
4.18 22.16 CASTROTUBING, PLEATER (1971) 2.47 31 (2014) 2.47 31 (2014) 2.47 31 (2014) 2.47 31 (2014) 2.47 31 (2014) 2.47 31 (2014) 2.42 2.47 31 (2014) 2.42 2.42 2.47 2.42	IC WAT	TER LEVEL (ft btoc)	50.8	. 1	WELL DEP	H (Fee)	569.73	3	S FINAL PUN	4P DEPTH (fee	÷.				
Start Star	R COL	٦	4	2.6 CASIN	IG/TUBING.	PIANETER (II			SAMPLER	SSIGNATURE		. (
Stat by Water Pump Temp (in bios) (i	L/PUMI	P VOLUME (V) (gals)	19	3 X O. 6		2.47	3 V (gals)								
Stad bal 50.55 (TD - 73.12) stad bal 71.31 (TD - 73.12) end saab stad bal 72.55 (TD - 73.15) end bal 72.55 (TD - 73.15) stad bal 72.55 (TD - 73.15) stad pan 50.43 stad pan 50.43 tuell paged day tuell p	ime	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C/E)	EC (µmhos/cm x	Hd	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volui Purg (gal			Flow Rate (mIPM /
Start bas 71.31 (FD-73.12)	25	19 trats	50.5									0	7	7	1
States States	子		71.31	.)	10-	73.	(2)					22	=	Co	1
status end bail 72.85 [7D-73.15] end bail 72.85 [7D-73.15] shat pay 50.42 shat pay 50.42 [7.64] well paged dry 9:13 well paged dry 10' sevagan Fetz (ppm) — Taken from first bailer, immediately before sampling.	14		59.78									-			
start bail 60.15 - 73.151 end bail 72.85 (TD-73.151) SO.13 rechart 1.57 (45 min 7 1504/h SO.13 Let pup 50.42 Let pup 7:3 Let - 19.45 70.51 Taken from first bailer, immediately before sampling.	8			l						<u> </u> -					
Start bas 1 (20.15	8	end sund		l											
end bail 72.85 (TD-73.15) 50.43 Let Apy 50.42 Let I pased 1my 12. 20.45 Let I pased 1my 2.13 Let - 19.45 70.51 2. recture 6.03 gall / min 10' Sevaon Fe+2 (ppm) — Taken from first bailer, immediately before sampling.	23		(40.LS	l								22		09	ı
50.42 So.42 Luell pursed day LU . 70.95 The from first bailer, immediately before sampling.	20	end bail	72.85	7	TD.		(5)					4.8		_	1
50.42 well puxed dry U. 10.45 rectures 6.05 gall/min 10' Seveny Fe+2 (ppm) Taken from first bailer, immediately before sampling.	13		71,28		echan	1.57	1/95	מישו	\$4	1 4005	1				
24.24 py 50.92 Well pred dry W. L. 70.95 Evectors 6.03 gall / min 10' Servey Fe+2 (ppm) Taken from first bailer, immediately before sampling.	38		50.43												
well puxed dry W. L. 70.95 Evenue 6.03 gall/min 10' Seveon Fe+2 (ppm) — Taken from first bailer, immediately before sampling.	48		50.92									45	10	-	1,5
Well present day 9:13 WL - 1995 70.51 **Section** 6.03 gail / min Taken from first bailer, immediately before sampling. 10' Servacy	28	0	67.63				1	570	j	1	Dr. m	04)	7	س	1.5
2 rectors 6.03 gall/min first bailer, immediately before sampling. 10' Schoon Fe+2 (ppm) Taken from first bailer, immediately before sampling.	70	I		700		-									
2 recharge 6.03 gall/min Taken from first bailer, immediately before sampling. 10' Schoon	3	.7M	70.95	-			7	9.95	70.5						
10' Schoon Fe+2 (ppm) Taken from first bailer, immediately before sampling.	٠.	- 1	harse	0.0	9						_				
pH x 0.1		,01	500	Fe+2 (ppm	ا. د		n from firs	ıt bailer, imn	rediately befo	re sampling.	PARAMETERS FO	OR WATER Q	UALITY	STABIL	IZATION
	nems.]:'				.1	Turbi	idity s5	NTUS
		1000	100												

Note: All water levels and pump depths are measured from the notch in the lop of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

FIELD DATA LOGS TT-PURGING

rage 1

0.0 PARAMETERS FOR WATER QUALITY STABILIZATION
Temperature ±1° C (1.8°F) Conductivity ±5% (mIPM/ Rate GPM) つい Conductivity ±5% Turbidity ≤5 NTUs (vented to) Bore Hole (vented to) Volumes Purged Ø PURGING DEVICE ACAND Ses CROSES DE Volume Purged (gals) 13.5 0,9 0:1 B 12.5 8.5 0 200 Ø ±1°C(1.8°F) (initial) (initial) Level 1/ Color Hd C [20 B OVA: FID PID PLA In Casing (ppm) bin 5 60 c N BREATHING ZONE (ppm) FINAL PUMP DEPTH (feet) -51.7 SAMPLER'S SIGNATURE -625 -18.9 Taken from first bailer, immediately before sampling. -74.6 177-ORP (mV) SAMPLING DEVICE 3 Dissolved Oxygen (mg/L) 98.9 5.40 5.45 5.93 3 5.64 25.87 0.407 8.97 522 107.2 Turbidity (NTU) 8,96,226 298 8.97 602 134 70 Shallew 8.96 0.402 8.97 3 V (gals) μd CASING/TUBING DIAMETER (in/ft) (mmyos/cm) 25.72 0.405 0.397 24.6 0.426 TOTAL WELL DEPTH (feet) A D N 25.30 25.58 Temp (Deg. C/F) DUPLICATE I.D. FT- MW2 SITE NUMBER pour und la con المدروم Fe+2 (ppm) 3 Depth (ft btoc) Pump 1 7 7 7 0 1 7 1 1 64.00 65.50 00/30) \$1.07 80,00 63.58 59.59 69.00 70.50 Water Level (ft btoc) well MONITORING WELL IDENTIFICATION WELL/PUMP VOLUME (V) (gals) starton STATIC WATER LEVEL (ft bloc) Activity WATER COLUMN (feet) PROGRAM NAME SAMPLE I.D. Comments: 11:48 11:45 8:43 11:35 1,25 8:8 5:55 Time 956 3:03 2:6 DATE -4.K

V:\graphics/inp/BGMP-AFRC/BGMP corcldrawfigs/purgetable.cdr

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial sercening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook..

190 (vented to) (vented to) 22 (initial) (initial) PURGING DEVICE 3" SS bach OVA: FID | PID | OVA: FID | PID | OVA: FID | DID | OVA: FID IN BREATHING ZONE (ppm) FINAL PUMP DEPTH (feet) TT - PURGING SAMPLER'S SIGNATURE SAMPLING DEVICE FIELD DATA LOG ? 22.17 3V (gals) CASING/TUBING DIAMETER (in/ft) 411. 4117 7117 DUPLICATE LD. SAPA 98.05 N - mwa-PROGRAM NAME LACK NOOF BOCKMONT WELLPUMP VOLUME (V) (gals) 34-10 x 0.65 SITE NUMBER 5 MONITORING WELL IDENTIFICATION STATIC WATER LEVEL (ft broc) 63.9 WATER COLUMN (feet) 34.10 DATE_9/ SAMPLE I.D.

Activity Level Depth (it bioc) (it b	5.1								Ì		Ť	2BOR-				NO	_
Activity Water Pump Temp (In block) pH Turbidity Oxygen (In block) (It bloc) C/F) x ———————————————————————————————————		1	1				1	1	1,5	٧.		_	ال ہ			ILIZATI	4 + 5%
Activity Level Depth Deg. (umbos/cm) pH Turbidity Oxygen ORP (if bioc) (if bioc) C/F) x (might) (might) (might) (might) (might) S-4c-4 by 63.45 (TD - 98.05) (might) (Bore Hole Volumes Purged	B	390				990	1.13	1.13	1.49	08.1	2,17	2.35	-		LITTY STAB	Conductivity ±5%
Activity Library Temp Temp (umhos/cm) pH Turbidity Oxygen (my) (mg/L) (m	Volume Purged (gals)	Ø	10/5				15	77	25	33	40	48		40		ATER QUA	.8°F)
Activity Water Pump Temp (Imbos) pH Turbidity Oxygen (Imbos) (Color							-		brn	מימ	bry	bro	1 Sc		PARAMETERS FOR W	Temperature ±1° C (1.8°F)
Start by Level Depth (Reg.) Start by 63.45 end boy 75.42 end boy 75.42 start bail (eless 75 end bail 14.25 end bail 14.25 end suab start bail 04.85 start bail 04.86 92.72 98.65 98.65 48 416 - 91.00 9 20.70 20.	ORP (mV)									a Designation			1	4	٥	e sampling.	
Start by 63.95 Start by 63.95 end bol 75.92 chalbel 75.92 chalbel 16.23 start bail (eless 75 chalbel 19.25 chalbel 19.2	Dissolved Oxygen (mg/L)			î.						I				Ne		Adately befor	
Start by 63.45 Start by 63.45 end bol 75.42 start bail (aluss 67.3) start bail (aluss 75.25 start bail 14.25 end bail 74.25 end such 25.52 start bail 14.25 end bail 14.25 end such 25.52 start bail 14.25 end such 25.52 start bail 14.25 start bail 14.2	Turbidity (NTU)		.05)							<i>∞</i> α/+	+1000	71000		90.00	86.00	st bailer, imp	
Start by Level Depth (it btoc) (it btoc) (it btoc) (it btoc) (it btoc) C/F) Start by 63.45			98					()		•				7	7	ron ri	
Start by Level Depth Deg. (it btoc) (it btoc) (it btoc) (it btoc) C/F) Start by 63.45	EC (µmhos/cm)		10					98.05								11 (Ren	
Start ball cond bay shall be and bay and sceat bail cond bail conditions.			5							1	.1		1	9.	.01	-	
Start ball end bay such end bay such such pail cond bay start bail cond ball well pung start pung s	Pump Depth (ft btoc)	I						F)	95				dry	,00,	00.	- Fetchm	
Start be end be end be end be end be end be end be start be end be start of mell be start of mell be start of mell be end	Water Level (ft btoc)	42.45	75.42	673			(,44,85	74.25		82.82	88.65	9272		16 - :	68 -7	addi	200 N
	Activity	Stath			Start Seach	end scuab	start bail	end bail	Start Dung	•	•	41	well pr	171	3	Dumped	IO' Scroon
18 13 15 15 15 15 15 15 15 15 15 15 15 15 15	Тіте	1310	1320	01:4	7:25	7:55	9:10	_	9.30	9:35	9:40	34.45	8/16	9:50	1	10:01	10'

V:\graphics/ip/BGMP-AFRC/BGMP coreldrawfigs/purgetable.cdr

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

*

GNOUTH WALEN MUNICIPAL CAMPO TIES 'ET - PHENING FIELD DATA LOG

rage Lui

Deedopms

PURGING DEVICE

SAMPLING DEVICE

gund Les 100d. Slo It pens

(initial)

OVA: FID PID X In Casing (ppm)

(vented to) (vented to)

(initial)

IN BREATHING ZONE (ppm)

98.05

TOTAL WELL DEPTH (feet)

STATIC WATER LEVEL (ft bloc) 68.92

SAMPLE I.D.

WATER COLUMN (feet) 29.13

WELL/PUMP VOLUME (V) (gals)

mw2-4

SITE NUMBER

PROGRAM NAME LOCK LOS d-BRUNAMIT

DATE -

MONITORING WELL IDENTIFICATION

DUPLICATE I.D.

CASING/TUBING DIAMETER (in/ft) __

FINAL PUMP DEPTH (feet) SAMPLER'S SIGNATURE

	Color Purped
	ORP
	Dissolved
	EC Durhidity
V (gals)	, II
0.65= 18.43	Temp
24,13 x O.	Water Pump

ù -1	Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. (C/F)	EC umhos/cm)	pH	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Yolume Bore Hole Purged Yolumes (gals) Purged	riow Rate (mIPM/ GPM)
4	4 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5		7.8.47									52 2.75	5.75	
3	718 612	1.1	.8.92	910								52	52 2-73	1.9
5 10	100	ST4 : Place	010 24.00	96			1	7/000		1	Drn	67	67 354 15	1.5
7 5	10000		2754	2				41000			bra	82	4.33 1.5	1.5
74.	0.0		200	<u> </u>										
	21.0	C. 17 See Divised of		1,1	14.8	1111 - 94,76	94.	76		5:83	21- 93.76	93.7	9	
	× ×	مر مرور م	5	11 0 11 0 min	1/20/	1		2						
123	123 10:25		73	0	,									
-	30.33	10810.30	7 d de 94	99	1						-	B	B	1.0
2	ところ	したと同文	NI - I	,								3		

PARAMETERS FOR WATER QUALITY STABILIZATION Turbidity S5 NTUs Conductivity ±5% Temperature +1°C(1.8°F) pH ±0.1 Taken from first bailer, immediately before sampling.

Fe+2 (ppm)

Comments:

V:\gaphics/ip\BCMP-AFRCBGMP corcldrawfigs/purgctable.cdr

0

20

0

41000 934 h

N

ろうの

400

9 39

89.64

707 10:52

70:11

1.07

01:1

2500

91.55

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial servening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

1	rh
1	0
1	SIN
	1
٠	0
)	PURG
٠	\mathbf{C}
) · : () · · ·) · · · · · · · · · · · · · ·	Ъ
i	
)	\vdash
ı	ET
ļ	£-2
ï	
)	
1	
	(7)
٠	\simeq
1	\mathbf{C}
1	\Box
1	_
1	A
•	II/
	K
1	Q
ï	0
i	ᅻ
•	FIELD
1	[2]
1	-
,	I
•	2000

1	
ħ	
Page	

CANADIEIN	MONITORING WELL IDENTIFICATION	П	TWW2-	2-4	Doe	a		OVA: FID PID E	OVA: FID PID A In Casing (ppm)	asing (ppm)	(irrtial)	20	(vented to)	
I'LE I.D. FIC WATEI	STATIC WATER LEVEL (R btoc)		TOTAL	WELL DEP	TOTAL WELL DEPTH (feet) 98.05	8.05		FINAL PUM	FINAL PUMP DEPTH (feet)					
WATER COLUMN (feet)	VIN (feet)		CASIN	GATUBING	CASING/TUBING DIAMETER (in/f)	(E)		SAMPLER'S	SAMPLER'S SIGNATURE					
LAPUMP	WELL/PUMP VOLUME (V) (gals)					3 V (gals)					A			
Time	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C/F)	EC (μmhos/cm) x	Hd	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color).	Volume Purged (gals)	Bore Hole Volumes Purged	Flow Rate (mIPM/ GPM)
8:6	statory	81.82	36)							i	8	8	6.0
3:8	,	86.95	45	25.9b	0,323	9.35	631	467	-995	bry	-	5.2		
4:33		88.89	95	26,00	0.330	9.49	डिन्ड	4/1	-93.4	"	× "	5.0		(*)
133		89.83	95	26.4	0.35	9.46	580	4.08	- 100.4	n.l		7.5	*	=
9:43		91.12	95	26,45	0347	9.39	\$100Q	4,61	-94.1	4	`	100		
87.6		92.53	95	26,60	0.336	940	940 +1000	4,7)	-95.6	7		125		
													·	
								=			,			
								391						
							ū				**			
										_			10	
ommente:		a a	Fe+2 (ppm)		Taker	from fir:	st bailer, imr	Taken from first bailer, immediately before sampling.	re sampling.	PARAMETER Temperature	PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1° C (1.8°F) Conductivity ±5%	TER QUAI	LITY STABILIZATI	ILIZATION y ±5%
		,					*			d.	- 11		Turbidity <5 NTUs	S NTUs

V: V: Party is CMP-AFRCBGMP core than figures to ble code of the party of the constant of the party of the

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

FIELD DATA LOG SHY - PURGING

PURGING DEVICE gund for novel. Slate - dodicall hose (vented to) (vented to) (initiz!) (initial) OVA: FID PID Casing (ppm) FINAL PUMP DEPTH (feet) IN BREATHING ZONE (ppm) SAMPLER'S SIGNATURE SAMPLING DEVICE. DUPLICATE ID. TT- MW2-20 x 0.65= 11.863 V (gals) 3564 CASING/TUBING DIAMETER (in/ft) __ TOTAL WELL DEPTH (feet) 4 T-mm2-Bonnag SITE NUMBER WELLPUMP VOLUME (V) (gals) 16.27 STATIC WATER LEVEL (A btoc) 54.98 PROGRAM NAME L BCK LOB O MONITORING WELL IDENTIFICATION SAMPLE ID. TT-MW2-DATE 9/27/04 WATER COLUMN (feet)

_	N C 100		1	 -				able.edr	z/brußer	3ij wezp j	2702 ¶	.KC/BCM	GMP-AF	فالإمتانات	inqsrg/:
	Flow Rate (mIPM/ GPM)	0.0		/		_	_	•	اد-						
-	Bore Hole Volumes Purged	B	120	24.0	0.63	0.84	1.05	1.26	1.47						
	Volume Purged (gals)	Ø	2.5		7.5	10.0	12.5	051	17.5 1.47						
The state of the s	Color .		c/wdy	, 1,		11	ζ	9 '	4	(ant					
	ORP (mV)		14.5	15.5	14.1	11.4	8.9	8	3.6	,					
	Dissolved Oxygen (mg/L)		5.36	4.95 15.5	4.93	4.90	4.93	4.96							
	Turbldity (NTU)			7.52 45.6	174	303	373	369	.342 7.8369 5.16	•					
No. of Lot, Spinster, Spin	рН		7.52	7.52	7.54	7.55	7.54		7.53						
	EC (miscent)		1.308 7.52 35.0	.313	1.323 7.54 174	1.3427.55	1.342 7.54								
	Temp (Deg. C/F)		25.04 1.	25.25 1	25.42 1.	25.981	25.9	26.63	25.55						
	Pump Depth (ft btoc)	30%	80)	89	89	9	89		89				3,75		
	Water Level (ft btoc)	54.9	56.95	57.36	57.63	57.50	57.48	57.45	57.45 68			11 901			
	Activity	startang.	8						81			Sample 120 11	7		
	Time	12:11	12:16	12:21	12:26	12:31	2:36	12:4	12:46			15:4F	1500		

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

PARAMETERS FOR WATER QUALITY STABILIZATION

±1°C(1.8°F) 1±6.1

Hd

Temperature

Taken from first bailer, immediately before sampling.

Fe+2 (ppm)

5

Comments:

Conductivity ±5% Turbidity ≤5 NTUs

C
GING
PURC
T. I.
S
00
L
ATA
DD
FIELD DATA LOG SF

1													•	6
OATE	DATE 9/27/04		SITE NUMBER	MBER	7			TO CALC ON COLIN		2 or Late Late 12 12 Las 20 Lange	15:4	H	J. 7: 4. L	Moss
ROGRAN	PROGRAM NAME Lock	bad	Becomen	reat				SAMPLING DEVICE			36	F	STATE OF THE PARTY	
AONITOR	MONITORING WELL IDENTIFICATION	L NOIT	ノイー	-mw2-	2-2			OVA : FID	OVA: EID BID L. C		CV			
SAMPLE I.D.	D. TT-MW2-7	2-2	DUPLIC	DUPLICATE I.D.	1	1		IN BREATHI	IN BREATHING ZONE (1891)	Casing (ppm) (initial)	2	(vented to)		
TATIC W	STATIC WATER LEVEL (fi bloc) 69,70	9.70	TOTAL	WELL DEP	TOTAL WELL DEPTH (feet)	120.2	8	FINAL PLIM	FINAL PLIMP DEPTH (Gal)	5//		(or pauling)		
VATER CC	WATER COLUMN (feet) 50.5\$.55	CASIN	IG/TUBING	CASING/TUBING DIAMETER (In/R)	/R)	d d	Sida IdM & S	A MPI EPIS SICHATIBE	+				
WELL/PUI	WELL/PUMP VOLUME (V) (gals)	50.5	50.53 x 0.65=	5= 3	32.86	3 V (gals)	98.58		SIGINAL ORE	9				
ТІте	Activity	Water Level (ft btoc)	Pump Depth (ft btoc)	Temp (Deg. C/F)	(printed/cm)	hd	Turbidity (NTU)	Dissolved Oxygen (mg/L)	ORP (mV)	Color	Volume Purged (gals)	Bore Hole Volumes Purged	Flow Rate (mIPM/	
8:05	statom	6.70	119	I							8	8	(MA)	
01:8	X	\$8.08	611	26.12	0.466	5.4/5	75.7	3,23	10.5	Mendy	1	7 2 2	ימ י	
8:15		87.99	119	22.19	8.462	8.62		3.23	13.87	1	1	3.5		
8:20		94.92	119	22.18	22.18 0.457	-	2.89218	3.08	14.0	1.	1.	0.68		
8:28		103:82	119	22.37	1950 75.55	8,76	8,7651.2	3.04	13.2	2		0.91		
8:30		108.75	119	D.22	0.454	S. S.	832	3.12	12.5		1	30.	· 	
8:33		110.80	611	b2.22	o.sid	8,74	202	4.89	137	2		1.37	ble.cdr	
8:39	well pu	possand	dry		-						15	1.55	s/brußere	
									•				Эумец	
00F1		86,14											blanca 9	
											·		СВСМ	
1405	Sample LO							٠					MP-AFR	
													D8/qri⁄z	
			,							-			oinqeng/	
								The state of the s					-	

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook..

PARAMETERS FOR WATER QUALITY STABILIZATION

Temperature ±1°C(1.8°F) Conductivity ±5%

pH ±0.1 Turbidity ≤5 NTUs

. Taken from first bailer, immediately before sampling.

Fe+2 (ppm) _

Comments:

G
GIN
UR
T - PURGING
SK
()
ŏ
Ĭ
ATA
a
Q
FIELD DATA LOG SP.

-dedicated hose					Flow Rate (mIPM / GPM)	0.5	`						igs/purger	, coreldrawf	RC/BGMF	3A-9Mi	DB/qri/soi	
1	(vented to)	(venced 10)			Bore Hole Volumes Purged	B	21.0	22.0	0.36	0.49	0-6	0.73	0.83					
redish T	3				Volume Purged (gals)	Ø	2.5	S	25	10.0	12.5	135	17.5					
a sighting	Casing (ppm) (initial)			X	Color		clady		z		13	:	2					
	OVA: FID PID Win Casing (ppm)	FINAL PUMP DEPTH (feet)	SAMPLER'S SIGNATURE		ORP (mV)		16.1	163	14.5	13.8	13.1	123	11.8					
PURGING DEVICE	OVA: FID	FINAL PUM	SAMPLER'S		Dissolved Oxygen (mg/L)		769	7.59.	7.59	7.63	7.64	7.66	7.65					
70		M	1	41.53	Turbidity (NTU)		455	7.48.147	Sas	73.2	7.37 67.5	7.35 64.2	134 6 3.9					
		1.3	(#)	3 V (gals)	Hd		7.37	7.48	7.40	7.39	7:37	7.35	7.34					
2	2	DOPLICATE I.D. TOTAL WELL DEPTH (feet)	CASING/TUBING DIAMETER (in/ft)	20.51	EC (umboelom)		1.000	29.53 6024	2477 1.034	1.039	24.50 1.033	24.84 1.039	24.82 1.037					£
√BER	7	DUPLICATE I.D. — TOTAL WELL DEP	G/TUBING		Temp (Deg. C/F)		24.46	24.53	24.77	24.87	24.50	24.88	24.82					
SITE NUMBER	-I-mW2-	- DUPLIC		X 0.65-	Pump Depth (ft btoc)	90	26	90	06	95	00	90	æ					(man) (100 E
1 1	H	9.78	31.55	3155	Water Level (ft btoc)	69.78		73.5K	7358	73.57	73.61	73.63	73.65		Leel			
DATE 9/27/04 PROGRAM NAME LECK NOOD	MONITORING WELL IDENTIFICATION	STATIC WATER LEVEL (R bloc) 69.7	WATER COLUMN (feet)	WELL/PUMP VOLUME (V) (gals)	Activity	10:57 statons									Sample	-		
DATE PROGRAM N	NITORIN	APLE I.D. TIC WATI	ER COLI	LL/PUMP	Time	1.57	11:20	10:11	11:12	11:11	11.22	17.77	75:11		11:32			

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

- 1	$\mathbf{\mathcal{C}}$
!	Z
÷	=
٠	9
	PURGING
	ب
į	T- L
	,
)	I
t	5
ť	
)	m
1	
•	G
:	0
İ	T
(_
1	٠,
•	A
ļ	DATA LOGS
ŗ	Q
1	\Box
!	FIELD
i	_
j	H

rage 1 DI

	100
	13. Fa
(Awad Das
	PURGING DEVICE
245	

900	1	ı	, 1		1	1	l Comment	578-J		1				Jbe.edr	hurgetal	23 y marq	P corelo	CBGN	MP-AFR	1DB/qri/s	oinq∉ng/:	^ -
J. M.							Flow Rate (mlPM /	(Mas)	2	-	_	71										LIZATION
-dad:		(vented to)	(vented to)				Bore Hole Volumes Purged	×	553	90	69.1	1.7.1										LITY STABILIZATI
中中		90	QZ QZ				Volume Purged	×	1-	1.	h	240										TER QUAL
5-Ka		(inivial)	(initial)	* ×	(Y		1,			-											S FOR WATER
PURGING DEVICE AWNOLDES 1021-5/12 The - oladice Int hoso		sing (ppm)		77			Color		o Tard	ben	2			1							_	PARAMETERS FOR WATER QUALITY STABILIZATION
SVICE ON	DEVICE	OVA: FID PID A In Casing (ppm)	IN BREATHING ZONE (ppm)	FINAL PUMP DEPTH (feet)		SAMPLER'S SIGNATURE	ORP (mV)		3.00	58/	18.6											sampling.
II PURGING DE	SAMPLING DEVICE	OVA: FID	IN BREATHI	FINAL PUME		SAMPLER'S	Dissolved Oxygen (mg/L)		5.38	12.50	5.53											Taken from first bailer, immediately before sampling.
		20		S		4218	Turbidity (NTU)		+	-	+1000											it bailer, imm
		Shallan	٢	73,15	J	(gals)	Hq		29.5	8.5					•							from firs
4		7-		1	CASING/TIBING DIAMETER (#/#)	4.06	EC (rembos/cm)		0.378 8.62,106.2	5.38	505	•										Taken
ABER	Bouned	162	DUPLICATE I.D.	TOTAL WELL DEPTH (feet)	I DAIRING	ナー・	Temp (Deg. C/F)		2325	23.4	235to	-										
		T-MW	DUPLIC	TOTAL	CAGIN	×0,65	Pump Depth (ft btoc)	22	1	72	26	day	,									Fe+2 (ppm)
	oclc had	TION H	2-45	51.52	59	21.63×0,652	Water Level (ft btoc)	51.52	6258	67.50	71.60	aprico d	0		69.0l							
40/22/6	00	MONITORING WELL IDENTIFICATION _	TT- MW2-4	STATIC WATER LEVEL (R bloc) 51.52	MN (feet) 21.63	V) (gals)	Activity	Statome 81.52				chell as	_				Samoball	22.				
DATE	PROGRAM NAME	IONITORUNG	SAMPLE I.D.	TATIC WATE	WATER COLUMN (feet)	/ELL/PUMP	Time	10:0g	20:01	0:19	10.15	41:01			13:20		13:25					

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone during the initial screening, the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...

FIELD DATA LOG SF T - PURGING

1/ hosa		Ç								`			20	D3.510=	. haußer	Zilweins	ME COLO	om v	ייטו ל - 🎶	omdin⇔	oidqstg/:V	
Ladica							Flow Rate (mIPM/ GPM)	1.5	0		_		->				47		, art			
The case		(vented to)	(vented to)				Bore Hole Volumes Purged	B	0.56	1.13	1.69	2.25	2.48					7				LITY STABILIZATIC Conductivity ±5% Turbidity ≤5 NTUS
ad:Sha		20	22				Volume Purged (gals)	B	7.5	15	22.5	30.0	33.0									ATER QUAI
ason of the total - dedicated hose		ppm) (initial)	(initial)	96.5		S	Color		cody	, "	Dry										-	PARAMETERS FOR WATER QUALITY STABILIZATION Temperature ±1°C (1.8°F) Conductivity ±5% pH ±0.1 Turbidity ≤5 NTUs
l	1	OVA: FID PID K In Casing (ppm)	ZONE (ppm)	SPTH (feet)	NATURE		ORP (mV)		13.6 de	7.0		ص									-	
PURGING DEVICE	SAMPLING DEVICE	OVA: FID	IN BREATHING ZONE (ppm)	98.05 FINAL PUMP DEPTH (feet)	SAMPLER'S SIGNATURE		Dissolved Oxygen (mg/L)		352 /	3.20	4.25	3.52										Taken from first bailer, immediately before sampling.
a 8				D. 36 5	4	39.9	Turbidity (NTU)		797	190	856	9.25 +1000										rst bailer, imme
8		Doep	9	2	(in/ft)	3 V (gals)	pH pH		5.76	19.04	3.16											ken from fi
7		7		TH (feet)	CASING/TUBING DIAMETER (in/ft)	15	EC (pmhos/cm)		0.320	24.26 0.32	24.24 0.256	6.309	·									Tal
ABER	1	w2-	DUPLICATE I.D	TOTAL WELL DEPTH (feet)	IG/TUBING	13.3	Temp (Deg. C/F)	l	2383	24.26	24.23	24.0										
_ SITE NUMBER	Bannet	T-mw	1	4	CASIN	CO 105	Pump Depth (ft btoc)	5.96	36.5		96.5		12	,								Fe+2 (ppm)
		.Н	32-4D	7.758	47	2017X0.65- 13.	Water Level (ft btoc)		SSO	89.45	92.15	95.12	arced o	0		88.09						
9/27/05	IME LOCK LABOR	MONITORING WELL IDENTIFICATION	SAMPLEID. JIT-MW2-4D	STATIC WATER LEVEL (ft bloc) 2258	WATER COLUMN (feet) 20.47	WELL/PUMP VOLUME (V) (gals)	Activity	stod Dung 1758	X				wellow					Samoloup				
DATE	PROGRAM NAME	MONITORING	SAMPLE I.D.	STATIC WATER	WATER COLUN	WELL/PUMP '	Time	9:20	9:25	@:6	5:35	9:4D	21:6			13:23	•	1340 =				Comments:

Note: All water levels and pump depths are measured from the notch in the top of the well casing. If volatiles are detected in the breathing zone will be periodically monitored during purging and sampling activities and recorded in the logbook...





October 12, 2004

Jeff Brenner
Tetra Tech, Inc.
348 West Hospitality Lane, Ste 100
San Bernardino, CA 92408-3216

Subject:

Calscience Work Order No.:

Client Reference:

04-09-1607

Lockheed Martin - Site 2 / TC #13505-02

Dear Client:

Enclosed is an analytical report for the above-referenced project. The samples included in this report were received 9/28/2004 and analyzed in accordance with the attached chain-of-custody.

Unless otherwise noted, all analytical testing was accomplished in accordance with the guidelines established in our Quality Assurance Program Manual, applicable standard operating procedures, and other related documentation. The original report of any subcontracted analysis is provided herein, and follows the standard Calscience data package. The results in this analytical report are limited to the samples tested and any reproduction thereof must be made in its entirety.

If you have any questions regarding this report, please do not hesitate to contact the undersigned.

Sincerely,

Calscience Environmental Laboratories, Inc.

Mouse

Stephen Nowak Project Manager





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

09/28/04

Work Order No:

04-09-1607

Preparation:

EPA 3010A Total / EPA 7470A Total

Method:

EPA 6010B / EPA 7470A

Units:

mg/L

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 1 of 3

Client Sample Number				b Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	atch ID
EB1		(04-09-16	07-2	09/27/04	Aqueous	09/28/04	09/29/04	040928	3L05
Comment(s): Mercury was an	alyzed on 9/29/20	04 10:24:1	1 AM wi	th batch 04	40928L02					
<u>Parameter</u>	Result	RL	DF	Qual	<u>Parameter</u>		Res	ult RL	DF	Qual
Antimony	ND	0.0150	1		Mercury		ND	0.00050	0 1	
Arsenic	ND	0.0150	1		Molybdenum		ND	0.00500	1	
Barium	ND	0.0100	1		Nickel		ND	0.00500	. 1	
Beryllium	ND	0.00100	1		Selenium		ND	0.0150	1	
Cadmium	ND	0.00500	1		Silver		ND	0.00500	1	
Chromium (Total)	ND	0.00500	1		Thallium		ND	0.0150	- 1	
Cobalt	ND	0.00500	. 1		Vanadium		ND	0.00500	1	
Copper	ND	0.00500	1		Zinc		ND	0.0100	1	
Lead	ND	0.0100	1							
TT-MW2-3		(04-09-16	07-3	09/27/04	Aqueous	09/28/04	09/29/04	040928	3L05
Comment(s): Mercury was and	alvzed on 9/29/20	04 10:27:1	3 AM wi	th hatch 04	109281 02					
Parameter	Result	RL	DF	Qual	Parameter		Res	ult RL	DF	Qual
Antimony	ND	0.0150	1	months and a	Mercury		ND	0.00050		-
Arsenic	ND	0.0150	1		Molybdenum		ND	0.00500	1	
Barium	0.112	0.010	1		Nickel		ND	0.00500	1	
Beryllium	ND.	0.00100	1		Selenium		ND	0.0150	1	
Cadmium	ND	0.00500	1		Silver		ND	0.00500	1	
Chromium (Total)	0.00656	0.00500	1		Thallium		ND	0.0150	1	
Cobalt	ND	0.00500	1		Vanadium		0.01		1	
Copper	0.00501	0.00500	1		Zinc	*	0.02		1	
_ead	ND	0.0100	1				0.02	.01		
TT-MW2-1	Y	:(04-09-16	07-4	09/27/04	Aqueous	09/28/04	09/29/04	040928	3L05
Comment(s): Mercury was and	ahaad on 9/20/20	04 10:20:1	4 AM vaid	th batch ()	100281 02					
Parameter	Result	RL	DE DE	Qual	Parameter		Res	ult RL	DF	Qual
Antimony	ND ND	0.0150	1	3,300	Mercury		ND.	0.00050		
Arsenic	ND	0.0150	1		Molybdenum		. 0.00		1	
Barium	0.220	0.010	1		Nickel		0.01		1	
Beryllium	0.220 ND	0.010	1		Selenium		ND	0.0150	1	
Cadmium	ND	0.00100	1		Silver		ND	0.0150	1	
Chromium (Total)	0.0172	0.00500	1		Thallium		ND ND	0.00500	1	
Cobalt	77.7.7.1.7.1.7.1.7.1.	0.0050	1/12		Vanadium					
	0.00591	0.00500	1		Vanadium Zinc		0.02		1	
Copper	0.0129		1		ZII IC		0.04	0.0100	7	
ead	ND	0.0100	1							

RL - Reporting Limit ,

DF - Dilution Factor

Qual - Qualifiers





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

09/28/04

Work Order No:

04-09-1607

Preparation:

EPA 3010A Total / EPA 7470A Total

Method:

EPA 6010B / EPA 7470A

Units:

mg/L

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 2 of 3

Client Sample Number	E			b Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	atch ID
TT-MW2-4S		(04-09-16	07-5	09/27/04	Aqueous	09/28/04	09/29/04	040928	BL05
Comment(s): Mercury was	analyzed on 9/29/20	04 10:33:1	7 AM wi	ith batch 0-	40928L02					
Parameter	Result	RL	DF	Qual	<u>Parameter</u>		Res	ult RL	DF	Qual
Antimony	0.0177	0.0150	1		Mercury		ND	0.00050	0 1	
rsenic	0.0598	0.0150	- 1		Molybdenum		0.01	158 0.0050	1	
Barium	0.256	0.010	1		Nickel		0.03	364 0.0050	1	
Beryllium	0.00230	0.00100	1		Selenium		ND	0.0150	1	
Cadmium	ND	0.00500	1		Silver		, ND	0.00500	1	
Chromium (Total)	0.0573	0.0050	1		Thallium		ND	0.0150	. 1	
Cobalt	0.0194	0.0050	1		Vanadium		0.19	0.005	1	
Copper	0.0427	0.0050	1		Zinc		0.14	0.010	1	
ead	0.0188	0.0100	1							
TT-MW2-4D		(04-09-16	07-6	09/27/04	Aqueous	09/28/04	09/29/04	040928	L05
Comment(s): Mercury was	analyzed on 9/29/20	04 10:36:2	1 AM wi	th batch 0	109281 02					
Parameter	Result	RL RL	<u>DF</u>	Qual	Parameter		Res	ult RL	DF	Qual
ntimony	ND	0.0150	 1		Mercury		ND	0.00050		
rsenic	0.0833	0.0150	1		Molybdenum		0.01	071.700V17001117001V	1	
Barium	0.0532	0.0100	1		Nickel			0.00500	1	
Beryllium	ND	0.00100	1		Selenium		ND.	0.0150	1	
Cadmium	ND	0.00500	1		Silver		ND	0.00500	1	
Chromium (Total)	0.0115	0.0050	1		Thallium		ND	0.0150	1	
Cobalt	ND	0.00500	1		Vanadium		0.12		1	
Copper	0.00882	0.00500	1		Zinc		0.02		1	
ead.	ND	0.0100	1		20		0.02	0.0.00		
TT-MW2-2			04-09-16	07-7	09/27/04	Aqueous	09/28/04	09/29/04	040928	1 05
						Aqueous	03/20/04	03/23/04	0,40320	-
Comment(s): Mercury was Parameter	anaiyzed on 9/29/20 Result	04 10:39:2 RL	DF	tn batch 04 Qual	Parameter		Res	ult RL	DF	Qual
Intimony	ND ND	0.0150	1	Cour	Mercury		ND.	0.00050		<u>Qua</u>
urumony rsenic	ND ND	0.0150	1		Molybdenum		ND ND	0.00500	1	
arium	0.0299	0.0100	1		Nickel		ND ND	0.00500	1	
					Selenium			0.00500		
seryllium	ND	0.00100	1		Selenium		ND	0.0150	1	
Cadmium	ND	0.00500	1		ATTACA (March		ND		1	
Chromium (Total)	ND	0.00500	1		Thallium		ND	0.0150	1	
Cobalt	ND	0.00500	1		Vanadium		0.01	166 0.0050	1	
			- 1				20020		1.0	
Copper ead	ND ND	0.00500 0.0100	1 1		Zinc		0.02	228 0.0100	1	

RL - Reporting Limit ,

DF - Dilution Factor

Qual - Qualifiers

Mulhan





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

09/28/04

Work Order No:

04-09-1607

Preparation:

EPA 3010A Total / EPA 7470A Total

Method:

EPA 6010B / EPA 7470A

Units:

mg/L

Project: Lockheed Martin - Site 2 / TC #13505-02

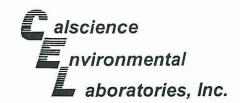
Page 3 of 3

Client Sample Number				ib Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	atch ID
TT-MW2-20		, % , (04-09-16	07-8	09/27/04	Aqueous	09/28/04	09/29/04	040928	3L05
Comment(s): Mercury was analyz	ed on 9/29/20	04 10:42:3	2 AM w	ith batch 04	10928L02					
<u>Parameter</u>	Result	<u>RL</u>	DF	Qual	<u>Parameter</u>		Resu	it RL	DF	Qual
Antimony	ND	0.0150	1		Mercury		ND	0.000500) 1	
Arsenic	ND	0.0150	1		Molybdenum		ND	0.00500	1	
Barium	0.228	0.010	1		Nickel		0.011	15 0.0050	1	
Beryllium	ND	0.00100	1		Selenium		ND	0.0150	1	
Cadmium	ND	0.00500	1		Silver		ND	0.00500	1	
Chromium (Total)	0.0170	0.0050	1		Thallium		ND	0.0150	1	
Cobalt	0.00661	0.00500	1		Vanadium		0.03	0.0050	1	
Copper	0.0140	0.0050	1		Zinc		0.044	0.0100	1	
Lead	ND	0.0100	1							
Method Blank		* 1	099-04-0	08-1,653	N/A	Aqueous	09/28/04	09/28/04	040928	3L02
Parameter	Result	RL	DF	Qual	£			-		
Mercury	ND	0.000500		Quai						
viercury	ND	0.000300	1					40		
Method Blank			107 04 0	03-4,194		Aqueous	09/28/04	09/29/04	040928	3L05
			131-01-0	100-4,104	N/A	Aqueous	03120104	00/20/04		
	Result			Qual	N/A Parameter	Aqueous	Resu			Qual
Parameter	Result ND	RL 0.0150	DF 1			Aqueous			DF 1	Qual
	ND	RL			Parameter	Aqueous	Resu	it RL	DF	Qual
Parameter untimony ursenic	()	<u>RL</u> 0.0150			Parameter Molybdenum	Aqueous	Resu ND	<u>RL</u> 0.00500	DF 1	Qual
Parameter Antimony Arsenic Barium	ND ND	<u>RL</u> 0.0150 0.0150			Parameter Molybdenum Nickel	Aqueous	Resu ND ND	t <u>RL</u> 0.00500 0.00500	DF 1	Qual
Parameter Antimony Arsenic Barium Beryllium	ND ND ND	RL 0.0150 0.0150 0.0100			Parameter Molybdenum Nickel Selenium	Aqueous	Resu ND ND ND	tt <u>RL</u> 0.00500 0.00500 0.0150	DF 1	Qual
Parameter Antimony Arsenic Barium Beryllium Cadmium	ND ND ND ND	RL 0.0150 0.0150 0.0100 0.00100			Parameter Molybdenum Nickel Selenium Silver	Aqueous	Resu ND ND ND ND	tt <u>RL</u> 0.00500 0.00500 0.0150 0.00500	DF 1	Qual
Parameter Antimony Arsenic Barium Beryllium	ND ND ND ND	RL 0.0150 0.0150 0.0100 0.00100 0.00500			Parameter Molybdenum Nickel Selenium Silver Thallium	Adueous	Resu ND ND ND ND ND	0.00500 0.00500 0.0150 0.00500 0.0150	DF 1	Qual

RL - Reporting Limit ,

DF - Dilution Factor

Qual - Qualifiers





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 3520B

EPA 8270C

ug/L

Page 1 of 8

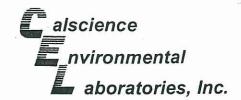
Project: Lockheed Martin - Site 2 / TC #13505-02

Client Sample Number				ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	atch ID
EB1		4.	04-09-16	607-2	09/27/04	Aqueous	09/29/04	10/01/04	040929	PL01
Parameter	Result	RL	DF	Qual	Parameter		Resul	<u>RL</u>	<u>DF</u>	<u>Qual</u>
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitropher	nol	ND	50	1	
Aniline	ND	10	1		4-Nitrophenol		ND	10	1	
Phenol	ND	10	1		Dibenzofuran		ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotolue	ene	ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotolue	ene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthala	te	ND	10	1	
1,4-Dichloro benzene	ND	10	1		4-Chloropheny	I-Phenyl Ether	ND	10	1	
Benzyl Alcohol	ND	10	1		Fluorene		ND	10	1	
1,2-Dichlorobenzene	ND	10	1		4-Nitroaniline	2	ND	10	1	
2-Methylphenol	ND	10	1		Azobenzene		ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-M	lethylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiphe	enylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromopheny	I-Phenyl Ether	ND	10	1	
_Hexachloroethane	ND	10	1		Hexachloroben	zene	ND	10	1	
Nitrobenzene	ND	25	1		Pentachloroph	enol	ND	10	1	
Isophorone	ND	10	1		Phenanthrene		ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene		ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phth	alate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene		ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine		ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene		ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine		ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl Ph	nthalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobe	enzidine	ND	25	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anth	racene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhexy	yl) Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene		ND	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phth	alate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluor	ranthene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluo	ranthene	ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyre	ene	ND	10	1	
2-Nitroaniline	ND	10	1		Benzo (g,h,i) P	erylene	ND	10	1	
Dimethyl Phthalate	ND	10	1		Indeno (1,2,3-c	,d) Pyrene	ND	10	1	
Acenaphthylene	ND	10	1		Dibenz (a,h) Ar	nthracene	ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphth	alene	ND	10	1	
Acenaphthene	ND	10	1							
Surrogates:	REC (%)	Contro Limits	<u>L</u>	Qual	Surrogates:	*	REC (%	(6) <u>Control</u> Limits	ě	Qual
2-Fluorophenol	86	15-138			Phenol-d6		83	17-141		
Nitrobenzene-d5	103	28-139			2-Fluorobiphen	wl	106	33-144		
2,4,6-Tribromophenol	89	32-143			p-Terphenyl-d1	•	106	23-160		
2,4,0-Thibitomophenoi	89	32-143			p- reipnenyi-d i	4	104	23-100		



DF - Dilution Factor

Qual - Qualifiers





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 3520B

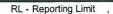
EPA 8270C

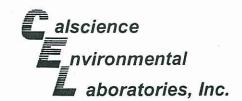
ug/L

Page 2 of 8

Project: Lockheed Martin - Site 2 / TC #13505-02

Client Sample Number			L	ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	itch ID
TT-MW2-3			04-09-1	607-3	09/27/04	Aqueous	09/29/04	10/01/04	040929	L01
Parameter	Result	RL	DF	Qual	Parameter		Resul	t RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitropher	nol	ND	50	1	
Aniline	ND	10	1		4-Nitrophenol		ND	10	1	
Phenol	ND	10	1		Dibenzofuran		ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotolue	ene	ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotolue	ene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthala	ite	ND	10	1	
1,4-Dichlorobenzene	ND	10	1		4-Chloropheny	I-Phenyl Ether	ND	10	1	
Benzyl Alcohol	ND	10	1		Fluorene		ND	10	1	
1,2-Dichlorobenzene	ND	10	1		4-Nitroaniline		ND	10	1	
2-Methylphenol	ND	10	1		Azobenzene		ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-M	lethylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiphe	enylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromopheny	d-Phenyl Ether	ND	10	1	
=Hexachloroethane	ND	10	1		Hexachlorober	nzene	ND	10	1	
Nitrobenzene	ND	25	1		Pentachloroph	enol	ND	10	1	
Isophorone	ND	10	1		Phenanthrene		ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene		ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phth	alate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene		ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine		ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene		ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine		ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl Pl	hthalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobe	enzidine	ND	25	- 1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anth	racene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhex	yl) Phthalate	22	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene		ND	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phth	nalate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluo	ranthene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1	9	Benzo (b) Fluo	ranthene	ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyre	ene	ND	10	1	
2-Nitroaniline	ND	10	1		Benzo (g,h,i) P	erylene	ND	10	1	
Dimethyl Phthalate	ND	10	1		Indeno (1,2,3-c	,d) Pyrene	ND	10	1	
Acenaphthylene	ND	10	1		Dibenz (a,h) Aı	nthracene	ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphth	nalene	ND	10	1	
Acenaphthene	ND	10	1							
Surrogates:	REC (%)	Contro Limits	<u>1</u>	Qual	Surrogates:		REC (S	<u>%) Control</u> Limits	-	Qual
2-Fluorophenol	81	15-138			Phenol-d6		98	17-141		
Nitrobenzene-d5	100	28-139			2-Fluorobipher	nvl	97	33-144		
2,4,6-Tribromophenol	95	32-143			p-Terphenyl-d1		110	23-160		
2,7,0-11IDIOIIIOPHENOI	30	32-143			p i cipilenyi-u		110	20-100		







Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation: Method:

Units:

Date

Lab Sample

04-09-1607 **EPA 3520B**

09/28/04

EPA 8270C ug/L

Page 3 of 8

Project: Lockheed Martin - Site 2 / TC #13505-02

Matrix	Date Prepared	Date Analyzed	QC Batch ID
	00/00/04	40104104	0400001 04

Client Sample Number	Li	ab Sample Number	Collected	Matrix	Prepared	Analyzed	QC B	atch ID		
TT-MW2-1			04-09-1607-4		09/27/04	Aqueous	09/29/04 10/01/04		040929L01	
Parameter	Result	RL	DF	Qual	Parameter		Resu	t RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitrophe	nol	ND	50	1	
Aniline	ND	10	1		4-Nitrophenol		ND	10	1	
Phenol	ND	10	1		Dibenzofuran		ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotoluene		ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotoluene		ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthalate		ND	10	1	
1,4-Dichlorobenzene ND		10	1		4-Chlorophenyl-Phenyl Ether		ND	10	1	
Benzyl Alcohol ND 10		10	1		Fluorene		ND	10	1	
1,2-Dichlorobenzene	ND	10	1		4-Nitroaniline		ND	10	1	
2-Methylphenol	ND	10	1		Azobenzene		ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-N	/lethylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiph	enylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromopheny	yl-Phenyl Ether	ND	10	1	
_Hexachloroethane	ND	10	1		Hexachlorober	nzene	ND	10	1	
Nitrobenzene	ND	25	1		Pentachloroph	ienol .	ND	10	1	
Isophorone	ND	10	1		Phenanthrene		ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene		ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phth	nalate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene		ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine		ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene		ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine		ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl P	hthalate	ND	10	1	12
4-Chloroaniline	ND	10	1		3,3'-Dichlorobe		. ND	25	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anti	hracene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhex		ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene	.,	ND	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phtl	halate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	. 1		Benzo (k) Fluo		ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluo		ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyro		ND	10	1	
2-Nitroaniline	ND	10	1		Benzo (g,h,i) F		ND	10	1	
Dimethyl Phthalate	ND	10	1		Indeno (1,2,3-		ND	10	1	
Acenaphthylene	ND	10	1		Dibenz (a,h) A		ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphti		ND	10	1	
Acenaphthene	ND	10	1		1 Westignapha	idionio	140	10	- 1	
Surrogates: REC (%) Control			Qual	Surrogates:		REC (S	%) Control		Qual	
Curroquies.	110 1/01	Limits	4)	Guai	ourrogates.		IVEO [Limits	ä	Quai
2-Fluorophenol	83	15-138			Phenol-d6		100	17-141		
Nitrobenzene-d5	104	28-139	,**		2-Fluorobipher	nvl	97	33-144		
		32-143			p-Terphenyl-d	•	104	23-160		

RL - Reporting Limit ,

DF - Dilution Factor

Qual - Qualifiers





Tetra Tech, Inc.

Client Sample Number

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

Lab Sample

Number

09/28/04

04-09-1607

EPA 3520B

EPA 8270C ug/L

Page 4 of 8

Project: Lockheed Martin - Site 2 / TC #13505-02

 Date Collected
 Matrix
 Date Prepared
 Date Analyzed
 QC Batch ID

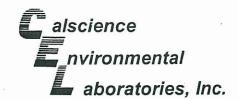
 09/27/04
 Aqueous
 09/29/04
 10/01/04
 040929L01

TT-MW2-4S			04-09-1607-5		09/27/04 Aqueous	09/29/04 1	0/01/04	040929L01	
Parameter	Result	RL	DF	Qual	<u>Parameter</u>	Result	RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitrophenol	ND .	50	1	
Aniline	ND	10	1		4-Nitrophenol	ND	10	1	
Phenol	ND	10	1		Dibenzofuran	ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotoluene	ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotoluene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthalate	ND	10	1	
1,4-Dichlorobenzene	ND	10	1		4-Chlorophenyl-Phenyl Ether	ND	10	1	
Benzyl Alcohol	ND	10	1		Fluorene	ND	10	1	
1,2-Dichlorobenzene	ND	10	1		4-Nitroaniline	ND	10	1	
2-Methylphenol	ND	10	1		Azobenzene	ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-Methylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiphenylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromophenyl-Phenyl Ether	ND	10	1	
-lexachloroethane	ND	10	1		Hexachlorobenzene	ND	10	1	
Nitrobenzene	ND	25	1		Pentachlorophenol	ND	10	1	
Isophorone	ND	10	1		Phenanthrene	ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene	ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phthalate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene	ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine	ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene	ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine	ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl Phthalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobenzidine	ND	25	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anthracene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhexyl) Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene	ND	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phthalate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluoranthene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluoranthene	ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyrene	ND	10	1	
2-Nitroaniline	ND	10	1		Benzo (g,h,i) Perylene	ND	10	1	
Dimethyl Phthalate	ND	10	1		Indeno (1,2,3-c,d) Pyrene	ND	10	1	
Acenaphthylene	· ND	10	1		Dibenz (a,h) Anthracene	ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphthalene	ND	10	1	
Acenaphthene	ND	10	1		5				
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	REC (%)	Control Limits		Qual
2-Fluorophenol	80	15-138			Phenol-d6	87	17-141		
Nitrobenzene-d5	98	28-139			2-Fluorobiphenyl	89	33-144		
2,4,6-Tribromophenol	85	32-143			p-Terphenyl-d14	76	23-160		

RL - Reporting Limit ,

DF - Dilution Factor

Qual - Qualifiers





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation: Method:

Units:

09/28/04

04-09-1607

EPA 3520B

EPA 8270C

ug/L

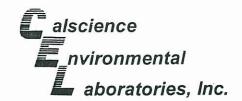
Project: Lockheed Martin - Site 2 / TC #13505-02

Page 5 of 8

Client Sample Number				ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC B	atch ID
TT-MW2-4D			04-09-16	607-6	09/27/04	Aqueous	09/29/04	10/01/04	04092	9L01
Parameter	Result	RL	DF	Qual	Parameter		Result	RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitropher	nol	ND	50	. 1	
Aniline	ND	10	1		4-Nitrophenol		ND	10	1	
Phenol	ND	10	1		Dibenzofuran		ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotolue	ene	ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotolue	ene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthala	te	ND	10	1	
1,4-Dichlorobenzene	ND	10	1		4-Chloropheny	I-Phenyl Ether	ND	10	1	
Benzyl Alcohol	ND	10	1		Fluorene		ND	10	1	
1,2-Dichlorobenzene	ND	10	1		4-Nitroaniline		ND	10	1	
2-Methylphenol	ND	10	1		Azobenzene		ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-M	lethylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiphe	enylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromopheny	1-Phenyl Ether	ND	10	- 1	
_Yexachloroethane	ND	10	1		Hexachlorober	AT THE PROPERTY OF THE PARTY OF	ND	10	1	
Nitrobenzene	ND	25	1		Pentachloroph	enol	ND	- 10	1	
Isophorone	ND	10	1		Phenanthrene		ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene		ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phth	alate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene		ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine		ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene		ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine		ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl Pl	nthalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobe		ND	25	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anth		ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhex		ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene	, ,	ND	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phth	nalate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluo		ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluo		ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyre		ND	10	1	
2-Nitroaniline	ND	10	i		Benzo (g,h,i) P		ND	10	1	
Dimethyl Phthalate	ND /	10	1		Indeno (1,2,3-c		ND	10	1	
Acenaphthylene	ND	10	1		Dibenz (a,h) Ar		ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphth		ND	10	1	
Acenaphthene	ND	10	1		. mourymaphu	idio io	NU	10	T.	
Surrogates:	REC (%)	Contro		Qual	Surrogates:		REC (%	200	-	Qual
2 Elucaphonol	70	Limits			Phenol-d6		00	<u>Limits</u> 17-141		
2-Fluorophenol	79 00	15-138				w.d	89			
Nitrobenzene-d5	96	28-139			2-Fluorobipher	•	94	33-144		
2,4,6-Tribromophenol	89	32-143			p-Terphenyl-d1	4	91	23-160		

RL - Reporting Limit ,

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation: Method:

Units:

09/28/04

04-09-1607

EPA 3520B

EPA 8270C

ug/L

Page 6 of 8

FAX: (714) 894-750

	E CONTRACTOR OF THE		0.1	0	TC #13505-02
Project.	LOCKDOOD	Martin	SITO	, ,	11 11 35115-117

Client Sample Number				ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	atch ID
TT-MW2-2		34 ³	04-09-16	607-7	09/27/04	Aqueous	09/29/04	10/01/04	040929)L01
Parameter	Result	RL	DF	Qual	Parameter		Resu	t RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitropher	nol	ND	50	1	
Aniline	ND	10	1		4-Nitrophenol		ND	10	1	
Phenol	ND	10	1		Dibenzofuran		ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotolue	ene	ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotolue	ene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthala	te	ND	10	1	
1,4-Dichlorobenzene	ND	10	1		4-Chloropheny	l-Phenyl Ether	ND	10	1	
Benzyl Alcohol	ND	10	1		Fluorene	*	ND.	10	. 1	
1,2-Dichloro benzene	ND	10	1		4-Nitroaniline		ND	10	1	
2-Methylphenol	ND	10	1		Azobenzene		ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-M	ethylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiphe	enylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromopheny	I-Phenyl Ether	ND	10	1	
=Hexachloroethane	ND	10	1		Hexachlorober	zene	ND	10	1	
Nitrobenzene	ND	25	1		Pentachloroph	enol	ND	10	1	
Isophorone	ND	10	1		Phenanthrene		ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene		ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phth	alate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene		ND	10 .	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine		ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene		ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine		ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl Pl	nthalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobe	enzidine	ND	25	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anth	racene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhex	yl) Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene		ND	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phth	alate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluo	ranthene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluo	ranthene	ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyre	ene	ND	10	1	3
2-Nitroaniline	ND	10	1		Benzo (g,h,i) P	erylene	ND	10	1	
Dimethyl Phthalate	ND	10	1		Indeno (1,2,3-c	,d) Pyrene	ND	10	1	
Acenaphthylene	ND	10	1		Dibenz (a,h) Ar		ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphth		ND	10	1	
Acenaphthene	ND	10	1							
Surrogates:	REC (%)	Contro		Qual	Surrogates:		REC (%) <u>Control</u> Limits		Qual
2-Fluorophenol	78	<u>Limits</u> 15-138			Phenol-d6		86	17-141		
Nitrobenzene-d5	78 96	28-139			2-Fluorobipher	nd	87	33-144		
						•	76	23-160		
2,4,6-Tribromophenol	77	32-143)		p-Terphenyl-d1	4	76	23-100		

RL - Reporting Limit ,

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 3520B

EPA 8270C

ug/L

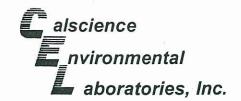
Page 7 of 8

Project: Lockheed Martin - Site 2 / TC #13505-02

Client Sample Number		-		ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC B	atch ID
TT-MW2-20			04-09-16	607-8	09/27/04	Aqueous	09/29/04	10/01/04	04092	9L01 -
Parameter	Result	<u>RL</u>	DF	Qual	Parameter		Resu	ilt RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitropher	nol	ND	50	1	
Aniline	ND	10	1		4-Nitrophenol		ND	10	1	
Phenol	ND	10	1		Dibenzofuran		ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotolue	ene	ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotolue	ene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthala	te	ND	10	1	
1,4-Dichlorobenzene	ND	10	1		4-Chlorophenyl	-Phenyl Ether	ND	10	1	
Benzyl Alcohol	ND	10	1		Fluorene		ND	10	1	
1,2-Dichlorobenzene	ND	10	1		4-Nitroaniline		ND	. 10	1	
2-Methylphenol	ND	10	1		Azobenzene		ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-M	ethylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiphe	enylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromopheny	I-Phenyl Ether	ND	10	1	
_Hexachloroethane	ND	10	1		Hexachloroben	zene	ND	10	1	
Nitrobenzene	ND	25	1		Pentachlorophe	enol	ND	10	1	
Isophorone	ND	10	1		Phenanthrene		ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene		ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phth	alate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene		ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine		ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene		ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine		ND	10	. 1	
Naphthalene	ND	10	1		Butyl Benzyl Ph	nthalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobe	nzidine	ND	25	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anth	racene	ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhexy	l) Phthalate	ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene		ND	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phth	alate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluor	anthene	ND	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluor	ranthene	ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyre	ne	ND	10	1	
2-Nitroaniline	ND	10	1		Benzo (g,h,i) Po	erylene	ND	10	1	
Dimethyl Phthalate	ND	10	1		Indeno (1,2,3-c	,d) Pyrene	ND	10	1	
Acenaphthylene	ND	10	1		Dibenz (a,h) An	thracene	ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphth		ND	10	1	
Acenaphthene	ND	10	1							
Surrogates:	REC (%)	Contro Limits	L	Qual	Surrogates:		REC (%) <u>Control</u> Limits) 2	Qual
2-Fluorophenol	74	15-138			Phenol-d6		67	17-141		
Nitrobenzene-d5	92	28-139			2-Fluorobiphen	VI	87	33-144		
2,4,6-Tribromophenol	92 79	32-143			p-Terphenyl-d1		87 87	23-160		
2,4,0-111010111041161101	19	32-143			p- i ei pi iei iyi-d i	+	8/	23-160		



DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 3520B

EPA 8270C

ug/L

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 8 of 8

Client Sample Number			L	ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	tch ID
Method Blank		· 4	095-01-	003-1,553	N/A	Aqueous	09/29/04	10/01/04	040929	L01
Parameter	Result	RL	DF	Qual	Parameter		Resu	ılt RL	DF	Qual
N-Nitrosodimethylamine	ND	10	1		2,4-Dinitropher	nol	ND	50	1	
Aniline	ND	10	1		4-Nitrophenol		ND	10	1	
Phenol	ND	10	1		Dibenzofuran		ND	10	1	
Bis(2-Chloroethyl) Ether	ND	25	1		2,4-Dinitrotolue	ene	ND	10	1	
2-Chlorophenol	ND	10	1		2,6-Dinitrotolue	ene	ND	10	1	
1,3-Dichlorobenzene	ND	10	1		Diethyl Phthalat	te	ND	10	1	
1,4-Dichlorobenzene	ND	10	1		4-Chlorophenyl	-Phenyl Ether	ND	10	1	
Benzyl Alcohol	ND	10	1		Fluorene		ND	10	1	
1,2-Dichlorobenzene	ND	10	1		4-Nitroaniline		ND	10	1	
2-Methylphenol	ND	10	1		Azobenzene		ND	10	1	
Bis(2-Chloroisopropyl) Ether	ND	10	1		4,6-Dinitro-2-M	ethylphenol	ND	50	1	
3/4-Methylphenol	ND	10	1		N-Nitrosodiphe	nylamine	ND	10	1	
N-Nitroso-di-n-propylamine	ND	10	1		4-Bromophenyl	-Phenyl Ether	ND	10	1	
Hexachloroethane	ND	10	1		Hexachloroben	zene	ND	10	1	
Nitrobenzene	ND	25	1		Pentachlorophe	enol	ND	10	1	
Isophorone	ND	10	1		Phenanthrene		ND	10	1	
2-Nitrophenol	ND	10	1		Anthracene		ND	10	1	
2,4-Dimethylphenol	ND	10	1		Di-n-Butyl Phtha	alate	ND	10	1	
Benzoic Acid	ND	50	1		Fluoranthene		· ND	10	1	
Bis(2-Chloroethoxy) Methane	ND	10	1		Benzidine		ND	50	1	
2,4-Dichlorophenol	ND	10	1		Pyrene		ND	10	1	
1,2,4-Trichlorobenzene	ND	10	1		Pyridine		ND	10	1	
Naphthalene	ND	10	1		Butyl Benzyl Ph	thalate	ND	10	1	
4-Chloroaniline	ND	10	1		3,3'-Dichlorobe		ND	25	1	
Hexachloro-1,3-Butadiene	ND	10	1		Benzo (a) Anthr		ND	10	1	
4-Chloro-3-Methylphenol	ND	10	1		Bis(2-Ethylhexy		ND	10	1	
2-Methylnaphthalene	ND	10	1		Chrysene		ND.	10	1	
Hexachlorocyclopentadiene	ND	25	1		Di-n-Octyl Phtha	alate	ND	10	1	
2,4,6-Trichlorophenol	ND	10	1		Benzo (k) Fluor		ND .	10	1	
2,4,5-Trichlorophenol	ND	10	1		Benzo (b) Fluor		ND	10	1	
2-Chloronaphthalene	ND	10	1		Benzo (a) Pyrei		ND	10	1	
2-Nitroaniline	ND	10	1		Benzo (g,h,i) Pe		ND	10	1	
Dimethyl Phthalate	ND	10	1		Indeno (1,2,3-c,		ND	10	1	
Acenaphthylene	ND	10	1		Dibenz (a,h) An		ND	10	1	
3-Nitroaniline	ND	10	1		1-Methylnaphtha		ND	10	1	
Acenaphthene	ND	10	1				110		57	
Surrogates:	REC (%)	Control		Qual	Surrogates:		REC (%) Control		Qual
TOTAL		Limits						Limits		
2-Fluorophenol	77	15-138			Phenol-d6		99	17-141		
Nitrobenzene-d5	102	28-139			2-Fluorobipheny		79	33-144		
2,4,6-Tribromophenol	65	32-143			p-Terphenyl-d14	1	96	23-160		

RL - Reporting Limit

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

09/28/04

04-09-1607

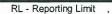
EPA 3520B

GC/MS Isotope Dilution

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 1 of 2

riojecti Econiloca i	riciriiii Oito	_ , , 0 ,, , 00	.00 02					3
Client Sample Number			Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
EB1			04-09-1607-2	09/27/04	Aqueous	09/29/04	10/01/04	040929L01D
<u>Parameter</u>	Result	RL	<u>DF</u>	Qual	Units			
1,4-Dioxane	ND	2.0	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
Nitrobenzene-d5	103	56-123						
TT-MW2-3			04-09-1607-3	09/27/04	Aqueous	09/29/04	10/01/04	040929L01D
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	Units			
1,4-Dioxane	ND	2.0	1		ug/L			
= <u>Зигroqates:</u>	REC (%)	Control Limits		Qual				
Nitrobenzene-d5	100	56-123						
TT-MW2-1			04-09-1607-4	09/27/04	Aqueous	09/29/04	10/01/04	040929L01D
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
1,4-Dioxane	ND	2.0	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual		•		
Nitrobenzene-d5	104	56-123					£1	
TT-MW2-4S			04-09-1607-5	09/27/04	Aqueous	09/29/04	10/01/04	040929L01D
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
1,4-Dioxane	ND	2.0	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
Nitrobenzene-d5	98	56-123						



DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

09/28/04

04-09-1607

EPA 3520B

GC/MS Isotope Dilution

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 2 of 2

	-							
Client Sample Number			Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
TT-MW2-4D			04-09-1607-6	09/27/04	Aqueous	09/29/04	10/01/04	040929L01D
Parameter	Result	<u>RL</u>	<u>DF</u>	<u>Qual</u>	<u>Units</u>			
1,4-Dioxane	ND	2.0	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
Nitrobenzene-d5	96	56-123						
TT-MW2-2			04-09-1607-7	09/27/04	Aqueous	09/29/04	10/01/04	040929L01D
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
1,4-Dioxane	ND	2.0	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
Nitrobenzene-d5	96	56-123						
TT-MW2-20			04-09-1607-8	09/27/04	Aqueous	09/29/04	10/01/04	040929L01D
<u>Parameter</u>	Result	RL	<u>DF</u>	Qual	<u>Units</u>			
1,4-Dioxane	ND	2.0	1 '		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
Nitrobenzene-d5	92	56-123						
Method Blank	35 is	4 F	099-09-004-305	N/A	Aqueous	09/29/04	10/01/04	040929L01D
<u>Parameter</u>	Result	RL	DF	Qual	<u>Units</u>			
1,4-Dioxane	ND	2.0	1		ug/L			
Surrogates:	REC (%)	Control Limits		Qual				
Nitrobenzene-d5	102	56-123						

RL - Reporting Limit

DF - Dilution Factor

Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 •





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

09/28/04

04-09-1607

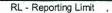
EPA 3520B

EPA 1625CM

Project: Lockheed Martin - Site 2 / TC #13505-02

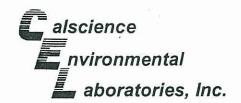
Page 1 of 2

	A STATE OF THE PARTY OF THE PAR								
Client Sample Number			Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID)
EB1			04-09-1607-2	09/27/04	Aqueous	10/04/04	10/07/04	041004L06	
<u>Parameter</u>	Result	RL	DF	Qual	<u>Units</u>				
N-Nitrosodimethylamine	ND	2.0	1		ng/L				
Surrogates:	REC (%)	Control Limits		Qual					
1,4-Dichlorobenzene-d4	113	50-130	%						
TT-MW2-3			04-09-1607-3	09/27/04	Aqueous	10/04/04	10/07/04	041004L06	14-
<u>Parameter</u>	Result	RL	DF	Qual	<u>Units</u>				
N-Nitrosodimethylamine	ND	2.0	. 1	F	ng/L				
≖ <u>Surrogates:</u>	REC (%)	Control Limits		Qual					
1,4-Dichlorobenzene-d4	66	50-130							
TT-MW2-1			04-09-1607-4	09/27/04	Aqueous	10/04/04	10/07/04	041004L06	i ilita
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>				
N-Nitrosodimethylamine	ND	2.0	1		ng/L				
Surrogates:	REC (%)	Control Limits		Qual					
1,4-Dichlorobenzene-d4	108	50-130							
TT-MW2-4S		6.	04-09-1607-5	09/27/04	Aqueous	10/04/04	10/07/04	041004L06	\$
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>				
N-Nitrosodimethylamine	ND	2.0	1		ng/L				
Surrogates:	REC (%)	Control Limits		Qual					
1,4-Dichlorobenzene-d4	100	50-130						ś	



DF - Dilution Factor







Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

09/28/04

04-09-1607

EPA 3520B

EPA 1625CM

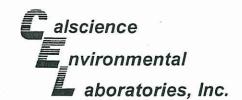
Project: Lockheed Martin - Site 2 / TC #13505-02

Page 2 of 2

Client Sample Number			Lab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Batch ID
TT-MW2-4D			04-09-1607-6	09/27/04	Aqueous	10/04/04	10/07/04	041004L06
Parameter	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
N-Nitrosodimethylamine	ND	2.0	1		ng/L		¥	
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Dichlorobenzene-d4	99	50-130						
TT-MW2-2	j.,	22	04-09-1607-7	09/27/04	Aqueous	10/04/04	10/07/04	041004L06
<u>Parameter</u>	Result	RL	DF .	Qual	<u>Units</u>	¥		
N-Nitrosodimethylamine	ND	2.0	1		ng/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Dichlorobenzene-d4	100	50-130						
TT-MW2-20		£ 9.	04-09-1607-8	09/27/04	Aqueous	10/04/04	10/07/04	041004L06
<u>Parameter</u>	Result	RL	DF	Qual	<u>Units</u>			
N-Nitrosodimethylamine	ND	2.0	1		ng/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Dichlorobenzene-d4	87	50-130						
Method Blank			099-07-027-126	N/A	Aqueous	10/04/04	10/07/04	041004L06
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>			
N-Nitrosodimethylamine	ND	2.0	1		ng/L			
Surrogates:	REC (%)	Control Limits		Qual				
1,4-Dichlorobenzene-d4	72	50-130						

RL - Reporting Limit

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method: Units:

09/28/04

04-09-1607

EPA 5030B EPA 8260B

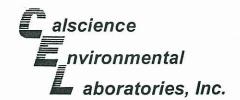
ug/L

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 1 of 9

Client Sample Number				ab Sample Number	Date Collected	Matrix	Da Prep		Date Analyzed	QC Ba	atch ID
TB1	4	~ 1	04-09-1	607-1	09/27/04	Aqueous	N	Ά	09/29/04	04092	BL02
Parameter	Result	RL	DF	Qual	Parameter			Result	RL	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	opane		ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropro	opane		ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropro			ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichlorop	propene		ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop	V		ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene			ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone			ND	10	1	
2-Butanone	ND	10	1		Isopropylbenze	ene		ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene		ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chlo	oride		ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Per	ntanone		ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene			ND	10	- 1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzer	ne		ND	1.0	1	
=Chlorobenzene	ND	1.0	1		Styrene			ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	nloro ethane		ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrach	nloroethane		ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroeth	ene		ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene			ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichloro	benzene		ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichloro	benzene		ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	. 1		1,1,1-Trichloro	ethane		ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro	-1,2,2-Trifluoroe	ethane	ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro	ethane		ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	Э		ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoro	methane		ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloro	propane		ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethyl	benzene		ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethyl	benzene		ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate			ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride			ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene			ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene			ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl B	Ether (MTBE)	0.0	ND	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:			REC (%			<u>Qual</u>
1,2-Dichloro ethane-d4	109	80-120			Dibromofluoro	methane		113	78-132		
Toluene-d8	99	82-118			1,4-Bromofluor	obenzene		90	71-119		

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 5030B

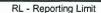
EPA 8260B

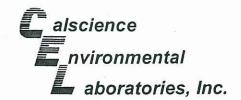
ug/L

Page 2 of 9

Project: Lockheed Martin - Site 2 / TC #13505-02

Client Sample Number	**			ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC Ba	atch ID
EB1			04-09-16	07-2	09/27/04	Aqueous	N/A	09/29/04	040928	BL02
Parameter	Result	RL	DF	Qual	Parameter		Resu	ılt <u>RL</u>	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	opane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropro	opane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropro	opene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichlorop	oropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop	ropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene		ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone		ND	10	1	
2-Butanone	ND	10	1		Isopropylbenze	ene	ND	1.0	1	2
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chlo		ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Per		ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene		ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzer	ne	ND	1.0	1	
=Chlorobenzene	ND	1.0	1		Styrene		ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	loroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrach	loro ethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethe		ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene		ND	1.0	4	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorol	benzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorol		ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloro		ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		THE STREET STREET, STR	-1,2,2-Trifluoroeth		10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro		ND	1.0	4	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene		ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoror	링	ND	10	4	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichlorop		ND	5.0	4	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethyl	District Control	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethyl		ND	1.0	4	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate		ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride		ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene		ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene		ND	1.0	4	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl E	ther (MTRF)	ND	1.0	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	tilei (MTDL)	REC (Qual
	1120 (70)	Limits		Suai	Guilogates.		KLCT	Limits		Qual
1,2-Dichloro ethane-d4	107	80-120			Dibromofluoror	methane	113	78-132		
Toluene-d8	96	82-118			1,4-Bromofluor		89	71-119		
	00000					20000000000000000000000000000000000000				







Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method: Units:

09/28/04

04-09-1607

EPA 5030B

EPA 8260B

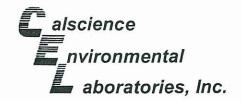
ug/L

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 3 of 9

Client Sample Number				ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC B	atch ID
TT-MW2-3			04-09-16	607-3	09/27/04	Aqueous	N/A	09/29/04	04092	8L02
<u>Parameter</u>	Result	RL	DF	Qual	Parameter		Re	sult RL	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	opane	NE	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropro	opane	NE	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropro	opene	NE	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichlorop	propene	NE	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop	ropene	NE	0.50	1	•
Bromoform	ND	1.0	1		Ethylbenzene	12	NE	1.0	1	
Bromomethane	ND	10	1		2-Hexanone		NE	10	1	
2-Butanone	ND	10	1		Isopropylbenze	ene	NE	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene	NE	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chlo	oride	NE	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Per	ntanone	NE	10	1	
Carbon Disulfide	ND	10	1		Naphthalene		NE	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenze	ne	NE	1.0	1	
=Chlorobenzene	ND	1.0	1		Styrene		NE	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	hloroethane	NE	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrach	hloroethane	NE	1.0	1	
Chloromethane	ND	10	1		Tetrachloroeth	ene	NE	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene		NE	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichloro	benzene	NE	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichloro	benzene	NE	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloro	ethane	NE	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro	-1,2,2-Trifluoroe	thane NE	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro	ethane	NE	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethen	е	. 1.6	1.0	1	
1,3-Dichloro benzene	ND	1.0	1		Trichlorofluoro	methane	NE	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloro	propane	NE	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethy	lbenzene	NE	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethy	lbenzene	NE	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate		NE	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride		NE	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene		NE	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene		NE	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl I	Ether (MTBE)	NE	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	,	REC	C(%) Contro Limits		Qual
1,2-Dichloro ethane-d4	102	80-120			Dibromofluoro	methane	10			
Toluene-d8	96	82-118			1,4-Bromofluor	robenzene	91	71-119)	

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method: Units: 04-09-1607

09/28/04

EPA 5030B EPA 8260B

ug/L

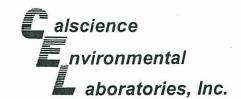
Project: Lockheed Martin - Site 2 / TC #13505-02

Page 4 of 9

Client Sample Number				ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC B	atch ID
TT-MW2-1			04-09-16	507-4	09/27/04	Aqueous	N/A	09/29/04	04092	8L02
<u>Parameter</u>	Result	RL	DF	Qual	Parameter		Re	sult RL	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	opane	NE	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropro	opane	NE	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropro	opene	NE	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichlorop	oropene	NE	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop	ropene	NE	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene		NE	1.0	1	
Bromomethane	ND	10	1		2-Hexanone		NE	10	1	
2-Butanone	ND	10	1		Isopropylbenze	ene	NE	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene	NE	1.0	· 1	
sec-Butylbenzene	ND	1.0	1		Methylene Chlo	oride	NE	10	1.	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Per	ntanone	NE	10	1	50
Carbon Disulfide	ND	10	1		Naphthalene		NE	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzer	ne	NE	1.0	1	
=Chlorobenzene	ND	1.0	1		Styrene		NE	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	nloroethane	NE	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrach	nloro ethane	NE	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethe	ene	NE	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene		NE	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorol	benzene	NE	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorol	benzene	NE	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloro	ethane	NE	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro	-1,2,2-Trifluoroet	hane NE	10	. 1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro	ethane	NE	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	е	NE	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoro	methane	NE	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloro	propane	NE	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethyl	lbenzene	NE	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethyl	benzene	NE	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate		NE	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride		NE	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene		NE	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene		NE	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl B	Ether (MTBE)	NE	1.0	1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	The second of th	REC	(%) Contro		Qual
1,2-Dichloro ethane-d4	104	80-120			Dibromofluoro	methane	11:			
Toluene-d8	94	82-118			1,4-Bromofluor	robenzene	90	71-119		

RL - Reporting Limit

DF - Dilution Factor ,





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

EPA 5030B EPA 8260B

Method:

04-09-1607

Units:

ug/L

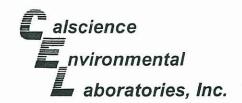
09/28/04

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 5 of 9

Client Sample Number				b Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC B	atch ID
TT-MW2-4S			04-09-16	07-5	09/27/04	Aqueous	∞ N/A	09/29/04	04092	8L02
<u>Parameter</u>	Result	RL	<u>DF</u>	Qual	Parameter		Res	ult RL	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	pane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropro	pane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropro	pene	ND	1.0	1	
3 romochloromethane	ND	1.0	1		c-1,3-Dichlorop	propene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop		ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene		ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone		ND	10	1	
2-Butanone	ND	10	- 1		Isopropylbenze	ene	. ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene	ND	1.0	1	
ec-Butylbenzene	ND	1.0	1		Methylene Chlo		ND	10	1	
ert-Butylbenzene	ND	1.0	1		4-Methyl-2-Pen	ntanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene		ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzer	ne	ND	1.0	1	
Chlorobenzene	ND .	1.0	1 *		Styrene	*	ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	loro ethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrach	loroethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethe	ene	ND	1.0	1	
-Chlorotoluene	ND	1.0	1		Toluene		ND	1.0	1	
-Chlorotoluene	ND	1.0	1		1,2,3-Trichloro	penzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichloro		ND	1.0	1	
,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloro		ND	1.0	1	
.2-Dibromoethane	ND .	1.0	1			1,2,2-Trifluoroe		10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro		ND	1.0	1	
,2-Dichlorobenzene	ND	1.0	1		Trichloroethene		ND	1.0	1	
,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoror		ND	10	1	
,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloron		ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethyl		ND	1.0	1	
.1-Dichloroethane	ND	1.0	1		1,3,5-Trimethyl		ND	1.0	1	
,2-Dichloroethane	ND	0.50	- 1		Vinyl Acetate		ND	10	1	
,1-Dichloroethene	ND	1.0	1		Vinyl Chloride		ND	0.50	1	
-1.2-Dichloroethene	ND	1.0	1		p/m-Xylene		ND	1.0	1	
1,2-Dichloroethene	ND	1.0	1	-	o-Xylene	ě.	ND	1.0	1	
,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl E	ther (MTRE)	ND	1.0	1	
Surrogates:	REC (%)	Control	•	Qual	Surrogates:	-tilot (INTIDE)	REC			Qual
iditogatos.	110 (70)	Limits		Qual	Currogates.		INLO	Limits		<u>u</u> uai
.2-Dichloro ethane-d4	106	80-120			Dibromofluoror	methane	112	78-132		
,	100	30 .20					112	, 0 ,02		

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 5030B

EPA 8260B

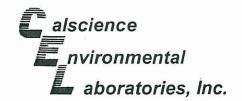
ug/L

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 6 of 9

Client Sample Number	ple Number Collected Matrix		Date Prepared	Date Analyzed	QC B	atch ID				
TT-MW2-4D			04-09-16	607-6	09/27/04	Aqueous	N/A	09/29/04	04092	8L02
Parameter	Result	RL	DF	Qual	Parameter		Res	ult RL	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	opane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropro	opane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropro	opene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichlorop	propene	ND	0.50	1	•
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop	oropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene		ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone		ND	10	1	
2-Butanone	ND	10	1		Isopropylbenze	ene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chlo	oride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Per	ntanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene		ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzei	ne	ND	1.0	- 1	
=Chlorobenzene	ND	1.0	1		Styrene		ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	nloro ethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrach	nloro ethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroeth	ene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene		ND.	1.0	1	
4-Chiorotoluene	ND	1.0	1		1,2,3-Trichloro	benzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichloro	benzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloro	ethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro	-1,2,2-Trifluoroeth	nane .ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro	ethane	NĎ	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloro ethene	е	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoro	methane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloro	propane	ND	5.0	. 1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethyl	lbenzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethyl	lbenzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate		ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride		ND	0.50	. 1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene		ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene		ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl B	Ether (MTBE)	ND	1.0	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:	100 000 000 000 000 000 000 000 000 000	REC (%) Control		Qual
1,2-Dichloro ethane-d4	103	Limits 80-120			Dibromofluoror	methane	109	<u>Limits</u> 78-132		
Toluene-d8	96	82-118			1,4-Bromofluor		90	71-119		
		1.0					50	. 1 110		

DF - Dilution Factor





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No;

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 5030B

EPA 5030B EPA 8260B

ug/L

Page 7 of 9

Project: Lockheed Martin - Site 2 / TC #13505-02

Client Sample Number			Lab Samp Number		Matrix	Date Prepared	Date Analyzed	QC B	atch ID
TT-MW2-2			04-09-1607-7	09/27/04	Aqueous	N/A	09/29/04	04092	8L02
Parameter	Result	RL	DF Qual	Parameter		Resi	ult RL	DF	Qual
Acetone	ND	10	1	1,3-Dichloropr	opane	ND	1.0	1	
Benzene	ND	0.50	1	2,2-Dichloropr	opane	ND	1.0	1	
Bromobenzene	ND	1.0	1	1,1-Dichloropr	opene	ND	1.0	. 1	
Bromochloromethane	ND	1.0	1	c-1,3-Dichloro	propene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1	t-1,3-Dichlorop	propene	ND	0.50	1	
Bromoform	ND	1.0	1 .	Ethylbenzene		ND	1.0	1	
Bromomethane	ND	10	1	2-Hexanone		ND	10	1	
2-Butanone	ND	10	1	Isopropylbenz	ene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1	p-Isopropyltolu	uene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1	Methylene Chl		ND	10	1	
tert-Butylbenzene	ND	1.0	- 1	4-Methyl-2-Per	ntanone	ND	10	1	
Carbon Disulfide	ND	10	1	Naphthalene		ND	10	1	
Carbon Tetrachloride	ND	0.50	1	n-Propylbenze	ne	ND	1.0	1	
Chlorobenzene	ND	1.0	1	Styrene		ND	1.0	1	
Chloroethane	ND	1.0	1	1,1,1,2-Tetracl	hloroethane	ND	1.0	1	
Chloroform	ND	1.0	1	1,1,2,2-Tetracl		ND	1.0	1	
Chloromethane	ND	10	1	Tetrachloroeth		ND	1.0	1	
2-Chlorotoluene	ND	1.0	1	Toluene		ND	1.0	1	
4-Chlorotoluene	ND	1.0	1	1,2,3-Trichloro	benzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	i	1,2,4-Trichloro		ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND -	5.0	1	1,1,1-Trichloro		ND	1.0	1	120
1,2-Dibromoethane	ND	1.0	1		-1,2,2-Trifluoroet		10	1	
Dibromomethane	ND	1.0	1	1,1,2-Trichloro		ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1	Trichloroethen		ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	i	Trichlorofluoro		ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1	1,2,3-Trichloro		ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1	1,2,4-Trimethy	T., 17	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1	1,3,5-Trimethy		ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1	Vinyl Acetate	IDCH ZONO	ND	10	1	
1,1-Dichloroethene	ND	1.0	i	Vinyl Chloride		ND	0.50	,	
c-1,2-Dichloroethene	ND	1.0	1	p/m-Xylene		ND	1.0	,	
-1,2-Dichloroethene	ND	1.0	1	o-Xylene		ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1	Methyl-t-Butyl I	Ethor (MTRE)		1.0	1	
Surrogates:	REC (%)	Control	, 1880 - Alexandria (1880)		LUICI (IVI I DE)	ND REC (Oud
Junogales.	REU (%)	Limits	<u>Qual</u>	Surrogates:		KEC ((%) Control Limits	-	Qual
1,2-Dichloro ethane-d4	108	80-120		Dibromofluoro	methane	112	78-132		
Toluene-d8	97	82-118		1,4-Bromofluoi		89	71-119		
i olderio-do	91	02-110		1,4-01011011001	I O D G I K G I K	69	71-119		





Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 5030B EPA 8260B

ug/L

Page 8 of 9

Project: Lockheed Martin - Site 2 / TC #13505-02

Client Sample Number				ab Sample Number	A A A A A A A A A A A A A A A A A A A		Date Prepared	Date Analyzed	QC B	atch ID
TT-MW2-20			04-09-16	607-8	09/27/04	Aqueous	N/A	09/29/04	04092	3L02
Parameter	Result	<u>RL</u>	DF	Qual	Parameter	1.3.	Result	RL	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	opane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropro	opane	ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropro	opene	ND	1.0	1	
Bromochloro methane	ND	1.0	1		c-1,3-Dichlorop	oropene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop	ropene	ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene		ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone		ND	10	1	
2-Butanone	ND	10	1		Isopropylbenze	ene	ND	1.0	. 1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chlo	oride	ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Per	ntanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene		ND	10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenzer	ne	ND	1.0	1	
[₹] Chloro benzene	ND	1.0	1		Styrene		ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	nloro ethane	ND	1.0	1	
Chloroform	ND ·	1.0	1		1,1,2,2-Tetrach	nloro ethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroethe	ene	ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene		ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichlorol	benzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichlorol	benzene	ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloro	ethane	ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1,1,2-Trichloro-	-1,2,2-Trifluoroeth	nane ND	10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro	ethane	ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloroethene	9	ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoror	methane	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichlorop	propane	ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	. 1		1,2,4-Trimethyl	benzene	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethyl	benzene	ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate		ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride		ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene		ND	1.0	.1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene		ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl E	Ether (MTBE)	ND	1.0	. 1	
Surrogates:	REC (%)	Control Limits		Qual	Surrogates:	727	<u>REC (%</u>	<u>Control</u> Limits		Qual
1,2-Dichloro ethane-d4	113	80-120			Dibromofluoror	methane .	112	78-132		
Toluene-d8	98	82-118			1,4-Bromofluor	obenzene	90	71-119		÷,







Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

Units:

09/28/04

04-09-1607

EPA 5030B EPA 8260B

ug/L

Page 9 of 9

Project: Lockheed Martin - Site 2 / TC #13505-02

Client Sample Number				ab Sample Number	Date Collected	Matrix	Date Prepared	Date Analyzed	QC B	atch ID
Method Blank			099-10-0	006-12,164	N/A	Aqueous	N/A	09/29/04	04092	8L02
Parameter	Result	RL	DF	Qual	Parameter		Resu	ılt RL	DF	Qual
Acetone	ND	10	1		1,3-Dichloropro	opane	ND	1.0	1	
Benzene	ND	0.50	1		2,2-Dichloropre		ND	1.0	1	
Bromobenzene	ND	1.0	1		1,1-Dichloropre	opene	ND	1.0	1	
Bromochloromethane	ND	1.0	1		c-1,3-Dichloro	propene	ND	0.50	1	
Bromodichloromethane	ND	1.0	1		t-1,3-Dichlorop		ND	0.50	1	
Bromoform	ND	1.0	1		Ethylbenzene		ND	1.0	1	
Bromomethane	ND	10	1		2-Hexanone		ND	10	1	
2-Butanone	ND	10	1		Isopropylbenze	ene	ND	1.0	1	
n-Butylbenzene	ND	1.0	1		p-Isopropyltolu	ene	ND	1.0	1	
sec-Butylbenzene	ND	1.0	1		Methylene Chlo		ND	10	1	
tert-Butylbenzene	ND	1.0	1		4-Methyl-2-Per	ntanone	ND	10	1	
Carbon Disulfide	ND	10	1		Naphthalene		ND	. 10	1	
Carbon Tetrachloride	ND	0.50	1		n-Propylbenze	ne	ND	1.0	1	
Chlorobenzene	ND	1.0	1		Styrene		ND	1.0	1	
Chloroethane	ND	1.0	1		1,1,1,2-Tetrach	nloroethane	ND	1.0	1	
Chloroform	ND	1.0	1		1,1,2,2-Tetrach	nloro ethane	ND	1.0	1	
Chloromethane	ND	10	1		Tetrachloroeth		ND	1.0	1	
2-Chlorotoluene	ND	1.0	1		Toluene		ND	1.0	1	
4-Chlorotoluene	ND	1.0	1		1,2,3-Trichloro	benzene	ND	1.0	1	
Dibromochloromethane	ND	1.0	1		1,2,4-Trichloro		ND	1.0	1	
1,2-Dibromo-3-Chloropropane	ND	5.0	1		1,1,1-Trichloro		ND	1.0	1	
1,2-Dibromoethane	ND	1.0	1		1.1.2-Trichloro	-1,2,2-Trifluoroetl		10	1	
Dibromomethane	ND	1.0	1		1,1,2-Trichloro		ND	1.0	1	
1,2-Dichlorobenzene	ND	1.0	1		Trichloro ethene		ND	1.0	1	
1,3-Dichlorobenzene	ND	1.0	1		Trichlorofluoro	(A)	ND	10	1	
1,4-Dichlorobenzene	ND	1.0	1		1,2,3-Trichloro		ND	5.0	1	
Dichlorodifluoromethane	ND	1.0	1		1,2,4-Trimethyl	• *************************************	ND	1.0	1	
1,1-Dichloroethane	ND	1.0	1		1,3,5-Trimethyl		ND	1.0	1	
1,2-Dichloroethane	ND	0.50	1		Vinyl Acetate		ND	10	1	
1,1-Dichloroethene	ND	1.0	1		Vinyl Chloride		ND	0.50	1	
c-1,2-Dichloroethene	ND	1.0	1		p/m-Xylene		ND	1.0	1	
t-1,2-Dichloroethene	ND	1.0	1		o-Xylene		ND	1.0	1	
1,2-Dichloropropane	ND	1.0	1		Methyl-t-Butyl B	Ether (MTBF)	ND	1.0	1	
Surrogates:	REC (%)	Control		Qual	Surrogates:		REC (%) Control		Qual
1,2-Dichloro ethane-d4	104	Limits 80-120			Dibromofluoro	methane	109	<u>Limits</u> 78-132		
Toluene-d8	97	82-118			1,4-Bromofluor	robenzene	90	71-119		

RL - Reporting Limit ,

DF - Dilution Factor ,





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216 Date Received: Work Order No:

09/28/04 04-09-1607

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 1 of 2

Client Sample Number			Lab Sample Nun	nber Date Collected	Matrix			
EB1			04-09-1607-2	09/27/04	Aqueous			
<u>Parameter</u>	Result	RL	<u>DF</u>	Qual Ur	its Date Prepared	Date Analyzed	Method	
Perchlorate	ND	2.0	1	u	g/L N/A	10/01/04	EPA 314.0	
TT-MW2-3			04-09-1607-3	09/27/04	Aqueous	÷		
<u>Parameter</u>	Result	RL	<u>DF</u>	Qual Un	its <u>Date Prepared</u>	Date Analyzed	Method	
Perchlorate	1300	100	50	D u	g/L N/A	10/05/04	EPA 314.0	
TT-MW2-1			04-09-1607-4	09/27/04	Aqueous	5.		¥.
<u>Parameter</u>	Result	RL	<u>DF</u>	Qual Un	its <u>Date Prepared</u>	Date Analyzed	Method	
Perchlorate	3500	200	100	. D u	g/L N/A	10/05/04	EPA 314.0	
TT-MW2-4S		*	04-09-1607-5	09/27/04	Aqueous	:	× t	A S
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual Un	its <u>Date Prepared</u>	Date Analyzed	Method	
Perchlorate	ND	2.0	1	uį	g/L N/A	10/01/04	EPA 314.0	
TT-MW2-4D			04-09-1607-6	09/27/04	Aqueous			Si .
<u>Parameter</u>	Result	<u>RL</u>	DF	Qual Un	its Date Prepared	Date Analyzed	Method	
Perchlorate	ND	2.0	1	uç	yL N/A	10/01/04	EPA 314.0	
TT-MW2-2	- 4 · · · · · · · · · · · · · · · · · ·		04-09-1607-7	09/27/04	Aqueous			r.
<u>Parameter</u>	Result	<u>RL</u>	DF	Qual Un	its Date Prepared	Date Analyzed	Method	
Perchlorate	ND	2.0	1	uç	yL N/A	10/01/04	EPA 314.0	

RL - Reporting Limit

DF - Dilution Factor

Qual - Qualifiers

7440 Lincoln Way, Garden Grove, CA 92841-1427 • TEL:(714) 895-5494 •

FAX: (714) 894-750





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216 Date Received: Work Order No:

09/28/04 04-09-1607

Project: Lockheed Martin - Site 2 / TC #13505-02

Page 2 of 2

Client Sample Number			Lab Sample Nun	nber Date Collec		Matrix		
TT-MW2-20			04-09-1607-8	09/27	/04 <i>A</i>	Aqueous		
<u>Parameter</u>	Result	<u>RL</u>	<u>DF</u>	Qual	<u>Units</u>	Date Prepared	Date Analyzed	Method
Perchlorate	3700	200	100	D	ug/L	N/A	10/05/04	EPA 314.0
Method Blank				N/A		Aqueous		1757 50
<u>Parameter</u>	Result	<u>RL</u>	DF	Qual	<u>Units</u>	Date Prepared	Date Analyzed	Method
Perchlorate Perchlorate	ND ND	2.0 2.0	1 1		ug/L ug/L	N/A N/A	10/01/04 10/04/04	EPA 314.0 EPA 314.0

1 . .

DF - Dilution Factor





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216 Date Received: Work Order No: Preparation: Method:

09/28/04 04-09-1607 EPA 3010A Total EPA 6010B

Project Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
TT-MW2-3	Aqueous	ICP 3300	09/28/04		09/29/04	040928S05
Parameter	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Antimony	99	104	80-120	5	0-20	
Arsenic	101	106	80-120	5	0-20	
Barium	103	108	80-120	4	0-20	
Beryllium	99	104	80-120	4	0-20	
Cadmium	99	103	80-120	4	0-20	
Chromium (Total)	99	103	80-120	4	0-20	
Cobalt	101	105	80-120	4	0-20	
Copper	99	103	80-120	4	0-20	
Lead	97	102	80-120	4	0-20	
Molybdenum	99	103	80-120	4	0-20	
Nickel	98	102	80-120	4	0-20	
Selenium	98	103	80-120	5	0-20	
Silver	101	104	80-120	3	0-20	
Thallium	97	102	80-120	5	0-20	
Vanadium	99	102	80-120	4	0-20	
Zinc	102	106	80-120	4	0-20	

1.1.

CL - Control Limi





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216 Date Received: Work Order No: Preparation: Method: 09/28/04 04-09-1607 EPA 7470A Total EPA 7470A

Project Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	Matrix	Instrument	Date Prepared		Date Analyzed	MS/MSD Batch Number
04-09-1584-2	Aqueous	Mercury	09/28/04		09/28/04	040928502
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Mercury	100	99	71-134	0	0-14	

RPD - Relative Percent Difference ,

CL - Control Limit





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received: Work Order No: Preparation: Method:

09/28/04 04-09-1607 **EPA 5030B EPA 8260B**

Project Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	Matrix	Instrument	Date Prepare		Date Analyzed	MS/MSD Batch Number
04-09-1609-4	Aqueou	us GC/MS FF	N/A		09/29/04	040928S02
<u>Parameter</u>	MS %REC	MSD %REC	%REC CL	RPD	RPD CL	Qualifiers
Benzene	107	103	84-120	4	0-9	
Carbon Tetrachloride	131	133	71-137	1	0-10	
Chlorobenzene	104	102	87-111	3	0-8	
1,2-Dichloro benzene	98	97	82-112	1	0-8	v
1,1-Dichloroethene	105	106	76-130	1	0-18	
Toluene	107	103	85-115	4	0-8	
Trichloroethene	100	99	84-114	0	0-10	
Vinyl Chloride	110	113	68-128	3	0-16	
Methyl-t-Butyl Ether (MTBE)	92	89	63-135	3	0-20	
Tert-Butyl Alcohol (TBA)	95	82	25-169	15	0-41	
Diisopropyl Ether (DIPE)	103	103	70-130	0	0-11	
Ethyl-t-Butyl Ether (ETBE)	100	103	73-127	2	0-12	
Tert-Amyl-Methyl Ether (TAME)	92	93	71-125	1	0-12	
Ethanol	102	115	59-143	12	0-30	

RPD - Relative Percent Difference,

CL - Control Limit





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received: Work Order No:

09/28/04 04-09-1607

Project: Lockheed Martin - Site 2 / TC #13505-02

Matrix: Aque	eous			34.3 F =						
Parameter	<u>Method</u>	Quality Control Sample ID	<u>Date</u> <u>Analyzed</u>	<u>Date</u> <u>Extracted</u>	MS% REC	MSD % REC	%REC CL	RPD	RPD CL	Qualifiers
Perchlorate Perchlorate	EPA 314.0 EPA 314.0	04-09-1596-1 04-09-1787-5	10/01/04 10/04/04	N/A N/A	117 119	117 117	80-120 80-120	0 2	0-15 0-15	

RPD - Relative Percent Difference .

7440 Lincoln





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216 Date Received: Work Order No: Preparation: Method: N/A 04-09-1607 EPA 3010A Total EPA 6010B

Project: Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Bar Number	tch
097-01-003-4,194	Aqueous	ICP 3300	09/28/04	09/29/04	040928L05	
Parameter	LCS %	%REC LCSD %RE	EC %REC	CL RPD	RPD CL	Qualifiers
Antimony	88	88	80-12	0 0	0-20	
Arsenic	89	89	80-12	0 1	0-20	
Barium	96	96	80-12	0 0	0-20	
Beryllium	88	89	80-12	0 0	0-20	
Cadmium	93	93	80-12	0	0-20	
Chromium (Total)	93	93	80-120	0 0	0-20	
Cobalt	96	96	80-120	0 0	0-20	
Copper	89	89	80-120	0	0-20	
Lead	93	93	80-120	0	0-20	
Molybdenum	92	92	80-120	0 .0	0-20	
Nickel	93	93	80-120	0	0-20	
Selenium	85	85	80-120	0	0-20	
Silver	88	88	80-120	0	0-20	
Thallium	91	91	80-120	0	0-20	
Vanadium	90	90	80-120	0	0-20	
Zinc	93	93	80-120	0	0-20	

alscience nvironmental Quality Control - Laboratory Control Sample aboratories, Inc.



Tetra Tech, Inc.

348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation:

Method:

N/A

04-09-1607 EPA 7470A Total

EPA 7470A

Project: Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	Matrix	Instrument	Date Analyzed	Lab File II) L	CS Batch Number	
099-04-008-1,653	Aqueous	Mercury	09/28/04	040928L02		040928L02	
Parameter		Conc Added	Conc Recovered	LCS %Rec	%Rec CL	Qualifiers	
Mercury		0.0100	0.0104	104	90-122		

RPD - Relative Percent Difference , CL - Control Limit





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received: Work Order No: Preparation: Method:

N/A 04-09-1607 EPA 3520B EPA 8270C

Project: Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	Matrix	Instrument	Date Prepared	Da Anal		LCS/LCSD Bat Number	ch
095-01-003-1,553	Aqueous GC/MS P		09/29/04 1		/04	040929L01	
<u>Parameter</u>	LCS %REG	C LCSD %	<u> </u>	REC CL	RPD	RPD CL	Qualifiers
Phenol	97	89	4-118		9 *	0-18	
2-Chlorophenol	95	88	;	35-101		0-21	
1,4-Dichlorobenzene	85	78		39-93		0-45	
N-Nitroso-di-n-propylamine	109	102	G .	33-123		0-38	
1,2,4-Trichlorobenzene	79	. 73		47-101		0-35	
4-Chloro-3-Methylphenol	98	92		0-295	6	0-30	
Acenaphthene	99	94	-	31-133	5	0-31	
4-Nitrophenol	122	115		1-143	5	0-44	
2,4-Dinitrotoluene	104	101		16-166	2	0-49	
Pentachlorophenol	103	98		1-154	5	0-53	
Pyrene	95	91	15-159		4	0-47	

RPD - Relative Percent Difference ,





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received:

Work Order No:

Preparation: Method:

N/A

04-09-1607 EPA 3520B

GC/MS Isotope Dilution

Project: Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	Matrix	Instr	ument	Dat Prepa		Da Anal		LCS/LCSD Bato Number	h
099-09-004-305	Aqueous	GC/	MS P	09/29/04		10/01/04		040929L01D	
Parameter	LCS %	6REC	LCSD %	REC	%RE	C CL	RPD	RPD CL	Qualifiers
1,4-Dioxane	81	86		86		50-130		0-20	





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216 Date Received: Work Order No: Preparation: Method: N/A 04-09-1607 EPA 3520B EPA 1625CM

Project: Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID		Matrix	Inst	rument		Date Prepa	ē.,,,	Da Anal		LCS/LCSD Batc Number	1
099-07-027-126	.vs	Aqueous	GC	MSH	- !!	10/04/	04	10/07	7/04	041004L06	
<u>Parameter</u>		LCS %	<u> REC</u>	LCSI) %F	REC	%RE	C CL	RPD	RPD CL	Qualifiers
N-Nitrosodimethylamine		102		11	15		50	-130	12	0-20	

11 74

RPD - Relative Percent Difference,

CL - Control Limit





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216 Date Received: Work Order No: Preparation: Method: N/A 04-09-1607 EPA 5030B EPA 8260B

Project: Lockheed Martin - Site 2 / TC #13505-02

Quality Control Sample ID	· Ma	trix In	strument	Date Prepared		ite yzed	LCS/LCSD Bate Number	ch
099-10-006-12,164	Aque	ous 🦂 GO	C/MS FF	N/A	09/2	3/04	040928L02	
Parameter	5	LCS %REC	LCSD %RE	EC %F	REC CL	RPD	RPD CL	Qualifiers
Benzene		104	102		87-117	1	0-6	
Carbon Tetrachloride		127	129		75-141	2	0-11	
Chlorobenzene		101	102	1	38-112	1	0-6	
1,2-Dichlorobenzene		98	97	8	38-112	1	0-6	
1,1-Dichloroethene		103	104	8	30-128	1	0-15	
Toluene		105	100	2 8	37-117	5	0-7	
Trichloroethene		99	95	8	36-116	4	0-8	
Vinyl Chloride		107	111	7	74-128	4	0-10	
Methyl-t-Butyl Ether (MTBE)		94	97	8	35-121	3	0-17	
Tert-Butyl Alcohol (TBA)		110	98		51-153	11	0-37	
Diisopropyl Ether (DIPE)		101	104	Eq.	74-128	3	0-9	
Ethyl-t-Butyl Ether (ETBE)		105	106	8	31-123	1	0-12	
Tert-Amyl-Methyl Ether (TAME)		104	98	}	31-123	5	0-9	
Ethanol		101	100		56-146	1-	0-41	

Mulha.

RPD - Relative Percent Difference , CL - Control Limit





Tetra Tech, Inc. 348 West Hospitality Lane, Ste 100 San Bernardino, CA 92408-3216

Date Received: Work Order No:

N/A 04-09-1607

Project: Lockheed Martin - Site 2 / TC #13505-02

Matrix: Aqueous	÷	3	4 4		y.				*************	
<u>Parameter</u>	<u>Method</u>	Quality Control Sample ID	<u>Date</u> <u>Extracted</u>	<u>Date</u> <u>Analyzed</u>	LCS % REC	LCSD % REC	%REC CL	RPD	RPD CL	<u>Qual</u>
Perchlorate Perchlorate	EPA 314.0 EPA 314.0	099-05-203-202 099-05-203-204	N/A N/A	10/01/04 10/04/04	98 109	101 111	85-115 85-115	3 2	0-15 0-15	

MAMA

RPD - Relative Percent Difference , CL - Control Limit



Glossary of Terms and Qualifiers

110

Work Order Number:

04-09-1607

Q	ualifier	Definition
	*	See applicable analysis comment.
	1	Surrogate compound recovery was out of control due to a required sample dilution, therefore, the sample data was reported without further clarification.
	2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
	3	Recovery of the Matrix Spike or Matrix Spike Duplicate compound was out of control due to matrix interference. The associated LCS and/or LCSD was in control and, therefore, the sample data was reported without further clarification.
	4	The MS/MSD RPD was out of control due to matrix interference. The LCS/LCSD RPD was in control and, therefore, the sample data was reported without further clarification.
	5	The PDS/PDSD associated with this batch of samples was out of control due to a matrix interference effect. The associated batch LCS/LCSD was in control and, hence, the associated sample data was reported with no further corrective action required.
	А	Result is the average of all dilutions, as defined by the method.
	В	Analyte was present in the associated method blank.
	С	Analyte presence was not confirmed on primary column.
	D	The analyte concentration was reported from analysis of the diluted sample.
	E	Concentration exceeds the calibration range.
	H :	Sample received and/or analyzed past the recommended holding time.
	J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
	N	Nontarget Analyte.
	ND	Parameter not detected at the indicated reporting limit.
	Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
	U	Undetected at the laboratory method detection limit.
	X	% Recovery and/or RPD out-of-range.
	Z	Analyte presence was not confirmed by second column or GC/MS analysis.

348 W. Hospitality Lane, Suite 100 San Bernardino, California 92408 Telephone: (909) 381-1674 FAX: (909) 889-1391 TETRA TECH, INC.

OP- 1007 CHAIN OF CUSTODY REJORD

Special Shipping/Handling/Storage Requirements: TOTAL NUMBER OF CONTAINERS ON THIS CHAIN OF CUSTODY: OBSERVATIONS/COMMENTS TURN-AROUND TIME METHOD OF SHIPMENT/SHIPMENT NO PRESERVATIVES: (Water Only) +ander 14 MB3 PAGE HCL NR (None required) DATE 9/22/04 火 00 8 *UMBER OF CONTRINERS* O (00 00 8 一都の 11:35AM TIME 00 *ANYTRIX TYPE* FILTERED/UNFILTERED SB - Brass Sleeve P - Plastic Bottle/Jar **PARAMETERS** 128/ 128 G - Glass Bottle/Jar SS - Stainless Steel Sleeve TETRA TECH, INC. CONTAINER TYPE: X COMPANY COMPANY Canary = Laboratory X SVOC X MATRIX TYPE: S - Soil
M Sediment X 3256 1405 500 1132 7:00 1325 3 TIME Brenner victoria DISTRIBUTION: White and Pink = Tetra Tech, Inc. 19/27/04 DATE Martin MUNFILTERED PROJECT MANAGER: 7255 Site 2 3505702 T- M W2- 4S 7 mw2mw2-Lockbood T- MWZm22-SAMPLE NO. -m22 SAMPLERS (Signature PROJECT NAME: RELINQUISHED BY RELANGUISHED BY ☐ FILTERED FILTERING: RECEIVEDBY RECEIVED BY 3 0 CLIENT: æ 6



WORK ORDER #:

04-09-11607

Cooler ____ of ___

SAMPLE REC	EIPT FORM
CLIENT Tetra Ted	DATE: 9/20/4
TEMPERATURE - SAMPLES RECEIVED BY:	
CALSCIENCE COURIER: Chilled, cooler with temperature blank provided. Chilled, cooler without temperature blank. Chilled and placed in cooler with wet ice. Ambient and placed in cooler with wet ice. Ambient temperature. °C Temperature blank.	LABORATORY (Other than Calscience Courier): ° C Temperature blank. ° C IR thermometer. Ambient temperature.
CUSTODY SEAL INTACT:	
Sample(s): Cooler: No (Not Intact)	Not Applicable (N/A):
SAMPLE CONDITION:	
Chain-Of-Custody document(s) received with samples Sample container label(s) consistent with custody papers Sample container(s) intact and good condition Correct containers for analyses requested Proper preservation noted on sample label(s) VOA vial(s) free of headspace. Tedlar bag(s) free of condensation	
COMMENTS:	
-7: Sample ID is TT-MW2-2	per sample labels on containers.